

OWNER'S MANUAL

TORRES/ HYBRID

KGM

Recommended Fluids and Lubricants

Descriptions			Capacity	Specifications
Engine Oil	G15DTF		≐ 4.5 ℓ	Quality class: KGM genuine engine oil or Approved by ACEA C2 SAE 0W/30
Engine Coolant	G15DTF		≐ 7.0 ℓ	KGM genuine coolant Anti-Freeze: SYC-1025 Anti-Freeze:Water = 50:50 ORGANIC ACID TYPE, COLOR:BLUE
Engine Oil (HEV)	G15DTF		≐ 4.0 ℓ	Quality class: KGM genuine engine oil or Approved by API SPOW16
Coolant (HEV)	High voltage battery		≐ 6.2 ℓ	KGM genuine coolant Anti-Freeze: SYC-1025
	G15DTF		≐ 7.0 ℓ	Anti-Freeze:Water = 50:50 ORGANIC ACID TYPE, COLOR:BLUE
Driving Motor Oil			≐ 4.7 ℓ	EHSF-2LV
Automatic Transaxle Fluid	G15DTF		≐ 6.2 ℓ	KGM genuine oil (AW-1)
Manual Transaxle Fluid	G15DTF		≐ 1.95 ℓ	KGM genuine oil (SK ZIC SYN MTF 70W)
Transfer Case (PTU) Fluid	G15DTF	A/T	≐ 0.6 ℓ	KGM genuine oil (SAE 80W/90, API GL-5)
Rear Axle Oil	AWD		≐ 0.6 ℓ	KGM genuine oil (SAE 80W/90, API GL-5)
Brake / Clutch Fluid			As required	KGM genuine oil (DOT4)



Warning

- Use only KGM recommended fluids and lubricants.
- Do not mix any different types or brands of oils or fluids. This may cause damages.
- Keep the specified levels when adding or replacing the fluids.

Notice

- The antifreeze mixture ratio at the time of vehicle delivery is 45%.

Foreword

This section provides useful information to know in advance for reading the owner's manual.

Information regarding the marks used in the owner's manual, change of car design, and periodic check is provided.

Thank you for purchasing the TORRES/HYBRID.

TORRES/HYBRID you selected is a vehicle with superior safety and quality and the latest technologies. KG Mobility Corporation has been carrying out and initiating R&D activities continuously in the industry.

Please read this owner's manual carefully before driving the TORRES/HYBRID. You can drive safely and economically by utilizing the technical advantages applied to the vehicle.

We will dedicate ourselves to ensure that you can always drive the TORRES/HYBRID pleasantly and safely.

KGM

Purpose and Application Conditions of the Owner's manual

This owner's manual has been prepared to provide information for the specifications and functions of the vehicle, and important safety information including cautions and warnings for safe driving and correct vehicle maintenance.

- All descriptions, pictures, and drawings included in this owner's manual are based on the time of the document's preparation. If there is a change in the specifications (options) and functions according to a change of design, some content may be different from the actual vehicle.
- This owner's manual has been prepared based on all specifications (options) of the vehicle. Please understand that an explanation of a specification (options) which is not provided for your vehicle may be provided.

As some options or option packages may be added or deleted randomly depending on the vehicle point of sale and design changes, make sure that the options you applied when signing the contract are fitted to your vehicle prior to reading this owner's manual.

Please read this owner's manual carefully before driving the vehicle, to ensure safe driving and the best vehicle performance.

Marks Used in this Owner's manual

DANGER

It indicates a dangerous situation (DANGER) that may likely lead to death or serious injury.

It should be observed for the safety of the driver and other passengers.

WARNING

It indicates a dangerous situation (WARNING) that may lead to death or serious injury.

It should be observed for the safety of the driver and other passengers.

CAUTION

It indicates a dangerous situation (CAUTION) that may lead to moderate or minor injury, or a situation that may lead to damage to the vehicle.

It should be observed for the safety of the driver and other passengers and the prevention of property damage.

NOTICE

It is used for explaining additional information or procedures related to the vehicle and driving.



It is used to indicate the location of relevant information useful for using the product.

Change of Specifications (options) and Functions According to a Change of Design

The design is subject to change without prior notice for improving the safety and performance of the vehicle. Therefore, a vehicle specification (options) may be added or deleted, or a function may change.

The content explained in this owner's manual may be different from your vehicle.

Do Not Use Vehicle Components for Other Purposes

Do not use vehicle components for other purposes. KGM is not liable for any consequent damages.

Importance of a Periodic Check

Have your vehicle checked and maintained at a prescribed period in order to maintain the performance of the vehicle and to prevent the reduction of its life.

Information for Using KGM Authorized Service Center

KGM is not liable for any problem that occurred due to maintenance carried out by a service center other than KGM Authorized Service Center.

Table of Contents

The table of contents is provided in three types to allow you to find necessary information in a convenient method easily and fast.

- Introduction to chapters - You can identify the content of each chapter at a glance.
- Detailed table of contents - You can find desired information using a name through the detailed title for the relevant chapter.
- Table of pictures - You can find desired information using a picture easily even if you do not know the title of the desired information.

Introduction to Chapters

Identify the contents of each chapter at a glance.

Foreword

- You can check information regarding the marks used in the instruction manual, change of car design, and periodic check.

1. Vehicle Information and Safety Precautions

- You can check helpful information for driving and managing the vehicle safely and conveniently.
- Information regarding the vehicle identification, specifications, check points before driving the vehicle, safety precautions while driving, and vehicle maintenance methods is provided.

2. Safety Units

- You can check information regarding devices that allow you to drive the vehicle safely and how to use such devices.
- An explanation is provided for seat belts, a baby car seat, airbags, anti-theft, and warning system.

3. Convenient Equipment

- You can check information regarding devices that allow you to drive the vehicle conveniently and usefully and how to use such devices.
- An explanation is provided for doors, seats, windows, as well as various convenient equipment including the tailgate, various lights and lamps, mirrors, heater and A/C, AV navigation, storage and cargo box.

4. Starting and driving

- You can check information regarding the basic auxiliaries for safe driving, auxiliary equipment that helps you to drive comfortably, and how to use such equipment.
- An explanation is provided for the START/STOP switch and smart key as well as the driving system including the instrument cluster, gear shift lever, 4WD, cruise control, auxiliary driving system such as the brake and autonomous emergency braking system, rear and side warning lane departure warning system, and parking assistance system.

5. Emergency Measures in the Event of Emergency

- You can check useful information and emergency measures for various emergency situations you can face while driving.
- Information regarding the warning triangle and OVM tools, and a correct measure in case of a dead battery, engine overheating, flat tire, and towing a vehicle is provided. An explanation is also provided for how to respond to a fire, heavy snow, vehicle trouble, and an accident safely.

6. Periodic Checking and Maintenance

- You can check the necessary periodic check and maintenance methods in detail for safe and pleasant vehicle driving.

Index

- You can find important functions or terms from the content of this instruction manual in alphabetical order conveniently.

Detailed Table of Contents

Find the desired information using a name through detailed titles.

1. Vehicle Information and Safety Precautions

Information regarding the installation of ADR and provision of information 1-2

Precautions for potentially hazardous seat belt related goods..... 1-3

Precautions for the reduction of non-crash incidents 1-4

Cautions for the protection of the environment..... 1-5

Economical driving 1-5

Description of hybrid vehicles..... 1-6

Basic Terms Related to Hybrid Vehicles 1-6

What is a hybrid vehicle?..... 1-6

What is a regenerative braking system? 1-6

What is Virtual Engine Sound System (VESS)?..... 1-6

Power Flow in Hybrid Vehicles 1-6

Standby mode..... 1-6

Electric Motor Driving Mode 1-7

High Voltage Charging Mode I 1-7

High Voltage Charging Mode II 1-7

High Voltage Charging Mode III 1-8

High Voltage Charging Mode IV 1-8

HEV driving 1-8

HEV driving (motor charging mode)..... 1-9

HEV driving (motor and engine charging mode) 1-9

Engine driving mode..... 1-9

Engine driving mode..... 1-10

Instrument Panel of Hybrid Vehicles 1-10

PWR/CHG gauge 1-10

High voltage battery charge gauge ... 1-10

Display of the regenerative brake stage 1-10

High voltage-related warning lamps/indicators 1-11

Low voltage battery charge warning lamp 1-11

Virtual Engine Sound System (VESS) warning lamp 1-11

Power down warning lamp..... 1-11

High voltage battery level warning lamp..... 1-11

High voltage battery failure warning lamp..... 1-11

HEV high voltage warning lamp 1-11

Ready indicator lamp 1-11

EV operation mode indicator lamp 1-11

Hybrid system warning message..... 1-12

Battery level is low. 1-12

Power will be limited. Charge the battery. 1-12

Power will be limited. 1-12

The 12V auxiliary battery protection has been activated. 1-12

Check the virtual engine sound system. 1-12

Check driving battery! Stop your vehicle in a safe place. 1-12

Check hybrid system. 1-12

Low battery temperature may limit power. 1-12

Risk of battery overheating! Stop your vehicle in a safe place. 1-12

High voltage battery 1-13

Battery Information 1-14

High voltage motor (engine compartment)..... 1-14

Lift mounting points 1-15

Stationary vehicle (OFF)..... 1-15

To turn ignition off 1-15

To turn ignition off while driving (in case of emergency) 1-16

Guide to high voltage shutdown	1-16
Safety interlock fuse	1-16
To cutoff power from low voltage (12 V) battery	1-16
High-Voltage Battery Cooling	1-17
Air intake	1-17
Low voltage (12V) battery discharge protection mode	1-18
Starting after emergency release of door	1-18
If a low-voltage (12V) battery is completely discharged	1-19
Starting up using a jump cable	1-19
Do not disassemble/assemble high- voltage battery systems	1-20
Measures to be taken in the event of a vehicle accident or fire	1-21
In the event of a fire in a hybrid vehicle	1-21
If a hybrid vehicle is flooded	1-21
If emergency braking using the parking brake (EPB) is required	1-22
Emergency measures in case of emergency	1-23
To change P (park) position	1-23
Double parking	1-23
Certification	1-24

Vehicle identification	1-27
Certification label	1-27
Vehicle Identification Number (VIN)	1-27
Engine number	1-27
Dimensions	1-28
Specifications	1-29
Precautions for the modification of the vehicle and structural alteration	1-32
Checking before driving	1-34
Daily inspection	1-34
Checking engine room	1-34
Checking engine & high-voltage system coolant	1-35
Checking engine oil	1-35
Checking brake fluid (clutch fluid)	1-35
Checking washer fluid	1-35
Checking belts	1-35
Checking tires	1-36
Checking the instrument cluster	1-37
Checking the parking brake	1-37
Checking the pedals	1-37
Cleaning up near the driver's seat	1-37
Adjustable driving position	1-38
Adjusting the seat, headrest, steering wheel, and mirrors	1-38

Wearing the seat belt correctly	1-39
Safety and cautions for driving ...	1-40
No drugged, drunk, distracted and drowsy (4D) driving	1-40
Cautions for air bag	1-40
Precautions for infants, children, old people, or pregnant women	1-41
An infant or a small child must be seated in the rear seat with protective gear	1-41
No sleeping in a sealed vehicle	1-41
Do not drive with the doors or tailgate open	1-42
Do not hold a part of your body out of the window or sunroof	1-42
Be careful not to have a part of your body caught when using the power window	1-42
Check for any vehicles or persons passing by when getting out	1-43
Safe parking and stopping	1-43
Warming up the engine correctly	1-43
Do not stop the engine while driving	1-44
No sudden starting, acceleration or braking	1-44
Driving on unpaved and mountain roads	1-44

In high mountain area	1-44
Driving on a snowy or icy road	1-44
Driving on a sandy or muddy road	1-44
Driving on a hillside road and downhill road	1-45
Driving on a road with a pool of water or a river	1-45
Do not use a cellular phone or watch DMB while driving	1-45
Driving on the expressway	1-46
Crossing an intersection or railroad crossing	1-46
No sudden maneuvering of the steering wheel	1-46
Do not warm up the engine or check the vehicle in a sealed space	1-46
Use of the engine brake	1-46
Use of regenerative braking and engine braking (HEV)	1-46
Cautions for attaching accessories	1-47
Special cautions when checking the coolant	1-47
Do not load hazardous materials	1-47
Cautions for vehicle ventilation	1-47
System protection function (delayed accelerator pedal response)	1-48
Placement of extinguisher	1-48

Vehicle management 1-49

KGM Authorized Service Center and maintenance partners	1-49
Cautions for the depletion of battery when connecting uninterruptible power supply to the black box system	1-49
Long-term parking mode	1-49
Breaking in a new vehicle correctly	1-49
Using genuine parts	1-49
Vehicle washing	1-50
Washing the bumper	1-51
Washing wheels	1-51
Cautions for polishing the vehicle	1-51
Cleaning and maintaining glass	1-52
Cautions for window tinting	1-52
Care and cleaning of the interior	1-52
Seat Belt Care	1-53
Cautions for using the vehicle key	1-53
Corrosion protection	1-53
Sheet Metal Damage	1-53
Foreign Material Deposits	1-53
Finish Damage	1-54
Underbody Maintenance	1-54
System safety mode	1-55
Vehicle Fueling from Drums or Storage Containers	1-55

Fuel recommendation	1-55
Gasoline Engine	1-55
Fuel Recommendation	1-55
Do not Use Methanol	1-56
Engine check indicator	1-56
High voltage warning lamp	1-56
Other maintenance	1-56

2. Safety Units

Seat belt 2-2

Seat belt warning	2-2
Front seat (driver / passenger) belt reminder	2-3
Rear seat (left / center / right) belt reminder*	2-3
Fastening the seat belt	2-4
Unfastening the seat belt	2-5
Managing the seat belt	2-5
Adjusting the height of the front seat belt	2-5
Rear seat belt storage	2-5
Rear seat buckle storage	2-5
Rear center seat belt storage	2-6
Rear center seat belt release	2-6
How to fasten the seat belts (2-point) in rear center seat	2-6

How to fasten the seat belt (3-point) in rear center seat	2-7	Installation of crs secured by the seatbelt	2-15	Cases where the air bag does not inflate	2-24
Seat belt pretensioner and load limiter	2-8	Front-facing Child Seat	2-15	In the event of a slight collision	2-24
Pretensioner	2-8	Rear-facing Child Seat	2-15	In the event of a rear end collision	2-24
Load limiter	2-8			In the event of a side collision	2-25
Fastening the seat belt by a pregnant woman	2-9	Securing a child restraint system with “ISOFIX/i-Size” system and “Tether Anchorage” system*	2-17	In the event of a diagonal collision	2-25
Warnings for the seat belt	2-9	Locations of ISOFIX/i-Size Lower Anchors and Top Tether	2-17	In the event of a collision with a narrow object	2-25
Child restraint for an infant or a small child	2-11	How to use ISOFIX/i-Size Lower Anchor	2-17	In case the vehicle moves beneath another vehicle	2-26
Infant and child safety	2-12	How to use Top Tether	2-18	In the event of a rollover accident	2-26
Child Seat	2-12	Warning For Child Restraint	2-19	Secondary injury due to air bag deployment	2-26
Table of Vehicle Handbook Information on Child Restraint Systems Installation Suitability for Various Seating Positions	2-12	Air bag*	2-20	Other cases	2-27
Table of Vehicle Handbook Information on ISOFIX Child Restraint Systems Installation Suitability for Various ISOFIX Positions	2-13	Air bag warning label	2-20	Cases where the driver/front passenger air bags do not inflate	2-27
Table of Vehicle Handbook Information for Installation in Various Seating Positions on i-Size Child Restraint Systems	2-14	Air bag warning lamp	2-20	Cases where the side air bags or curtain air bags do not inflate	2-27
List of suitable universal Child Restraint Systems (CRS)	2-14	Air bag crash sensor and air bag control module	2-21	Warnings for the air bag	2-27
List of suitable ISOFIX Child Restraint Systems (CRS)	2-14	Configuration of air bag	2-21	Tire pressure monitoring system (TPMS)*	2-29
List of suitable i-Size Child Restraint Systems (CRS)	2-14	Passenger Air Bag ON/OFF Switch*	2-21	Checking the tire pressure	2-29
		Driver air bag	2-22	If the tire pressure or the TPMS is abnormal	2-30
		Driver knee air bag	2-22	Display of the TPMS status on the instrument cluster	2-31
		Front passenger air bag	2-22	When low tire pressure is detected	2-33
		Front seat side air bag	2-23	When you have rotated the tires	2-33
		Far side air bag	2-23	Cautions for the TPMS	2-34
		Curtain air bag	2-23		

Anti-theft and warning system 2-35

Immobilizer system*	2-35
Immobilizer/smart key warning light	2-35
If the engine does not start	2-36
When the transponder is damaged	2-36
When you lose the key	2-36
Theft deterrent system	2-37
Entering the theft monitoring mode	2-37
Activating the theft alarm	2-38
Holding the theft alarm	2-38
Canceling the theft monitoring mode	2-38

3. Convenient Equipment

Door..... 3-2

How To Lock/Unlock & Open Door	3-2
Door Opening Lever	3-2
How To Check If Door Locked/Unlocked	3-2
Door Lock/Unlock button	3-2
Auto door lock function at the time of driving	3-3
Auto door unlock function at the time of collision	3-3

How To Lock Doors In Emergency	3-4
Smart key	3-4
REKES key	3-4
To lock doors with mechanical key (excluding driver door)	3-4
Child safety door lock	3-5
Locking/unlocking the door lock	3-5

Seat 3-6

Seat & adjustment switch / button / lever	3-6
Front seat	3-7
Adjusting the headrest	3-7
Adjusting the front and rear positions	3-7
Adjusting the height	3-7
Separation/installation	3-8
Adjusting the power seat*	3-8
Front and rear position adjustment (driver seat/front passenger seat)	3-8
Adjusting the height (driver seat/front passenger seat)	3-9
Adjusting the cushion angle (driver seat/front passenger seat)	3-9
Adjusting the backrest angle (driver seat/front passenger seat)	3-9
Adjusting the lumbar support (driver seat)	3-10
Adjusting the seat manually	3-11

Front and rear position adjustment (driver seat/front passenger seat)	3-11
Adjusting the backrest angle (driver seat/front passenger seat)	3-11
Adjusting the height (driver seat)	3-11
Front passenger walk-in switch*	3-12
Adjusting the front and rear positions	3-12
Adjusting the angle of the backrest	3-12
Rear seat	3-13
Adjusting the height of the headrest	3-13
Seatback reclining adjustment	3-13
Rear seat backrest folding	3-14
Seat ventilation and heating*	3-15
Front seat ventilation and heating*	3-15
Front seat ventilation	3-15
Front seat heating*	3-16
Smart front seat heating control	3-16
Rear seat heating*	3-17
Rear seat heating smart control	3-17
Warnings and cautions related to the seats	3-18
Window (power window)*	3-20
Opening the driver seat/front passenger seat window	3-20
Closing the driver seat/front passenger seat window	3-20

Driver seat window safety function	3-21	Opening sunroof automatically	3-29	Operating condition	3-38
Opening/closing the rear seat window	3-21	Opening sunroof manually	3-29	Operation step	3-38
Rear seat window lock function	3-22	Closing sunroof automatically	3-30	Stopping the smart tailgate function	3-39
Sunroof (Type A)*	3-23	Closing sunroof manually	3-30	Opening the tailgate in the event of emergency	3-40
Opening the sunroof	3-24	Sunroof Open Warning	3-31	Engine hood	3-42
Opening automatically	3-24	Sunroof Safety Feature	3-31	Opening the engine hood	3-42
Opening manually	3-24	Resetting Sunroof	3-31	Closing the engine hood	3-42
Closing the sunroof	3-24	Resetting is required if:	3-31	Checking before closing the engine hood	3-42
Closing automatically	3-24	Tailgate	3-33	Closing the engine hood	3-42
Closing manually	3-24	Manual tailgate	3-33	Fuel inlet	3-43
Tilting the sunroof up/down	3-25	Opening	3-33	Opening the fuel inlet	3-43
Tilting up (opening the rear section)	3-25	Closing	3-33	Closing the fuel inlet	3-44
Tilting down (closing the rear section)	3-25	Power tailgate*	3-34	Lights and lamps	3-45
Sunroof open warning	3-25	Open/Close Tailgate With Interior Switch	3-34	Outdoor lights/lamps	3-45
Sunroof safety function	3-25	Opening/closing with the smart key	3-35	Light switch	3-46
Resetting the sunroof	3-26	Opening/closing with the button on the tailgate	3-35	Turning on the head light	3-46
Cases requiring the resetting of the sunroof	3-26	Open/close with the tailgate switch in luggage compartment*	3-36	Turning on the tail light	3-46
Resetting	3-26	Anti-pinch protection function	3-36	Activating the auto light function*	3-46
Sunroof (Type B)*	3-27	Resetting the opening height	3-36	Turning off all lights	3-46
Sunroof control button	3-28	Resetting the power tailgate	3-37	Turning on the front fog light*	3-46
Basic operating conditions of sunroof	3-28	Smart tailgate*	3-38	Turning on the rear fog light*	3-46
Opening / Closing Sunroof	3-29	Activating/deactivating the smart tailgate	3-38	Turning off the fog light*	3-46
		Opening the smart tailgate	3-38	Turning on/off the left/right turn signal	3-46

Turning on/off the high beam	3-47
Turning on the high beam and low beam at the same time (passing light)	3-47
Hazard warning lamp	3-47
Adjusting the angle of the head light	3-48
Headlight Angle Adjustment Levels	3-48
Headlight angle adjustment standard (5-seater)	3-49
Headlight angle adjustment standard (2-seater VAN)	3-49
Daytime Running Light (DRL)*	3-50
In case the DRL turns on	3-50
In case the DRL turns off	3-50
Smart High Beam (SHB)*	3-51
Setting the SHB	3-51
In case the high beam turns on	3-51
In case the high beam turns off	3-52
Operating the Light switch	3-52
AUTO Approach	3-53
In case the auto approach lamp turns off	3-53
Coming home/living home light	3-53
Setting the coming home/living home light	3-53
Operating the coming home light	3-54
Operating the living home light	3-54

Auto light function*	3-54
Auto light sensor	3-55
Interior lamp	3-56
Front room lamp (overhead console)	3-57
Driver seat spot switch	3-57
Front passenger seat spot switch	3-57
Driver / passenger / rear room lamp spot switch	3-57
Door linkage switch	3-57
Front spot lamp	3-57
Linkage function between the smart/ rekes key and the front room lamp	3-57
Rear room lamp	3-58
Luggage room lamp	3-58
Sun visor/mirror lamp	3-58
Mood lamp*	3-59
Mood lamp setting	3-59
e-call (Emergency call)*	3-60
Glove box lamp	3-60
How to use E-CALL system	3-61
e-call can't be canceled when:	3-62

Wiper and washer fluid

Windshield wiper	3-64
Adjusting the operation speed of the windshield wiper	3-64
Front windshield and washer fluid linkage	3-64

Front auto washer	3-64
Rear window wiper	3-65
Rear window wiper washer fluid linkage function	3-65
Rain sensing wiper*	3-65
Rain sensor	3-65

Mirror

Outside rearview mirror	3-66
Folding/unfolding the outside rearview mirror	3-66
Auto folding/unfolding function	3-66
Adjusting the outside rearview mirror	3-66
Selecting the outside rearview mirror	3-66
Adjusting the angle of the outside rearview mirror	3-67
Interior mirror	3-67
ECM room mirror*	3-67
Manual type inside rearview mirror	3-68
Manual Day/Night Adjustment	3-68

Heater and air conditioner

Adjusting the direction of air distribution and blocking the air distribution	3-69
Rear air distribution and fan speed control	3-70

Cautions for using the heater and air conditioner.....	3-70
Replacing A/C refrigerant/oil.....	3-70
Heater & A/C Controls.....	3-72
Turning Heater & A/C ON/OFF	3-73
Driver/Passenger Side Temperature Control	3-73
Independent Temperature Control (SYNC Off).....	3-74
Synchronization Temperature Control (SYNC On).....	3-74
AUTO Mode	3-74
Manual Mode.....	3-75
Air Distribution	3-76
Activating glass heater.....	3-76
How to Dehumidify Window Glass.....	3-77
Auto Defogger System (ADS).....	3-78
Enabling/disabling AUTO defogger	3-78
Steps to activate AUTO defogger	3-78
Wash fluid interlock automatic internal circulation mode	3-79
Maximum A/C operation	3-79
Auto ventilation	3-79
Enabling/disabling Auto ventilation.....	3-79
Eco Mode	3-80

Hypervisor (HVC).....	3-81
Hypervisor panel.....	3-81
Names of parts of hypervisor control panel.....	3-81
Main Menu Controls	3-82
Navigation.....	3-82
Media.....	3-83
Heater and A/C control.....	3-83
Top scroll panel (buttonless quick panel).....	3-84
Steering wheel	3-85
Adjusting the height/length of the steering wheel	3-85
Steering wheel heater*	3-85
Horn	3-86
Infotainment system	3-87
Smart audio*	3-87
AV/Navigation*	3-88
Slots for multimedia	3-89
Operating from the steering wheel	3-89
Bluetooth hands-free	3-89
Voice recognition function	3-89
Mute	3-90
Controlling the volume	3-90
Searching for media (SEEK)	3-90
Selecting the mode	3-90
Antenna	3-90

USB charging port	3-91
Power socket	3-92
Indoor convenient equipment	3-93
Sun visor and card holder (driver seat)	3-93
Sun visor	3-93
Card holder	3-93
Mirror and lamp	3-93
Grip handle/coat hanger	3-94
Headrest hangers (coat hooks)*	3-94
Rear seat door roller blind*.....	3-94
Storage unit	3-96
Front seat/rear seat cup holder*	3-96
Cell phone cradle	3-96
Front storage bin.....	3-97
Rear storage box	3-97
Glove box	3-97
Console	3-98
Door map pocket	3-98
Seat backrest pocket	3-98
Wireless Phone Charger System*.....	3-99
To Charge Phone.....	3-99
Additional equipment in the luggage compartment*	3-101
Luggage upper cover	3-101

Installing the luggage upper cover.....	3-101
Luggage compartment hook	3-101
Luggage compartment side storage box	3-102
How to store luggage upper cover.....	3-102
Luggage compartment	3-103
Roof rack*	3-104

4. Starting and driving

START/STOP switch (Smart key)* .. 4-2

OFF status	4-2
ACC status	4-2
ON status	4-2
READY status	4-2
Starting the engine	4-3
Starting the engine	4-3
Getting your vehicle started	4-4
Restarting the engine when it cannot be started.....	4-4
Stopping the engine.....	4-4
Stopping the engine while driving (in the event of emergency)	4-5
System safety mode	4-5

Cautions for using the START/STOP switch	4-5
--	-----

Key cylinder (ignition key) 4-7

OFF position (LOCK)	4-7
ACC position	4-7
ON position.....	4-7
START position.....	4-7
Starting the engine	4-8
Starting the engine.....	4-8
Getting your vehicle started	4-8
Restarting the engine when it cannot be started.....	4-8
Stopping the engine.....	4-9
System safety mode	4-9

Smart key* & REKES key 4-10

Function of each button	4-10
Locking the door	4-10
Unlocking the door (when the safety unlock is enabled)	4-11
Unlocking the door (when the safety unlock is disabled)	4-12
Activating/deactivating the panic mode	4-13
Headlamp (low beam) on	4-13
Opening/closing the tailgate (Type A).....	4-13
Additional functions	4-13

Smart door auto lock (auto close).....	4-13
Activating the smart door auto lock function (Activating from the hypervisor control panel)	4-14
Locking/unlocking the door with the door handle switch	4-14
To lock with door handle switch.....	4-15
To unlock with door handle switch (when the safety unlock is disabled).....	4-15
To unlock with door handle switch (when the safety unlock is enabled).....	4-15

Cautions for using smart key / REKES key.....	4-16
---	------

Using the emergency key	4-18
Unfolding/folding the emergency key	4-18
REKES key	4-18
Smart key	4-18
Locking/unlocking the door using the emergency key.....	4-18

Starting the engine with the dead smart key or interference, etc. (in the event of emergency)	4-19
---	------

Replacing the smart key/rekes key battery	4-20
Rekes key	4-20
Smart key	4-21

Instrument cluster 4-22

Type A	4-22	Electric power steering warning light	4-34	Rear fog lamp ON indicator*	4-41
Type B	4-24	Parking brake ON indicator (Red)	4-34	SHB indicator*	4-41
Driving Information Display	4-26	ABS (Anti-Lock Brake System) warning light	4-35	High beam indicator	4-42
Engine RPM	4-26	Brake system warning lamp	4-35	Turn signal/hazard warning lamp	4-42
Driving Speed	4-26	Electronic Parking Brake (EPB) warning light (Orange)	4-36	COMFORT mode indicator (HEV)	4-42
Over speed warning light (GCC only)	4-26	AUTO HOLD indicator/warning light	4-36	ECO mode indicator (HEV)	4-43
Engine Coolant Temperature	4-27	Engine check indicator	4-36	SPORT mode indicator (HEV)	4-43
Fuel gauge	4-28	Steering wheel heater indicator*	4-37	WINTER / SPORT indicator lamp	4-43
Total mileage	4-28	Electronic stability control system (ESC) ON indicator/warning light	4-38	Hands OFF warning lamp*	4-44
PWR/CHG gauge	4-29	Electronic stability control system (ESC) OFF indicator	4-38	ISG indicator/warning lamp*	4-44
High voltage battery charge gauge	4-29	Low fuel level warning light	4-38	ISG OFF indicator*	4-44
Display of the regenerative brake stage	4-29	TPMS warning light	4-39	4WD CHECK warning lamp*	4-45
Position of gear shift lever	4-30	Autonomous Emergency Braking (AEB) warning light	4-39	4WD LOCK ON indicator*	4-45
Gear shift point indicator in manual mode	4-30	Autonomous Emergency Braking (AEB) OFF indicator	4-39	Over speed warning light (GCC only)	4-45
Manual transmission display	4-30	Hill Descent Control (HDC) ON indicator/warning light	4-40	Engine compartment hood open warning light	4-46
Driving range	4-31	LKA (LDW) indicator / warning lamp*	4-40	Door open warning light	4-46
Ambient temperature	4-31	Centering lane keeping assist (CLKA) indicator / warning lamp	4-40	Master symbol	4-46
Warning lights and indicators	4-32	Illumination ON indicator	4-41	Smart tailgate indicator	4-47
Seat belt warning lamp	4-32	Front fog lamp ON indicator*	4-41	Driver Attention Alert (DAW) Warning Lamp	4-47
Air bag warning lamp	4-32			Driver Attention Alert (DAW) Failure Warning Lamp	4-47
Engine oil pressure warning light	4-32			Virtual Engine Sound System (VESS) warning light (HEV)	4-48
Charge warning light	4-33			Power down warning light (HEV)	4-48
Immobilizer/smart key warning light	4-33			HV battery level warning light (HEV)	4-48
Engine overheat warning lamp	4-33				

HV battery fault warning light (HEV)	4-49	TBT (Turn By Turn)	4-56	N (neutral) position	4-112
HEV high voltage warning lamp (HEV)	4-49	General Settings	4-57	D (drive) position	4-112
Ready indicator lamp (HEV)	4-49	Vehicle Settings	4-59	+/- (manual) position (paddle shift)	4-113
EV operation mode indicator lamp (HEV)	4-50	Message on the display of the instrument cluster	4-65	Display of gear shift lever position on the instrument cluster	4-114
HYBRID operation mode indicator lamp	4-50			How To Use Engine Brake	4-115
Headlamp angle indicator	4-50			Regenerative Braking System	4-115
Indicator panel on instrument cluster	4-51	Instrument cluster illumination brightness	4-105	Regenerative braking (paddle shift)	4-115
Main menu	4-51	To Adjust Instrument Cluster Illumination Brightness	4-105	How to set up regenerative braking	4-116
Main menu list	4-52	Shift lever in manual transmission	4-106		
HEV	4-52	Downshifting	4-107	Driving a vehicle equipped with automatic transmission	4-117
Trip computer information	4-53	Gear position when parking	4-107	Using the engine brake	4-118
Distance to empty/average fuel economy/Instantaneous fuel economy	4-53	Using the clutch	4-107	Using the kick down function	4-119
Mileage/average speed/driving time	4-53	Driving tips for normal starting off or starting off on uphill	4-107	Safety mode of the automatic transmission	4-119
Driving information after departure	4-54	EPB operation when driving uphill	4-108	Resetting the safety mode when the gear shift lever is fixed to a position	4-119
Energy flow chart (HEV)	4-54	SBW (shift by wire)	4-109	Resetting the safety mode	4-119
ISG cumulative time	4-55	Transmission selector lever position	4-109	If the fixed gear shift lever phenomenon appears after resetting the safety mode	4-119
TPMS status	4-55	Electronic shift lever position display	4-109	Cautions for using a vehicle equipped with automatic transmission	4-120
Driving assist Menu	4-55	How to move shift lever to target gear position	4-110	Drive mode	4-121
Driving assist	4-55	Functions for each shift position	4-111	Drive mode switch	4-121
AV screen	4-56	P (park) position	4-111		
		R (reverse) position	4-111		

Default Settings by Drive Mode	4-121	Checking and replacing the brake pads/discs	4-131	Releasing the EPB	4-138
Drive mode switch (HEV)	4-122	If the brake is not working	4-131	Releasing the EPB automatically	4-139
Default settings for each mode	4-122	ABS (Anti-Lock Brake System)	4-131	EPB warning light/brake warning light	4-139
4WD System*	4-123	ABS warning light	4-132	EPB emergency mode	4-139
4WD LOCK Shift	4-123	Electronic Brake-Force Distribution (EBD)	4-132	AUTO HOLD	4-141
Driving Modes and Indicators	4-123	Brake system warning lamp (EBD system)	4-132	Activating the AUTO HOLD function	4-141
4WD LOCK indicator (green)	4-123	Emergency Stop Signal (ESS)	4-133	Deactivating the AUTO HOLD function	4-141
4WD CHECK warning lamp (red)	4-123	Activation and deactivation conditions	4-133	Using the AUTO HOLD function	4-141
Driving Modes	4-124	Electronic stability control system (ESC)	4-134	AUTO HOLD indicator/warning light	4-142
4WD AUTO	4-124	ESC indicator/warning light	4-134	Parking assist system*	4-143
4WD LOCK	4-124	ESC OFF indicator	4-134	Front/rear obstacle detection system	4-143
Cautions for using 4WD system	4-124	Phenomenon that occurs when the ESC is activated	4-135	Activating the obstacle detection system	4-144
ISG (Idle Stop & Go) System*	4-126	When it is necessary to deactivate the ESC function	4-135	Warning buzzer interval	4-145
Engine Automatic Shutdown	4-126	Hill Descent Control (HDC)	4-136	Sensor and relevant system malfunction	4-145
Automatic Engine Restart	4-126	Activating/deactivating the HDC function	4-136	If the system does not operate or malfunctions	4-146
ISG system OFF	4-127	HDC indicator/warning light	4-137	Cautions regarding the front/rear obstacle detection system	4-147
Conditions for ISG system activation	4-127	HDC activation conditions	4-137	Rear camera system	4-147
Forced restart conditions	4-127	HDC deactivation conditions	4-137	Around View Monitoring (AVM) system*	4-148
Battery sensor (BSC)	4-128	HDC operation	4-137	Operating conditions	4-149
Conditions for activating battery sensor (BSC)	4-128	Electronic Parking Brake (EPB)	4-138		
Brake system	4-129	Applying the EPB	4-138		
Warning Light and Indicator Related to Brake	4-129				
Foot brake	4-130				
Checking for foreign materials on the pedal operation area	4-130				

How to operate AVM	4-150
360 Around view	4-150
Driving rear view	4-150
Clear-sight ground view	4-150
Double-Parking (Second Row Parking)*	4-151
Autonomous Emergency Braking (AEB)*	4-152
AEB indicator/warning light	4-152
AEB OFF indicator	4-152
AEB indicator/warning light	4-152
How to set Autonomous emergency braking (AEB)	4-153
How to set AEB Sensitivity	4-153
How to set Autonomous Emergency Braking (AEB) warning sound	4-153
AEBs operation	4-154
Activation conditions	4-155
Deactivation conditions	4-155
The AEB cannot detect a vehicle properly:	4-155
The AEB cannot detect a pedestrian	4-158
LDW (Lane Departure Warning)*	4-160
How to set LDW warning sound	4-160
To activate / deactivate Lane Departure Warning (LDW)	4-160

LDW ON indicator	4-161
Activation conditions	4-161
Cases that the system is not activated	4-162
Cases requiring the driver's attention	4-163

LKA (Lane Keeping Assistance)*

How to set LKA warning sound	4-164
To enable / disable LKA	4-165
LKA ON indicator	4-165
Operating conditions	4-165
Cases that the system is not activated	4-166
Cases requiring the driver's attention	4-167

Centering Lane Keeping Assist (CLKA)

To activate / deactivate CLKA	4-169
Centering lane keeping assist (CLKA) ON indicator lamp	4-170
Conditions for activation	4-170
Centering lane keeping assist (CLKA) hands-off warning	4-171
The CLKA does not work when:	4-173
Driver Attention Required	4-174

Cruise control system

Conditions for using the cruise control	4-175
Cruise control switch and indicator	4-175
Cruise control switch	4-175
Cruise Control Ready / Enabled Display	4-176
Auto cruise ACTIVATED	4-176
Auto cruise READY	4-176
Setting the cruise control driving speed	4-176
Speed acceleration process of the cruise control	4-177
Speed deceleration of the cruise control	4-178
Deactivating the cruise control	4-179
Deactivation condition	4-179
Other deactivation conditions according to the vehicle condition	4-179
Resuming the cruise control	4-180

Adaptive Cruise Control*

Adaptive Cruise Control Switch	4-181
Conditions for using Cruise Control	4-182
Adaptive Cruise Control Ready / Enabled Display	4-182
Set adaptive cruise (enabled)	4-182
Adaptive Cruise Control Ready	4-182

To set adaptive cruise control (ACC) operation sensitivity	4-183
Driving settings of adaptive cruise control (ACC)	4-183
Increasing speed	4-184
Decreasing speed	4-184
Temporary acceleration (override)	4-185
Deactivating	4-185
Disable conditions	4-185
Other disable conditions	4-185
Resume	4-186
To Deactivate	4-187
Steering wheel (steering force) control alert	4-187
To set safety distance to front vehicle	4-189
Forward situation awareness	4-190
Starting at congested areas	4-190
Front detection sensor (Front radar + front camera)	4-191
Vehicle detection is difficult under the following circumstances:	4-191
Not detected preceding pedestrian	4-192
Curved road	4-192
Uphill or downhill	4-193
To change lane	4-193
Detecting vehicle ahead	4-194

Intelligent Speed Assistance (ISA)*4-196

Intelligent Speed Assistance (ISA) operation switch	4-197
How To Set ISA	4-197
How to operate Intelligent Speed Assistance (ISA)	4-197
How ISA appears on instrument panel	4-198
Speed limit warning	4-198
Enabling speed limit warnings	4-198
Disabling speed limit warnings	4-198
Speed Limit Assist	4-198
Enabling Speed Limit Assist	4-198
Disabling Speed Limit Assist	4-199
Recognizing Traffic Signs	4-199
Lateral distance condition based on velocity	4-199
Recognizable traffic signs	4-199
Speed limit signs	4-199
Traffic signs can be difficult to recognize when:	4-199

Speed Limit*4-200

Images that show readiness and operation	4-200
Speed Limit Ready (Standby)	4-200
Speed Limit Setting (Activation)	4-200

How to enable speed limit in hypervisor control panel	4-201
Issue speed limit warning	4-201
To set speed	4-201
To deactivate speed limit warning	4-201

FVSW (Front Vehicle Start Warning)*4-202

How To Set	4-202
Operation	4-202

Safe Distance Warning (SDW)*4-203

How to set Safe distance Warning (SDW)	4-203
How Safe Distance Warning (SDW) operates	4-203

Rear and side warning system*4-204

Display of rear and side warning system activation	4-204
Warning Steps in BSW System	4-205
1st warning	4-205
2nd warning	4-205
When the rear and side warning system is abnormal	4-205

Blind Spot Detection Warning (BSW) system	4-206
Activating / deactivating BSW system	4-206
Activation conditions	4-206

Lane Change Collision Warning (LCW) system	4-207
Operating conditions	4-207
BSA System	4-207
Activating / deactivating BSA system	4-207
Operating conditions	4-208
BSA is deactivated when:	4-208
RCTW System	4-208
Activating / deactivating RCTW system	4-209
Activation conditions	4-209
RCTA System	4-210
Activating / deactivating RCTA system	4-210
Operating conditions:	4-210
Message on instrument cluster	4-210
Cases where RCTA system not work	4-211
Cases where the RCTA system malfunctions	4-211
SEW System	4-212
Activating / deactivating SEW system	4-212
Operating conditions:	4-212
Message on instrument cluster	4-212

5. Emergency Measures in the Event of Emergency

Warning triangle and OVM (Owner Vehicle Maintenance) tools 5-2

Warning triangle	5-2
Storage place of the warning triangle*	5-2
OVM tools	5-3
Location where the OVM tools are stored	5-3

When the engine cannot be started due to depletion of the battery 5-4

Starting the engine using the jump cable	5-4
--	-----

When 12V Battery Discharged 5-5

Low voltage (12V) battery discharge protection mode	5-5
Starting after emergency release of door	5-5
If a low-voltage (12V) battery is completely discharged	5-6
Starting up using a jump cable	5-6

When the engine is overheated or other problems have occurred 5-9

When the engine is overheated so that the warning light turns on	5-9
Symptoms that appear when the engine is overheated	5-9

Emergency measures when the engine is overheated	5-9
When the engine check indicator turns on	5-10

When a tire is flat 5-11

Repairing a flat tire/inflating a tire using the service kit for tire repair	5-12
Components of the service kit for tire repair*	5-12
Storage location of the service kit	5-12
Confirming whether it is possible to repair the flat tire with the service kit or not	5-12
Operating principle of the service kit	5-13
Repairing a flat tire	5-13
Checking the tire pressure after repairing a flat tire	5-17
Inflating a tire	5-18

Removing the spare tire (Temporary)*	5-19
Changing a spare tire (Temporary)	5-20
When replacing a front tire	5-20
When replacing a rear tire	5-21
Cautions when changing the tire	5-23

When you need to have your vehicle towed 5-24

Towing a disabled vehicle	5-24
---------------------------------	------

Towing with tow truck	5-24
For 4WD vehicle	5-24
For 2WD vehicles	5-24
When a tow truck is unavailable (in case of emergency)	5-25
Installing the towing hook	5-25
Using a towing rope	5-26
Trailer towing	5-27
Trailer loading	5-27
Maximum Load Limits	5-27
If you want to pull a trailer	5-28
Weight of trailer	5-28
Weight of trailer tongue	5-28
Trailer brakes	5-29
Trailer lights	5-29
Tires	5-29
Safety chains	5-29
Brake fluid	5-29
Automatic transmission fluid	5-29
Towing tips	5-29
Driving on hill	5-30
Parking on hills	5-30
When you are ready to leave after parking on a hill	5-30
Maintenance when towing trailer	5-30
When the vehicle has stopped due to a failure	5-31

In the event of an accident	5-32
Tips when an accident or a malfunction occurs on the expressway	5-32
In the event of a fire	5-33
Placing an extinguisher in the vehicle	5-33
How to use the extinguisher	5-33
Checking and maintaining the extinguisher	5-33
In the event of a heavy snow	5-34
Precautions in case of rain	5-34

6. Periodic Checking and Maintenance

Scheduled maintenance services - gasoline engine	6-2
Scheduled maintenance services (under severe condition) - gasoline engine	6-5
Scheduled maintenance services - HEV	6-8
Scheduled maintenance services (under severe condition) - HEV	6-11
Checking the engine room	6-14

Engine oil	6-16
Level Check	6-16
Replenishment	6-16
Function of engine oil	6-17
Consumption of Engine Oil	6-17
Engine care	6-17
Change interval	6-18
Specification and capacity	6-18
Warnings and cautions when checking	6-18
SAE viscosity classes	6-19
Engine	6-19
Engine oil inspection and replacement	6-20
Functions	6-20
Consumption	6-20
How to keep your engine in good shape	6-20
Check engine oil	6-21
Replenishment	6-22
Engine oil and filter change interval	6-23
Specification and capacity	6-23
Engine coolant	6-24
Level Check	6-24
Service Interval	6-25
Replenishment	6-25
Air cleaner	6-27
Cleaning	6-27

Change	6-28
Brake and clutch fluid (with M/T) · 6-29	
Check brake fluid	6-29
Refilling brake fluid	6-30
Specification and Replacement	6-30
Level Check and Replenishment	6-30
Washer fluid · 6-31	
Top up washer fluid	6-31
Battery · 6-33	
Battery Maintenance	6-33
Specification	6-33
Low-voltage (12V) battery specifications and capacity	6-34
How to check	6-34
Spark plugs - Gasoline engine · 6-36	
Checking the wipers and replacing the blade · 6-37	
Replacing the blade of windshield wiper	6-37
Replacing the blade of rear window wiper	6-37
Specifications of wiper blade	6-37
Checking and replacing fuses and relays · 6-39	
Engine compartment fuse and relay box	6-39

Interior fuse box	6-39
Checking and replacing fuses	6-40
Checking and replacing the lamps · 6-41	
Specifications of lamps and checking	6-41
Specifications and quantity of lamps and bulbs	6-41
Checking the lamps	6-42
Headlamp desiccant*	6-42
Position of exterior lights and lamps	6-43
Replacing exterior lamps	6-44
Replacement of headlamp desiccant	6-44
Headlamp absorbent*	6-44
To replace license plate lamp	6-44
To Replace Rear Combination Lamp	6-45
Position of interior lamps	6-47
Replacing the interior lamps	6-48
Rear Room Lamp (Bulb)	6-48
Replacing the sun visor/mirror lamp (Bulb)	6-48
Glove Box Lamp	6-49
Replacing the A/C filter · 6-50	
Checking the tires and wheels · 6-52	
Checking the tire pressure	6-52

Prescribed tire inflation pressure	6-52
Wheel alignment status and the balance between tires and wheels	6-52
Checking the status of tire wear	6-53
Rotating the tire positions	6-53
Snow tire	6-53
Tire chain	6-54
Cautions for checking the tires and wheels	6-54

Vehicle management during winter · 6-56

Starting the engine and driving the vehicle	6-56
Managing the engine (motor) oil	6-56
Managing the engine coolant	6-56
Managing washer fluid	6-57
Installing a snow tire	6-57
Managing the A/C	6-57
Other maintenance	6-57
Cautions for parking during winter	6-58

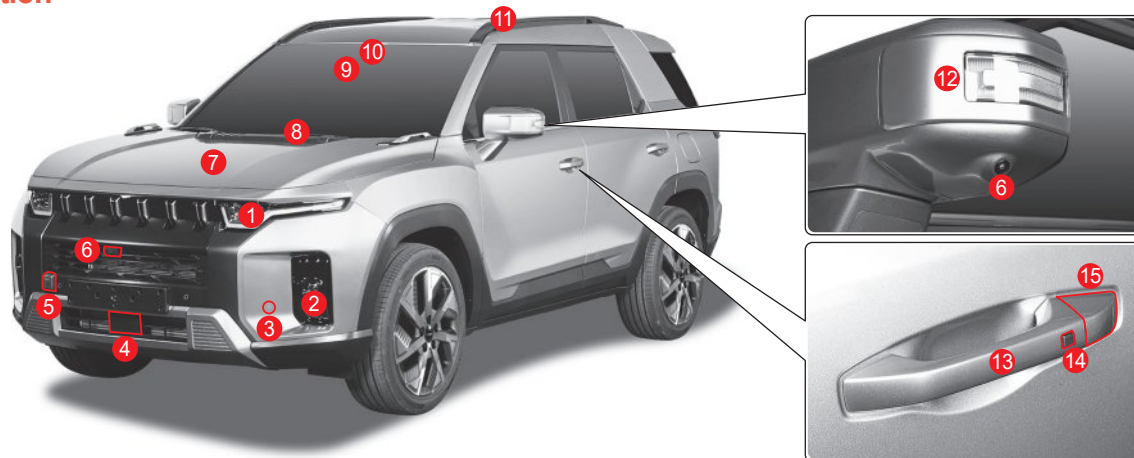
Warnings for self-maintenance · 6-59

7. Index

Table of Pictures

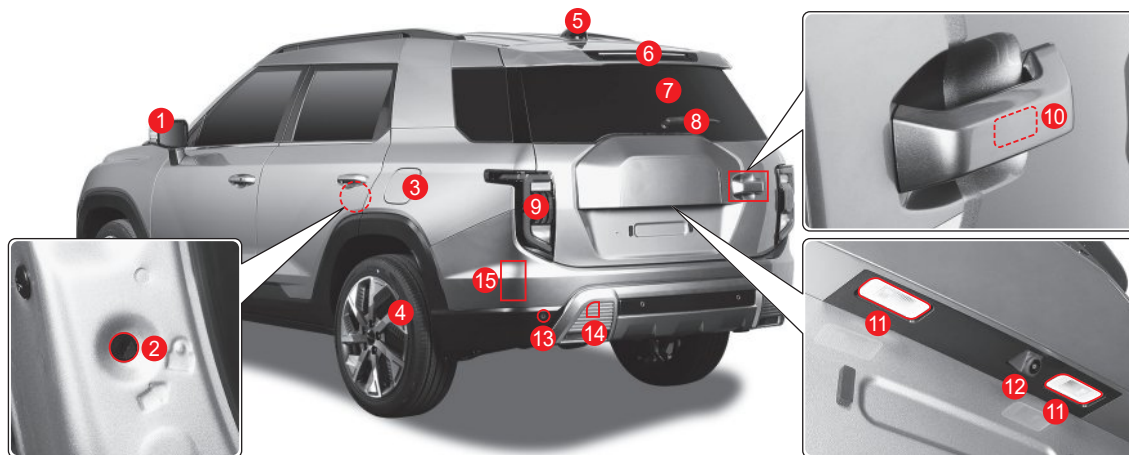
Find the desired information using a picture easily even if you do not know the title of the desired information.

Front section



- | | | |
|---|--|---|
| <p>1 Head light (head light) 3-46</p> <ul style="list-style-type: none"> • Smart High Beam (SHB) 3-51 • Daytime running light (DRL) 3-50 <p>2 Front fog light 3-46</p> <p>3 Front obstacle detection sensor 4-143</p> <p>4 Front radar 4-191</p> <ul style="list-style-type: none"> • SDW (Safety Distance Warning) 4-203 • ACC (Adaptive Cruise Control) 4-181 <p>5 Front towing hook 5-25</p> <p>6 Front view camera, side view cameras 4-148</p> <ul style="list-style-type: none"> • Around view monitoring (AVM) system 4-148 | <p>7 Engine hood 3-42</p> <p>8 Windshield wiper 3-64</p> <p>9 Front camera module (FCM) 4-191</p> <ul style="list-style-type: none"> • Autonomous Emergency Braking (AEB) 4-152 • Lane Departure Warning (LDW) 4-160 • Lane Keeping Assist (LKA) 4-164 • Centering Lane Keeping Assist (CLKA) 4-169 • Front Vehicle Start Warning (FVSW) 4-202 <p>10 Auto light/rain sensor 3-54/3-65</p> | <p>11 Roof rack 3-104</p> <p>12 Side repeater 3-45</p> <ul style="list-style-type: none"> • AUTO Approach 3-53 <p>13 Door handle 4-14, 4-17</p> <ul style="list-style-type: none"> • Using emergency key 4-18 <p>14 Door outside handle switch 4-15</p> <p>15 Emergency key 4-18</p> |
|---|--|---|

Rear section



- 1 External mirror heater 3-77
- 2 Child safety door lock / unlock 3-5
- 3 Fuel inlet 3-43
- 4 Tire and wheel 6-52
 - Tire pressure monitoring system (TPMS) 2-29
- 5 Antenna (GPS, radio) 3-90
- 6 High mounted stop lamp 3-45
- 7 Rear window heater 3-77

- 8 Rear window wiper 3-65
- 9 Rear lamp 3-45, 6-41, 6-43
- 10 Tailgate open button 3-33
- 11 License plate lamp 3-45
- 12 Rear camera 4-147
- 13 Rear obstacle detection sensor 4-143
- 14 Rear towing hook 5-25

- 15 Rear Cross Traffic Alert 4-204
 - Lane Change Warning (LCW) 4-207
 - Blind Spot-detection Warning (BSW) 4-206
 - Blind Spot Collision Assist (BSA) 4-207
 - Rear Cross Traffic Warning (RCTW) 4-208
 - Rear Cross Traffic Alert (RCTA) 4-210
 - Safety Exit Warning (SEW) 4-212

Left side of driver's seat (with doors)



- ❶ Door Opening Lever 3-2
- ❷ Outside rearview mirror angle adjustment button 3-66
- ❸ Door lock/unlock button 3-2
- ❹ Window button 3-20
 - Rear window lock 3-22
- ❺ Motor room hood opening lever 3-42
- ❻ Interior fuse box 6-39
- ❼ Foot brake pedal 4-130
- Emergency Stop Signal (ESS) 4-133
- ❽ Steering wheel unlock lever 3-85

- ❾ Light switch 3-46
- ❿ Instrument cluster 4-22
- ⓫ Driver air bag 2-22
- ⓬ Front seats 3-7
- ⓭ Power seat adjustment button 3-8
- ⓮ Driver's lumbar support adjustment button 3-10
- ⓯ Walk-in button for passenger seat adjustment 3-12
- ⓰ Audio system control button 3-89
- ⓱ Paddle shift (-/+) 4-113

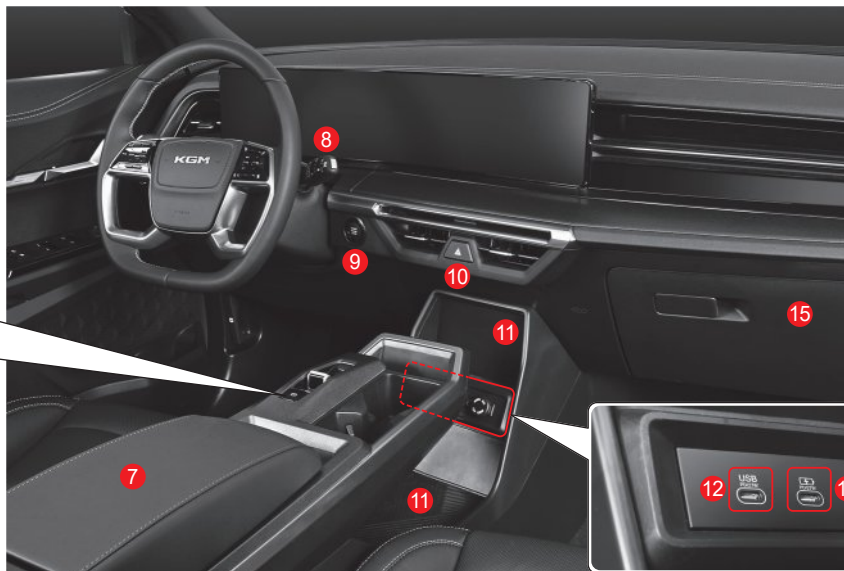
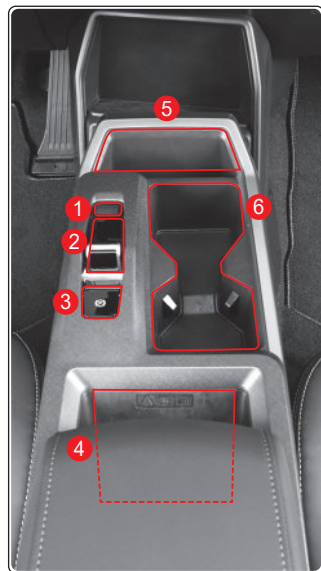
- ⓓ LKAS ON/OFF switch 4-160, 4-164, 4-169
 - Lane Departure Warning (LDW) 4-160
 - Lane Keeping Assistance (LKA) 4-164
 - Centering Lane Keeping Assistance (CLKA) 4-169
- ⓔ Intelligent cruise control switch 4-197
 - Speed limit control switch 4-201
- ⓕ Intelligent speed assistance ON/OFF switch 4-196
- ⓖ Button to set safety distance to front vehicle 4-181
- ⓗ Instrument cluster menu button and control button 4-22

Interior front view



- | | | |
|---------------------------------------|--|--|
| 1 Sun visor..... 3-93 | 6 Window dehumidifier switch..... 3-77 | 13 Mute switch |
| 2 Overhead console assembly..... 3-57 | 7 Glass heater switch..... 3-76 | 14 Drive mode switch 4-121 |
| • Emergency call 3-89 | 8 Steering wheel heating switch..... 3-85 | 15 Power tailgate switch..... 3-34 |
| • Sunroof control switch..... 3-23 | 9 Heater and A/C control switch..... 3-72 | 16 AUTO HOLD 4-129 |
| • Front room lamp..... 3-57 | • Seat Ventilation & Heating..... 3-15 | 17 Front obstacle detection system ON/OFF switch 4-143 |
| • Rear room lamp..... 3-58 | 10 Media volume control switch | 18 Hill descent control (HDC) switch..... 4-136 |
| 3 Inside rear view mirror 3-67 | 11 Interior illumination brightness | 19 Electronic stability control (ESC) OFF switch 4-134 |
| 4 Hypervisor (HVC) panel..... 3-81 | 12 Headlight angle adjustment switch..... 3-48 | |
| 5 Mood lamp..... 3-59 | | |

Right side of driver's seat (with center console)



- 1 P (park) button4-111
- 2 Electronic shift lever 4-109
- 3 Electronic Parking Brake (EPB).....4-138
- 4 Wireless phone charger system3-99
- 5 Cell phone cradle.....3-96
- 6 Front seat cup holder.....3-96

- 7 Front seat console storage bin3-98
- 8 Wiper and Washer Switch3-64
- 9 Ignition switch4-2
 - Smart key4-2
- 10 Hazard warning flasher switch.....3-47
- 11 Front storage bin3-97

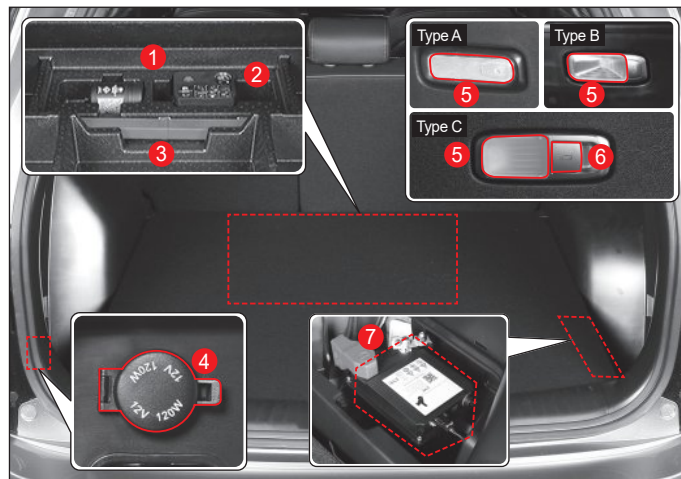
- 12 Multimedia jack 3-89
- 13 USB charging port (lower front of center console).....3-91
- 14 Power socket (lower front of center console).....3-92
- 15 Glove box.....3-97

Rear seats



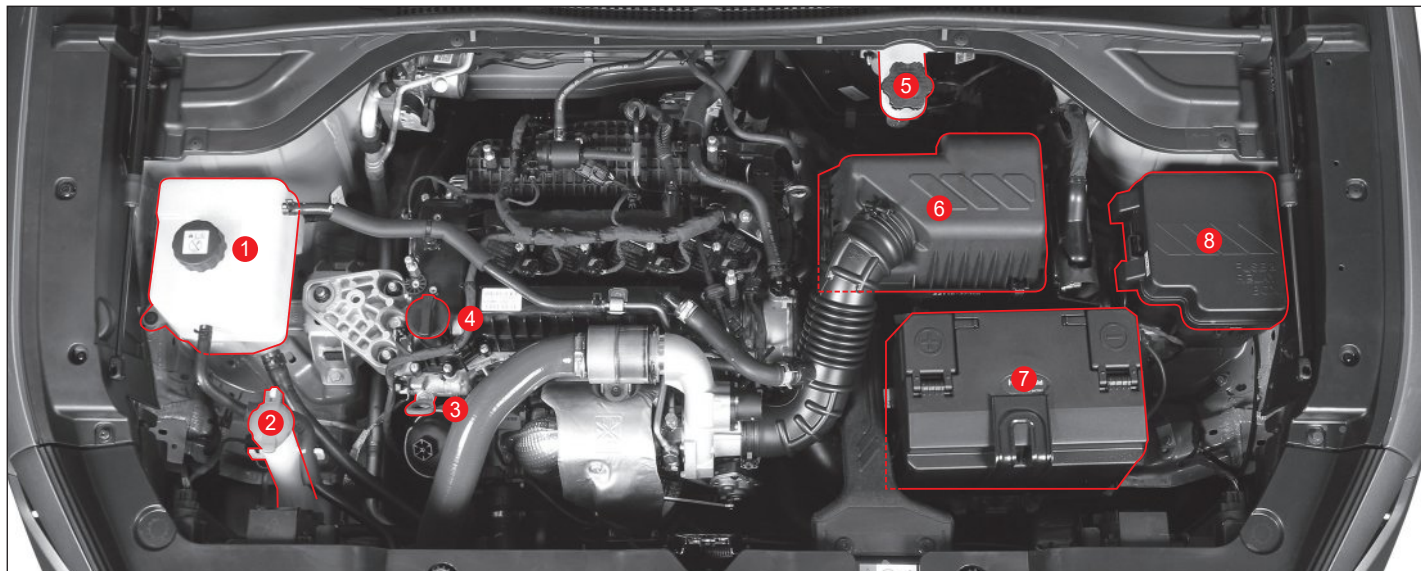
1	Rear seat	3-13
2	Baby car seat	2-11
3	Rear seat door open lever	3-45
4	Rear seat window button	3-21
5	Rear seat warmer button	3-17
6	USB charging port (rear side of center console)	3-91
7	Rear cup holder and armrest	3-96
8	Rear seat belt	2-6
9	Rear seatback release lever	3-13
10	Rear seat door roller blind	3-94

Luggage compartment



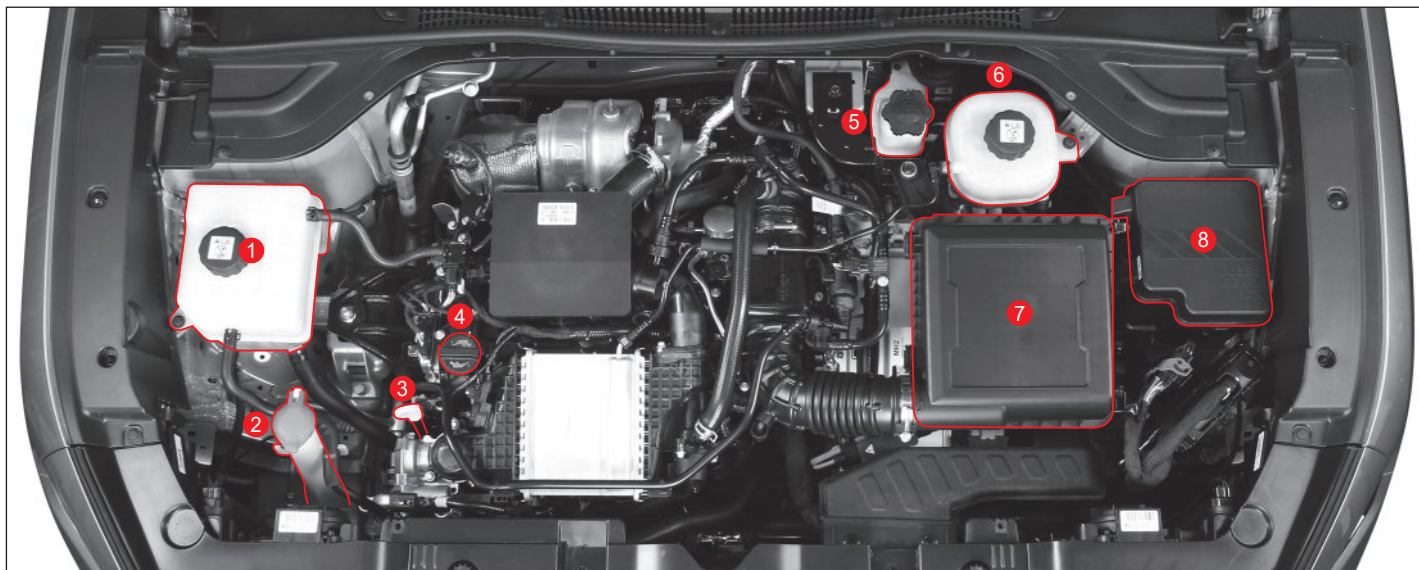
1	Service kit for tire repair*	5-12
2	OVMS tools	5-2
3	Warning triangle*	5-2
4	Power socket (left side of luggage compartment)	3-92
5	Luggage compartment lamp	3-58
6	Tailgate switch (right side of luggage compartment)	3-36
7	12V battery (HEV only)	6-34

Engine room (G15DTF)



- | | | |
|---|---|---|
| <p>1 Engine coolant reservoir 6-24</p> <ul style="list-style-type: none"> • Checking engine coolant 6-24 <p>2 Washer fluid inlet 6-31</p> <ul style="list-style-type: none"> • Checking and adding washer fluid 6-31 <p>3 Engine oil level gauge 6-16</p> <ul style="list-style-type: none"> • Checking engine oil 6-16 | <p>4 Engine oil inlet 6-16</p> <ul style="list-style-type: none"> • Adding and replacing engine oil 6-16 <p>5 Brake and clutch fluid reservoir 6-29</p> <ul style="list-style-type: none"> • Checking brake and clutch fluid 6-29 <p>6 Air cleaner 6-27</p> <ul style="list-style-type: none"> • Cleaning the air cleaner and replacing the filter 6-27 | <p>7 Battery 6-33</p> <ul style="list-style-type: none"> • Checking and replacing the battery 6-33 <p>8 Engine compartment fuse and relay box 6-39</p> <ul style="list-style-type: none"> • Checking and replacing fuses 6-40 |
|---|---|---|

Engine room (G15 HEV)



- | | | |
|--|--|---|
| <p>1 Engine coolant auxiliary tank 6-24</p> <ul style="list-style-type: none"> • Engine coolant check 6-24 <p>2 Washer fluid filler cap 6-31</p> <ul style="list-style-type: none"> • Washer fluid check and refill 6-31 <p>3 Engine oil level gauge 6-16</p> <ul style="list-style-type: none"> • Check engine oil 6-16 | <p>4 Engine oil filler neck 6-16</p> <ul style="list-style-type: none"> • Engine oil refill and replacement 6-16 <p>5 Brake fluid reservoir 6-29</p> <ul style="list-style-type: none"> • Check brake fluid 6-29 <p>6 High-voltage system coolant auxiliary tank 6-34</p> | <p>7 Air cleaner 6-27</p> <ul style="list-style-type: none"> • Air cleaner cleaning and filter replacement 6-27 <p>8 Engine compartment fuse and relay box 6-39</p> <ul style="list-style-type: none"> • Checking and replacing fuse 6-40 |
|--|--|---|

Warning lights and indicators

Image	Meaning/Relevant page
	Seat belt warning lamp 2-2, 4-32
	Air bag warning lamp 2-20, 4-32
	TPMS warning light 4-39
	Immobilizer/Smart key warning light 2-35, 4-33
	Engine oil pressure warning light 4-32
	Charge warning light 4-33
	Engine overheat warning lamp 4-33
	Electric power steering warning lamp 4-34

Image	Meaning/Relevant page
	Brake system warning lamp (EBD system) 4-34, 4-132
	ABS (Anti-Lock Brake System) warning light 4-35, 4-132
	Parking brake ON indicator (Red) 4-34, 4-132
	Electronic parking brake (EPB) warning lamp (orange) 4-36, 4-138
	Engine check indicator 4-36, 5-10
	Steering wheel heater indicator 4-37
	Electronic stability control system (ESC) ON indicator/ warning light 4-38, 4-134
	ESC OFF indicator 4-38, 4-134

Image	Meaning/Relevant page
	Low fuel level warning light 4-38
	Autonomous Emergency Braking System (AEBS) warning light 4-39, 4-152
	AEBS OFF indicator 4-39, 4-152
	Illumination ON indicator ... 4-41
	Front fog light ON indicator 4-41
	SHB indicator 4-41
	High beam indicator 4-42
	Turn signal/hazard warning lamp 4-42

Image	Meaning/Relevant page
	Engine compartment hood open warning light4-46
	Hands-off warning lamp4-44
	Door ajar warning lamp4-46
AUTO HOLD	AUTO HOLD indicator/warning light 4-36, 4-141
	HDC ON indicator/warning light 4-40, 4-137
	LKAS (LDWS) indicator/warning lamp - Lane departure warning (LDW) 4-40, 4-161 - Lane keeping assist system (LKA) 4-40, 4-164
COMFORT (HEV)	COMFORT mode indicator4-42

Image	Meaning/Relevant page
SPORT (HEV)	SPORT mode indicator4-43
ECO (HEV)	ECO indicator4-43
WINTER	Winter mode indicator.....4-43
SPORT	SPORT mode indicator4-43
	ISG indicator/warning light4-44
	ISG OFF indicator.....4-44
	4WD CHECK warning light4-45
	4WD LOCK ON indicator4-45

Image	Meaning/Relevant page
	Master symbol 4-46
	Centering lane keeping assist (CLKA) indicator / warning lamp 4-40, 4-169
120 km/h	Over speed (120 km/h) (GCC only) 4-26, 4-45
	Rear fog lamp ON indicator4-41
	Driver Attention Alert (DAW) warning lamp4-47
	Driver Attention Alert (DAW) failure warning lamp4-47
	Virtual Engine Sound System (VESS) warning lamp4-48

Image	Meaning/Relevant page
	Power down warning lamp 4-48
	High voltage battery level warning lamp 4-48
	High voltage battery failure warning lamp 4-49
	HEV high voltage warning lamp 4-49

Image	Meaning/Relevant page
	Ready indicator lamp 4-49
	Headlamp angle indicator 4-50
	HYBRID operation mode indicator lamp 4-50
	EV operation mode indicator lamp 4-50

1. Vehicle Information and Safety Precautions

You can check helpful information for driving and managing the vehicle safely and conveniently.

Information regarding the vehicle identification, specifications, check points before driving the vehicle, safety precautions while driving, and vehicle maintenance methods is provided.

Installation of ADR (Accident Data Recorder) and provision of information

This vehicle has an ADR (Accident Data Recorder).

The ADR (Accident Data Recorder) is a device that can record and check the driving information of the vehicle (vehicle speed and operation status of brake pedal and acceleration pedal, etc.) for a certain period of time before and after an accident, such as a car crash.

The ADR (Accident Data Recorder) helps to better understand an accident situation.

Precautions for potentially hazardous seat belt related goods



Warning

When potentially hazardous seat belt related goods are used, the safety of passengers will be seriously endangered. Never use these goods.

Do not use the clip to disable the seat belt alarm



When this clip is inserted into the seat belt buckle, the seat belt is recognized as fastened, so the seat belt warning lamp and alarm are not activated.

This leads to no fastening of the seat belt, and it is very dangerous when an accident occurs.

Do not use the seat belt stopper



When it is installed on the seat belt, it hinders the normal automatic locking function of the retractor and lowers the performance of the seat belt.

Do not use playroom mat



When it is installed in the rear seat, it will lead to not fastening seat belts and car seats, and it is very dangerous when an accident occurs.

Precautions for the reduction of non-crash incidents



Warning

A part of your body may get stuck or hit and get seriously injured when opening and closing the doors. Caution should be taken.



- When you open and close the doors, a part of your body such as your finger or head may get stuck or hit and get seriously injured. Open and close the doors after ensuring that no part of your body is stuck or hit.



- When you open or close the trunk (tail gate), a part of your body such as your finger or head may get stuck or hit and get injured. Open or close the trunk after ensuring safety.
- The trunk (tail gate) is raised or lowered automatically at below or over a certain level. Always take caution to avoid your face or head from getting hit or your hand from getting stuck.



- Close the windows after checking that other passengers' hands or heads are away from the windows. This is especially important for children, who may get a serious injury, such as suffocation if their head gets stuck.
- When you pull the switch continuously to raise the window at a position where something is pinched first without operating the one touch auto close function, the anti-pinch function will not operate.
- Especially when a part of a child's body is on the window, a certain amount of force (resistance) is not applied to the window, so the anti-pinch function may not operate. Make sure to check before closing the windows.

Cautions for the protection of the environment

KG Mobility Corporation environment-related policies aim at comprehensive protection of the environment. This is also a way to save natural resources that become the basis of human survival on earth, and meet and harmonize the demands of nature and mankind.

You can contribute to the protection of the environment by operating our vehicle in an eco-friendly way.

High-voltage battery consumption, decelerator control, brake and tire wear are affected by driving conditions and driving style.

Observe the following content and participate in the protection of the environment.

Economical driving

High-voltage battery power consumption and tire wear are affected by driving conditions and driving style. Reduce charging and repair costs by following driving conditions and practicing good driving habits.

Recycling

- Information about eco-friendly product development and vehicle recycling can be found on the KG Mobility Corporation website www.kg-mobility.com/en

Driving conditions

- Avoid short-distance driving as high-voltage battery consumption is relatively high.
- Always check the fuel efficiency.
- Always check if the tire inflation pressure is appropriate.
- Unload unnecessary goods from the luggage compartment.
- Always check high-voltage battery consumption.
- Have your vehicle checked periodically.
- Do not drive with the windows open when traveling at high speeds. Depending on air resistance and heating/cooling settings, high-voltage battery consumption can increase.
- Reduce your speed in windy conditions where you may encounter air resistance (crosswinds, tailwinds).
- If road conditions are poor, avoid from traveling on those roads.
(Driving on unpaved roads, etc. can cause damage to the high-voltage battery and lower components).

Driving habits

- Do not depress the accelerator pedal when starting the vehicle.
- Drive off in the vehicle slowly.
- Keep a safe distance with the vehicle ahead and drive carefully.
- Avoid frequent acceleration or deceleration.
- Avoid sudden acceleration, deceleration, or stops.
- Turn off the motor when you stop the vehicle for a long time.
- Drive safely at economic speeds.
- Use air conditioner and heater only when needed.
- Drive carefully, maintaining a safe distance from the car in front of you to avoid sudden stop lights (this can reduce high-voltage battery power usage and reduce brake pad light wear).
- Do not drive with your foot on the brake pedal. This results in increased high-voltage battery drain and wear and tear on brake pads, etc.
- In manual mode, shift the gears properly and avoid exceeding 2/3 of the maximum engine RPM in each gear.
- Avoid warming up the vehicle while stopping.
- Turn off the engine when you stop the vehicle for a long time.

Description of hybrid vehicles

Basic Terms Related to Hybrid Vehicles

What is a hybrid vehicle?

Hybrid vehicles efficiently control the electric drive motor and gasoline engine, the two power sources, and select the power source according to the driving conditions of the vehicle, thereby reducing harmful exhaust emissions compared to vehicles that only use internal combustion engines.

What is a regenerative braking system?

Regenerative braking recovers kinetic energy generated when monitoring speed while the vehicle is in motion (using the reverse rotation property of the drive motor) and converts it into electrical energy, which can be stored in a high-voltage battery or supplied to a high-voltage electrical system. Additionally, regenerative braking provides braking effect when activated.

While driving, the regenerative braking amount changes according to the vehicle speed, load status, and regenerative braking stage without pressing the accelerator pedal.



Caution

- When both the brake pedal and regenerative braking are activated simultaneously, a phenomenon of stronger braking may occur. This is normal operation and can be partially alleviated by adjusting the regenerative braking phase.

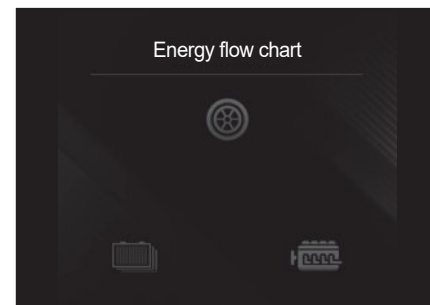
What is Virtual Engine Sound System (VESS)?

Hybrid vehicles run on the drive motor at low speeds, so they produce very little noise. At this time, a virtual sound is generated as a device to make pedestrians aware of the approaching vehicle.

Power Flow in Hybrid Vehicles

Standby mode

- **Stationary**
Drive motor and engine stopped



Operation mode indicator lamp

HYBRID

EV

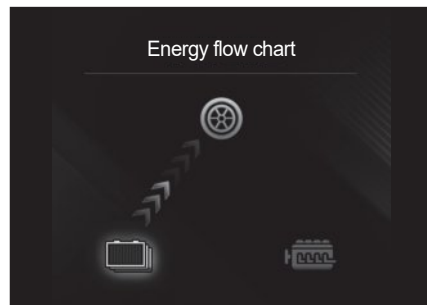
Off: Gray

On: Green

Electric Motor Driving Mode

- **Driving motor drive**

This is a mode where the vehicle is powered solely by the drive motor using energy stored in the high-voltage battery.



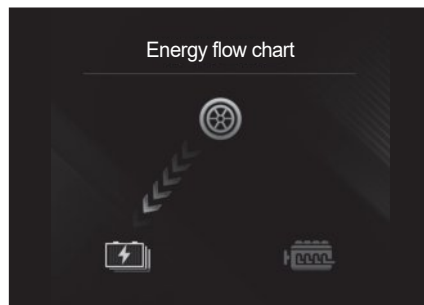
Operation mode indicator lamp

HYBRID	EV
Off: Gray	On: Green

High Voltage Charging Mode I

- **Regenerative braking of driving motor**

This is a mode where the vehicle is driving using the drive motor while the engine is off, and the high-voltage battery is charged through regenerative braking.



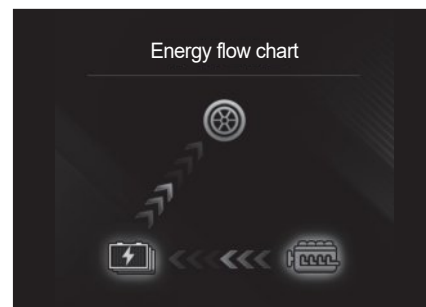
Operation mode indicator lamp

HYBRID	EV
Off: Gray	On: Green

High Voltage Charging Mode II

- **Driving motor drive + charging with engine**

This mode involves the engine operating to charge the high-voltage battery while the drive motor is in operation. Depending on the vehicle load, energy generated is either used to charge the high-voltage battery or supplied to the drive motor.



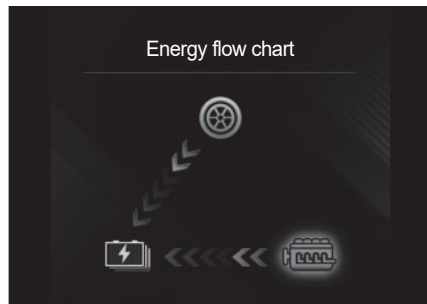
Operation mode indicator lamp

HYBRID	EV
On: Green	Off: Gray

High Voltage Charging Mode III

- **Driving motor regenerative braking + charging with engine**

This is a mode where the high-voltage battery is charged through engine operation, while regenerative braking by the drive motor also charges the high-voltage battery.



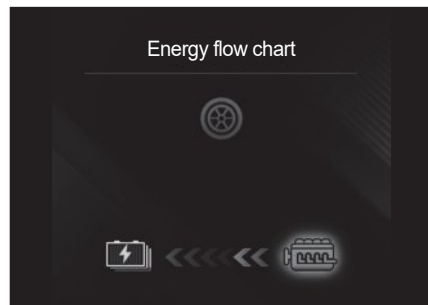
Operation mode indicator lamp

HYBRID	EV
On: Green	Off: Gray

High Voltage Charging Mode IV

- **Charging engine**

This is a mode that charges the high-voltage battery by running the engine while the vehicle is stopped.



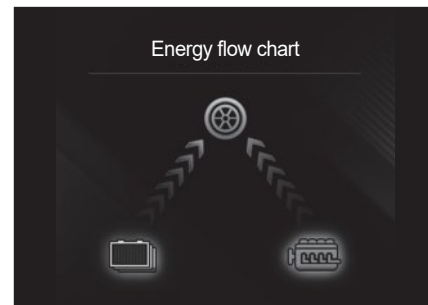
Operation mode indicator lamp

HYBRID	EV
Off: Gray	Off: Gray

HEV driving

- **Drive motor + engine running**

This mode is driven by the drive motor and engine output depending on the driving status (load and speed) of the hybrid vehicle.



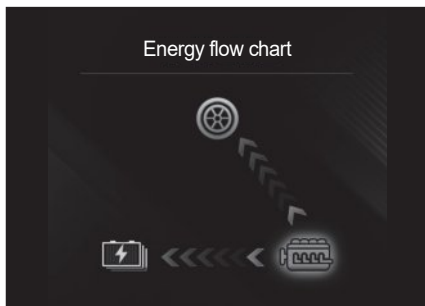
Operation mode indicator lamp

HYBRID	EV
On: Green	Off: Gray

HEV driving (motor charging mode)

- **Charging drive motor + engine running and charging**

This is a mode that uses the engine output to drive the vehicle while the engine is running, and uses the excess driving force to generate charging energy in the drive motor to charge the high-voltage battery.



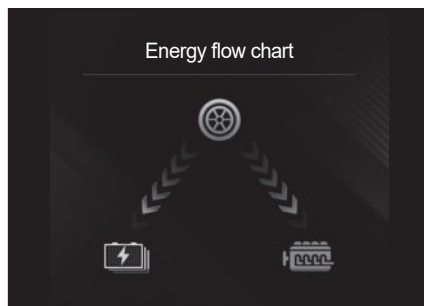
Operation mode indicator lamp

HYBRID	EV
On: Green	Off: Gray

HEV driving (motor and engine charging mode)

- **Driving motor regenerative braking + engine regenerative charging**

This is a mode in which regenerative braking force is applied to the drive motor and engine to charge the high-voltage battery while the HEV driving mode is activated.



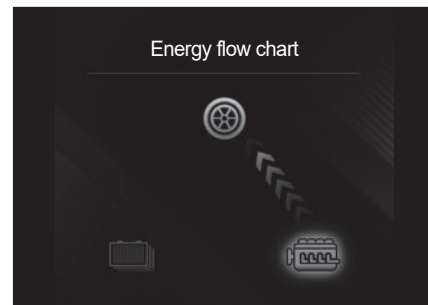
Operation mode indicator lamp

HYBRID	EV
On: Green	Off: Gray

Engine driving mode

- **Engine running**

This is a mode where the vehicle is powered solely by the engine, operating within its maximum efficiency range.



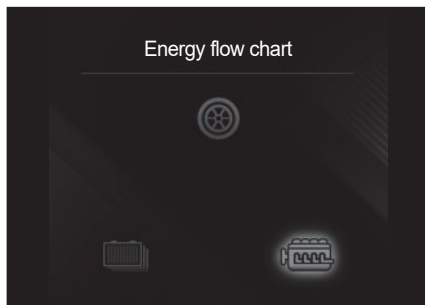
Operation mode indicator lamp

HYBRID	EV
Off: Gray	Off: Gray

Engine driving mode

- **Engine operation**

If you drive the engine while the vehicle is stationary, the engine only operates for a certain period of time (engine warming up).



Operation mode indicator lamp

HYBRID	EV
Off: Gray	Off: Gray

Instrument Panel of Hybrid Vehicles

PWR/CHG gauge



Displays the motor power consumption and the charge/discharge status of the regenerative braking brake's electric energy.

- **PWR (A)**
It displays the power used by the motor when accelerating, and the gauge moves up as the power consumption increases.
- **CHG (B)**
When decelerating, it displays the power being charged through regenerative braking, and the gauge moves down as the amount of charge increases.

High voltage battery charge gauge



Indicates the state of charge of the high-voltage battery (drive battery).

Display of the regenerative brake stage



When using regenerative braking, the current regenerative braking setting level is displayed here.

You can use the paddle shift lever to set it to 0-3, SMART levels.

High voltage-related warning lamps/indicators

Low voltage battery charge warning lamp



The warning light comes on when the low voltage battery is discharged or there is an abnormality in the charging system, such as a low DC-DC converter (LDC).

Virtual Engine Sound System (VESS) warning lamp



The virtual engine sound warning light turns on if there is an abnormality in the virtual engine sound system.

Power down warning lamp



The warning light is turned on and the output is limited for the safety of the electric vehicle system.

High voltage battery level warning lamp



The high-voltage battery remaining warning light turns on when the remaining battery charge of the high-voltage battery is low.

High voltage battery failure warning lamp



The high-voltage battery failure warning light turns on when there is an abnormality in the unit, sensor and etc. related to the high-voltage battery control system.

HEV high voltage warning lamp



If there is an abnormality in the hybrid high-voltage system, control system, or related sensors, this warning light will turn on.

Ready indicator lamp



This indicates that the vehicle is in a state where it can be driven, and the green light after starting indicates that it is in a state where it can be driven normally.

EV operation mode indicator lamp



This indicator light turns on when the vehicle is capable of driving solely with the drive motor.

HYBRID operation mode indicator lamp



The green indicator light turns on when the engine is running in driving mode.

Hybrid system warning message

Battery level is low.

This message is displayed for about 5 seconds when the charge level of the high-voltage battery is low.

Power will be limited. Charge the battery.

This message is displayed for approximately five seconds before the power of the drive motor is limited due to insufficient high-voltage battery charge.

Power will be limited.

This message is displayed for about 5 seconds when the power of the drive motor is limited due to insufficient charge in the high voltage battery.

The 12V auxiliary battery protection has been activated.

When starting after the function is activated before replenishing the low voltage (12V) battery, this message is displayed for approximately 5 seconds.

Check the virtual engine sound system.

In the event of the faulty virtual engine sound system, this message is displayed for approximately 5 seconds.

Check driving battery! Stop your vehicle in a safe place.

This message is displayed for about 5 seconds if there is an abnormality in the high-voltage battery.

Check hybrid system.

This message is displayed for about 5 seconds if there is an abnormality in the high-voltage electrical system.

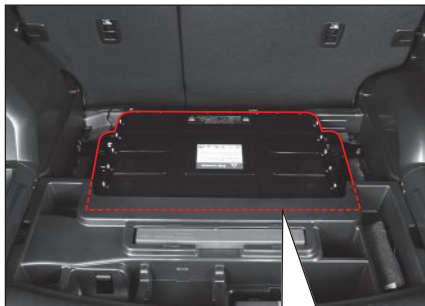
Low battery temperature may limit power.

When the high voltage battery temperature is very low and the SOC is low, this message is displayed for approximately 5 seconds.

Risk of battery overheating! Stop your vehicle in a safe place.

This message is displayed for about 5 seconds when the temperature of the high-voltage battery is very high.

High voltage battery



Warning

- Follow the instructions on the warning label on the high-voltage (drive) battery.
- High-voltage cables (orange cables) connected to high-voltage (drive) batteries and drive motors can cause serious bodily harm and death due to electric shock from contact. Never touch high-voltage cables.



Caution

- If the vehicle has been involved in a collision that caused significant damage, please have the high-voltage battery checked and serviced at our nearest authorized service center for damage and connection status.
- High-voltage batteries that have been exposed to high temperatures for a long period of time can cause performance degradation.
- The remaining level of the high voltage (drive) battery may gradually decrease even if the vehicle is not driven.
- Storing the vehicle at high (55°C) or low (-30°C) temperatures can degrade the high voltage (drive) battery capacity.
- Depending on the temperature of the high voltage battery, the cooling fan operation may be heard, which is a normal operating sound, the sound will be reduced when the proper temperature is maintained.
- Even with the same charge, the range or power may vary depending on driving conditions (such as outside temperature).
- Driving at high speeds or uphill can result in higher power consumption from the high-voltage (drive) battery than normal, resulting in a shorter range.

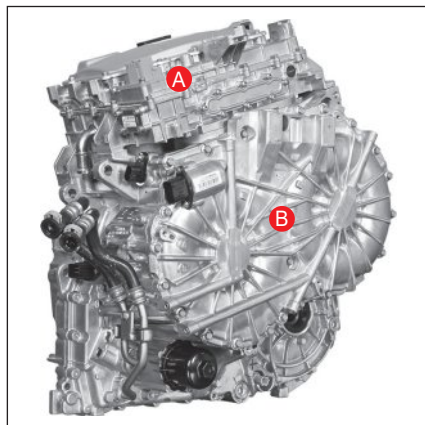
- Using the heating and cooling functions uses high-voltage (drive) battery power, resulting in a shorter driving range. Maintain an optimal temperature when using the heating and cooling features.
- Natural degradation of the high-voltage (power) battery occurs over the age of the vehicle, which reduces the range.
- If the charge and range continue to decrease, visit our nearest authorized service center for inspection and maintenance.
- If the vehicle is not used for an extended period, start the engine approximately once every three months to charge the high-voltage (drive) battery and prevent it from discharging. Also, if the charge is low, charge it immediately and store the vehicle.
- Depending on the state of charge of the high-voltage (drive) battery (ambient temperature, battery temperature, etc.), the charge power value shown on the charge indicator may be lower.
- When the vehicle is turned on and off, the high voltage battery may hear an operating sound for the high voltage connection, which is a normal operating sound.

Battery Information

Manufacturer Information	
Manufacturer name	Sunwoda Mobility Energy Technology Co.,Ltd.
Trade mark	SEVB
Postal address	Sunwoda Industrial Park, No.18, Tangjia Road South, Gongming Subdistrict, Guangming New District, Shen Zhen city, Guangdong Province, China
Web	https://www.sevb.com

Manufacturer Information	
Manufacturer name	KG Mobility Corp.
Trade mark	KGM
Postal address	455-12 Dongsakro, Pyeongtaek City, Gyeonggi Province, Korea
Web	https://www.kg-mobility.com/en/index.html

High voltage motor (engine compartment)



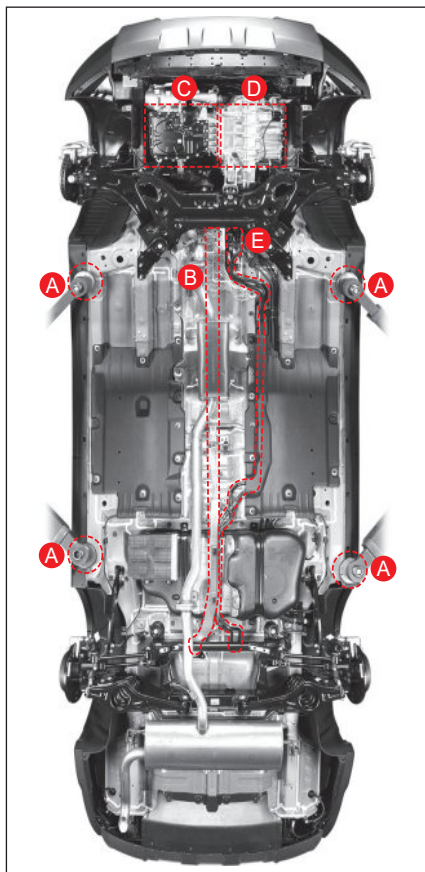
- A** Dual motor controller
- B** Drive motor (including regenerative braking motor)



Warning

- Do not disconnect the high-voltage connector of the dual motor controllers (MCU & GCU) randomly. This may result in electric shock or other hazards.
- For inspection and maintenance of hybrid vehicles, please be sure to have your vehicle inspected and serviced at our nearest authorized service center.

Lift mounting points



- A Vehicle lift points
- B High voltage cable
- C Gasoline engine
- D Drive motor and reducer
- E Coolant in/out (LDC side)

Stationary vehicle (OFF)

You can turn off the engine while keeping the electronic shift lever in the P (parking) position and pressing the brake pedal.

To turn ignition off

- 1 Allow the vehicle to come to a full stop and depress and hold the brake pedal.
- 2 Place the electronic shift lever in the P (park) position.
- 3 Apply the parking brake.
- 4 Press the START switch to turn off the ignition.
- 5 When the ignition is turned off, release your foot from the brake pedal.

Before exiting the vehicle, make sure that the ignition is turned off and that there are no other abnormalities, and get off with the smart key.

To turn ignition off while driving (in case of emergency)

If you need to turn off the ignition in an emergency situation such as an accident or vehicle damage while driving, press and hold the START switch for at least 3 seconds or press 3 times within 1.5 seconds. The ignition will be switched off and the START switch enter the ACC state.

Warning

- Never turn off the ignition while driving unless it is an emergency, such as an accident or damage to the vehicle. It can be very dangerous as the steering wheel becomes difficult to maneuver and the braking performance of the brake decreases.

Notice

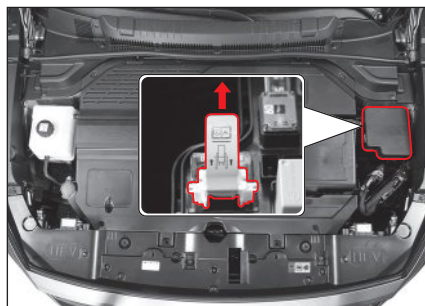
- If the vehicle is still driving with the ignition turned off, the electric shift lever in the N (neutral) position can be re-started by pressing the START switch without depressing the brake pedal.

Guide to high voltage shutdown

Safety interlock fuse

In case of an emergency (accident or fire), follow the appropriate procedure to disconnect or remove the safety interlock fuse in the engine compartment fuse box to quickly cut off the power from the high-voltage (drive) battery.

- 1 When you open the engine compartment fuse box, you will see the safety interlock fuse. Pull the corresponding fuse in the direction of the arrow to detach or remove it.

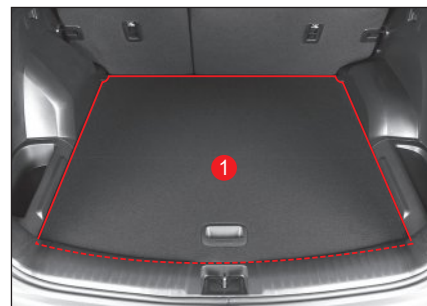


Warning

- When the safety interlock fuse is removed or detached, the high-voltage (for driving) battery power is cut off, and the vehicle will not start. Do not remove or disconnect it unless it is an emergency.

To cutoff power from low voltage (12 V) battery

- 1 Remove the luggage board (1).



- 2 There is a low-voltage (12V) battery cover (2) on the right side of the luggage compartment. Remove the cover in the direction of the arrow.



- 3 Unscrew the mounting bolt (10 mm) (3) for the low battery (12 V) battery (-) terminal to remove the (-) terminal.



Specification	LFP / 12V-22Ah
Capacity	22Ah



Warning

- Before removing the low-voltage (12V) battery, park the vehicle in a safe place and turn off the ignition to prevent low-voltage system protection and unnecessary warning lights.
- For discharging the capacitor voltage of the high-voltage device, be sure to wait at least three minutes after disconnecting the low-voltage (12V) battery terminal.

High-Voltage Battery Cooling

Air intake

The hybrid high-voltage battery air intake is installed at the bottom of the rear seat on the left (side). The corresponding air intake is used to cool the hybrid high-voltage battery. Do not block the air intake with objects, clothes, etc. or spill foreign substances. High-voltage batteries may deteriorate or fail due to damage or overheating. In addition, a fire may occur due to overheating.



Warning

- Be careful when cleaning the hybrid air intake. Do not spill liquid such as water when cleaning with a damp cloth.
- If the air intake cover is damaged, immediately request an inspection from our authorized service center.
- If foreign matter enters the air intake or is blocked by thin clothing, the performance of the hybrid battery may be degraded or the battery may be damaged.

Low voltage (12V) battery discharge protection mode

What is discharge protection mode?

The low-voltage (12V) battery used in hybrid cars has a discharge protection mode activated to prevent damage to the battery and prevent the low-voltage (12V) battery from being completely discharged.

When the discharge protection mode is activated, electrical devices such as the smart key system will not operate.

At this time, open the door according to the discharge protection mode release procedure and start the engine within one minute to charge the low voltage (12V) battery.

Low voltage (12V)
battery
discharge warning
signal (LBMS)



Enters discharge
protection mode



Caution

- If the vehicle is left without starting after the discharge protection mode is released, the low voltage (12V) battery will be completely discharged, causing serious damage to the battery.

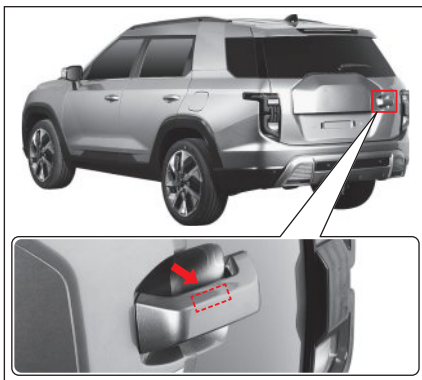
Notice

- When the discharge protection mode is activated, all systems (high-voltage and low-voltage) of the hybrid vehicle are not operational.

Starting after emergency release of door

When the discharge protection mode is activated, follow the procedure below to start the engine after releasing the door emergency release.

- 1 Press the tailgate's opening switch for about 5 to 15 seconds.



Notice

- Depending on the conditions of the various modules applied to the hybrid car, the tailgate switch must be pressed for up to 15 seconds to release the discharge protection mode.

- 2 When the discharge mode is released, the tailgate will unlock and open.
- 3 After releasing the discharge mode, be sure to start the engine within one minute to recharge the low-voltage (12V) battery.

Notice

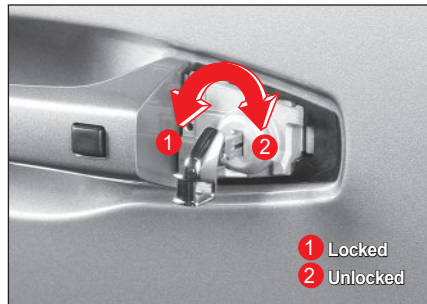
- After starting the engine, the low voltage (12V) battery is charged regardless of whether the engine is running when the Ready indicator lamp (⚡) is turned on on the instrument panel.
- When charging the low-voltage (12V) battery, depressing the accelerator pedal is not necessary.

If a low-voltage (12V) battery is completely discharged

If the low voltage (12V) battery is completely discharged and the discharge protection mode does not activate, you can start the engine by connecting a battery of the same specification and capacity or a spare battery with a jump cable. Start the engine using the jump cable according to the following procedure:

Starting up using a jump cable

- 1 After removing the emergency key cover, use the emergency key to unlock the door.



☞ Refer to "Using the emergency key" (p.4-18)

- 2 Open the engine compartment hood.

- 3 Open the engine compartment fuse box cover (A).



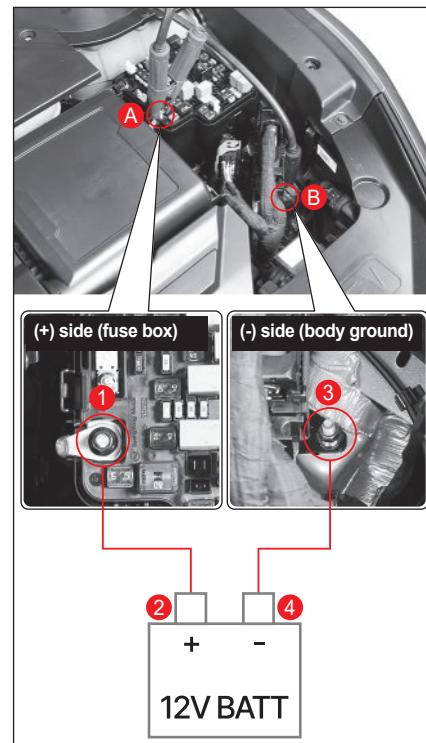
- 4 Connect the jump cables in the following order.

A. Red jump cable (+) (positive):

- Low voltage (12V) battery (+) terminal of the engine compartment fuse box of a discharged vehicle (1)
- Positive terminal of the auxiliary battery or other vehicle supplying power (2)

B. Black jump cable (-) (negative):

- Unpainted areas of the body of a discharged vehicle (3)
- Negative terminal of the auxiliary battery or other vehicle supplying power (4)



- 5 Start the discharged vehicle.
- 6 Once the engine starts, disconnect the jumper cables in the reverse order in which they were connected.

Do not disassemble/assemble high-voltage battery systems



Warning

- Never disassemble or assemble the battery system. Electric shock can cause death or injury.
- Disassembling or assembling the battery system without authorization may cause problems with the vehicle's performance or durability.
- Do not touch the components or remove or attach the covers or electrical cables at your own discretion, as there is a risk of electric shock from the battery system, high-voltage cables (orange cables) connected to the motor, etc. Especially for hybrid vehicles, do not touch the high-voltage system when the ignition is in the "ON" position. Electric shock can cause death or injury.
- If the electrolyte from a high-voltage battery comes into contact with the skin, clothing, or eyes, flush with clean running water for at least 15 minutes and seek medical attention immediately. Continue to wipe off the electrolyte with a sponge or cloth soaked in water until you receive medical attention. Risk of blindness or harm to the skin.

- Do not use the high-voltage components inside the battery system (high-voltage battery, inverter, DC converter, etc.) for other purposes.
- Do not attempt to charge the high-voltage battery within the battery system using an external charger. Electric shock can cause death or injury and affect vehicle performance or durability.
- Do not arbitrarily drill holes or apply shocks to the battery system. Electric shock can cause death or injury and affect vehicle performance or durability.
- Do not bring it near fire or incinerate it. There is a risk of fire due to heat generation.



Caution

- High-voltage batteries that have been exposed to high temperatures for a long period of time can cause performance degradation. Do not exceed 30 minutes at 70°C or 20 minutes at 80°C when heat treating vehicle paint.
- When cleaning the inside of the engine compartment, do not use high-pressure washing or water washing as this may cause electric shock due to high-voltage leakage and damage to the vehicle's electrical system, which may cause problems with the vehicle.
- The high-voltage battery is automatically charged when driving.
- When the hybrid system is operating, operating noise may be heard from the high-voltage battery system in the rear seat. This is not caused by any problems.

Measures to be taken in the event of a vehicle accident or fire

If you are driving a hybrid vehicle and an accident occurs, turn on the hazard warning flasher and move the vehicle to a safe place.

After turning off the ignition, evacuate to a safe place and prevent others from approaching.



Warning

If a high-voltage battery is damaged in an accident, it can leak gases and electrolytes that are harmful to humans.

- Be careful not to let leaked liquids touch your skin.
- If combustible and toxic gas leaks are suspected, open windows to ventilate and evacuate to a safe place.
- If a leaked liquid enters the eye or comes into contact with the skin, immediately flush the area with running or salt water and consult a doctor.

In the event of a fire in a hybrid vehicle

In the event of a fire, evacuate to a safe place and prevent other people from approaching the vehicle.

- Contact the fire department and inform them that a hybrid vehicle fire has occurred, and follow the instructions of the fire department.



Caution

- In the event of a fire, quickly evacuate to a safe area and wait for rescue party to arrive.
- If a high-voltage battery under the vehicle catches fire, a large amount of water must be continuously supplied for a long period of time to completely extinguish the fire. Extinguishing is difficult if you don't use enough water or a fire extinguisher suitable for extinguishing. Do not approach the vehicle haphazardly. Accidents, such as electric shock, can result in personal injury.

If a hybrid vehicle is flooded

If your hybrid vehicle is flooded while driving, take the following measures:

- Turn off the vehicle immediately, take the key with you, and evacuate to a safe place.
- Contact our Emergency Roadside Assistance Center and inform them that your hybrid vehicle has been flooded.



Warning

- Do not touch a flooded hybrid vehicle. High-voltage battery can cause accidents such as electric shock or fire.

If emergency braking using the parking brake (EPB) is required

Notice

- EPB stands for Electronic Parking Brake.
- If the brake pedal fails while driving, pull the EPB switch to apply emergency brakes. In this case, the brakes are applied only while the switch is being pulled, and the brakes stop when the switch is released. The parking brake is engaged when the vehicle is stopped by continuously pulling the switch.
- While the vehicle is braking, the brake warning light comes on and a warning sound is heard in the instrument cluster.
- Emergency braking distance may be longer than normal braking distance.



Caution

- Improper operation of EPB switch (operating with excessive force applied, continuous operation) may turn on the EPB warning lamp. If you turn off the engine, wait for a while, and then turn it on again, the warning light will go out and the engine will return to normal operation. If the EPB warning light continues to turn on, please have it inspected at a KGM service center.
- If the brake warning light does not turn on or blinks when the EPB switch is pulled, the parking brake is not engaged. If the EPB warning light is on and the brake warning light is flashing, press and release the EPB switch once, then pull the switch back to its original position. If the EPB warning light continues to turn on, please have it inspected at a KGM service center.
- If the parking brake makes an emergency stop and the associated device makes a noise or continues to emit a burnt smell, it may be a system malfunction, so please have it inspected at our directly managed Hi-Tech Center or Bluehands.



Warning

- Actuating the EPB switch while driving can cause a very dangerous situation, so be sure to use it only in an emergency.

Emergency measures in case of emergency

To change P (park) position

In an emergency, change the P (park) position as follows:

- 1 Depress and hold the brake pedal with the vehicle in full stop.
- 2 Press the P(park) button.



Warning

- Do not move to the P (park) position unless the vehicle is stationary.
- Do not attempt to place the shift lever in the P position instead of applying the parking brake.

Notice

- If the ignition switch is turned off in a position other than P (park), the shift lever automatically moves to the P (park) position.

Double parking

If you need to double-park (second row park) due to lack of parking space, operate as follows:

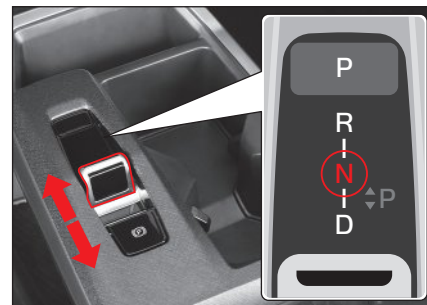
- 1 Release AUTO HOLD with the engine started.
- 2 Press the ignition switch to turn the ignition off.
- 3 Press the ignition switch twice without depressing the brake pedal. (turn the ignition switch on with the engine not started)

Notice

- If the AUTO HOLD is activated, the EPB operates automatically when the ignition is turned off, so be sure to press the AUTO HOLD switch to deactivate the function.

- 4 Briefly push the electronic shift lever in either N (forward) or D (reverse) position to confirm N (Neutral) while depressing the brake pedal, then turn off the engine.

(Entering N position disengages the electronic parking brake (EPB)).



Warning

- Double-parking (second row parking) must be done on a level surface with no slope, and additional safety measures must be taken, such as installing chocks on the vehicle's wheels. Otherwise, the vehicle could roll, creating a very dangerous situation.
- When using an automatic car washer, etc. in double parking mode, i.e. with the gear selector lever in the N (neutral) position, never press the P (park) button. If you drive the vehicle into a car wash with the gear selector lever in the P (parking) position, problems may occur in your vehicle, automatic car washer and etc.

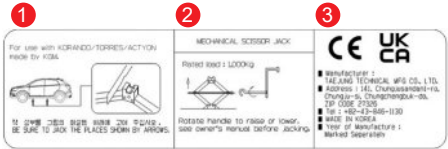
1. TIRE PRESSURE MONITORING SYSTEM

CE	Hereby, KGM, declares that the in-vehicle mounted radio systems are in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC	EU
FCC	Model: TSSSG4G5 and TSSRE4Db FCC ID: OYGTSSRE4DB ORD. No: 14778/DFRS19614/F-50 This device complies with Part 15 of the Federal Communications Commission (FCC) rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.  Warning • Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.	AMERICA
CU TR	LOGO  Certificate in the user manual due to product size Tire Pressure Monitoring System Model: TSSRE4Db The device passed all the conformity assesment procedures to CU TR.  EAC mark in the user manual due to product size.	CIS

2. FOB/FOLDING

FCC	FCC ID: DEO-MT-FLIP01 This device complies with Part 15 of the Federal Communications Commission (FCC) rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Warning - Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.	AMERICA
TR	LOGO  Certificate in the user manual due to product size	CIS

3. JACK LABEL

CE	 Caution - When using the jack, set your parking brake. - When using the jack, stop the engine. - Do not get under a vehicle that is supported by a jack. - The designated locations under the frame - When supporting the vehicle, the base plate of jack must be vertical under the lifting point. - Shift into Reverse gear on vehicles with manual transmission or move the shift lever to the P (Park) position on vehicles with automatic transmission. - The jack should be used on firm level ground.	EU

4. Compressor, Jack

CE	LOGO  (1) Description Model: CE certified parts (2) Representative: KGM European Parts Center B.V. (3) Address: IABC 5253&5254, 4814RD Breda, The Netherlands	EU
UKCA	LOGO  (1) Description Model: UKCA certified parts (2) Importer: KGM UK Ltd (3) Address: G Offices, Parsonage Road, Stratton St. Margaret, Swindon, Wiltshire SN3 4RN	UK

5. Battery Information

Manufacturer Information	
Manufacturer name	Sunwoda Mobility Energy Technology Co.,Ltd.
Trade mark	SEVB
Postal address	Sunwoda Industrial Park, No.18, Tangjia Road South, Gongming Subdistrict, Guangming New District, Shen Zhen city, Guangdong Province, China
Web	https://www.sevb.com

Manufacturer Information	
Manufacturer name	KG Mobility Corp.
Trade mark	KGM
Postal address	455-12 Dongsakro, Pyeongtaek City, Gyeonggi Province, Korea
Web	https://www.kg-mobility.com/en/index.html

Vehicle identification

The identification numbers including the vehicle identification number and the engine number are the unique information of the vehicle. If you know this information, it is very convenient for making inquiries about the vehicle or placing an order for a component or accessory.

Certification label

The certification label includes information including the vehicle identification number, tire inflation pressure, vehicle weight, and color necessary for maintaining the vehicle properly.

TYPE A

KG Mobility Corp.	
kg	kg
1-	2-
BODY PAINT COLOR	
DATE OF MANUFACTURE	
KG Mobility European Parts Center B.V.	
Contact address: SMC 5253 & 5254, 4314RD Breda, The Netherlands	

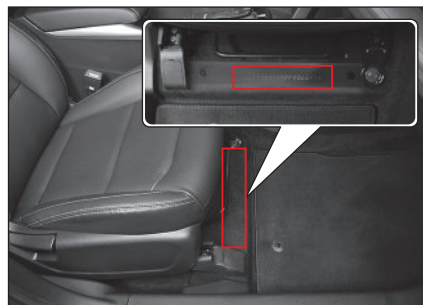
TYPE B

KG Mobility Corp.	
GOODS VEHICLE	KG
VEHICLE WEIGHT	KG
GOODS WEIGHT + WEIGHT	KG
TRAILER WEIGHT	KG
VEHICLE COLOR	KG
DATE OF MANUFACTURE	

The certification label is attached to the driver's door sill (B pillar).

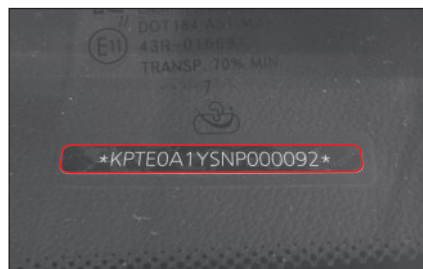
Vehicle Identification Number (VIN)

The vehicle identification number (VIN) is the identification number that includes vehicle model, manufacturing country and manufacturing year.



It is engraved on the front RH seat mounting member.

Vin Label*

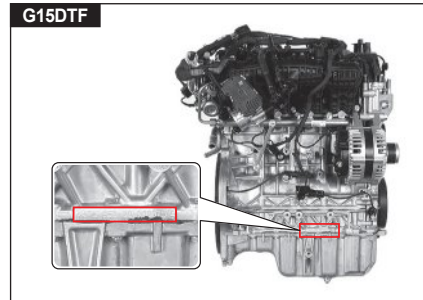


The VIN is stamped on top of the instrument panel.

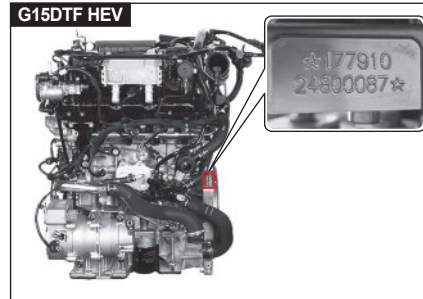
Engine number

The engine number is the identification number including the type of fuel, engine type and displacement, etc.

G15DTF



G15DTF HEV



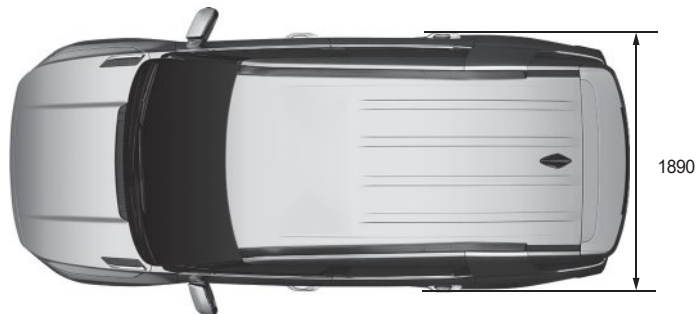
The engine number is stamped on the rear surface of the cylinder block.

Dimensions

Front



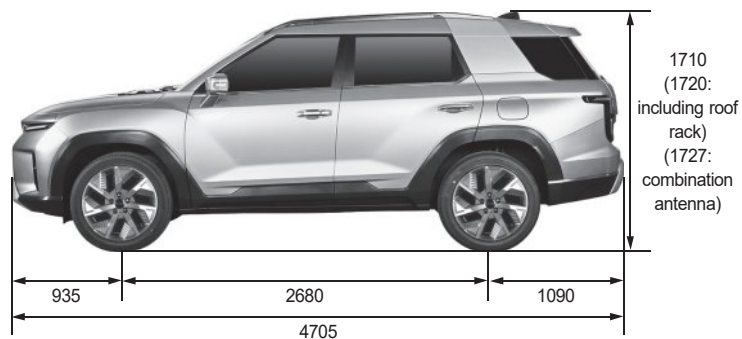
Top



Rear



Side



* (): Optional

SPECIFICATIONS (I)

* () Optional

Descriptions			G15DTF	G15DTF HEV
General	Overall length (mm)		4705	←
	Overall width (mm)		1890	←
	Overall height (mm)		1710 (1720: including roof rack) (1727: combination antenna)	←
	Gross vehicle weight (kg)	A/T	4WD: 2170, 2WD: 2080	2WD: 2250
		M/T	2WD: 2050	-
	Curb vehicle weight (kg)	A/T	4WD: 1733, 2WD: 1643	2WD: 1768
		M/T	2WD: 1613	-
	Fuel		Gasoline	←
Engine	Fuel tank capacity (ℓ)		50 (EU), 47 (GEN)	50
	Engine		G15DTF	←
	Number of cylinders/Compression ratio		4 / 9.5:1	4:14:1
	Total displacement (cc)		1497	1498
	Camshaft arrangement		DOHC	DOHC
	Max. power		120 kW (163PS) / 5000~5500 rpm	110 kW (150) / 5500 rpm
	Max. torque		280 Nm / 1500~4000 rpm	220 Nm / 2400~4200 rpm
	Idle speed		700 ± 50 rpm	1200 ± 50 rpm
	Cooling system		Water-cooled / forced circulation	←
	Coolant capacity (ℓ)		7.0	←
	Lubrication type		Gear pump, forced circulation	-
	Max. oil capacity (ℓ) (when shipping)		4.5	4.0
	Turbocharger and cooling type		Turbocharger, water-cooled	←

* () Options, vehicle weights and gross weights are based on the maximum values and they depend on vehicle options and specifications.

SPECIFICATIONS (II)

* (): Optional

Descriptions			G15DTF	G15DTF HEV
DHT	Motor	Max.power	-	130kw/4615~7000rpm
		Max.torque	-	300Nm/0~4000rpm
	Alternator	Max.power	-	95kw/6000rpm
		Max.torque	-	170Nm/0~5000rpm
Electrical	HV battery type/capacity (V/kw)			353/1.8
Manual Transaxle	Operating type		Floor change type	-
	Gear ratio	1st	3.538	-
		2nd	1.913	-
		3rd	1.152	-
		4th	0.829	-
		5th	0.689	-
		6th	0.587	-
		Reverse	3.000	-
Automatic Transaxle	Model		Electronic 6-speed	-
	Operating type		SBW	←
	Gear ratio	1st	4.044	-
		2nd	2.371	-
		3rd	1.556	-
		4th	1.159	-
		5th	0.852	-
		6th	0.672	-
		Reverse	3.193	-

SPECIFICATIONS (III)

* (): Optional

Descriptions			G15DTF	G15DTF HEV
Transfer Case	Model		AWD	-
	Type		On demand type	-
Clutch (M/T)	Operating type		Hydraulic (CSC) type	-
	Disc type		Dry single diaphragm type	-
Power Steering	Type		Rack and pinion (EPS)	←
	Steering angle	Inner	31.82	←
		Outer	37.72	←
Rear Axle	Drive shaft type	Independent suspension	Ball joint type	←
	Axle housing type		IRDA type	←
Brake	Master cylinder type		Tandem type	EBU (Electronic Brake Unit)
	Booster type		Vacuum assisted booster type	EBU (Electronic Brake Unit)
	Brake type	Front wheel	Ventilated Disc	←
		Rear wheel	Disc	←
	Parking brake		EPB	←
Suspension	Front suspension		Macpherson + Coil spring	←
	Rear suspension		Multi link + Coil spring	←
Air Conditioner	Refrigerant (capacity)	Type A	R-1234yf (530 ± 30g)	R-1234yf (430 ± 30g)
		Type B	R-134a (570 ± 30g)	R-134a (500 ± 30g)
Electrical	Battery type / Capacity (V-AH)	ISG	AGM / 12 - 70	LFP / 22
		NON-ISG	MF / 12 - 60	-
	Starter capacity (V-KW)	ISG	12 - 1.4	-
		NON-ISG	12 - 0.9	-
Alternator capacity (V-A)			14V - 130A	-

Precautions for the modification of the vehicle and structural alteration



Warning

Unauthorized vehicle modification, structural alteration and installation of a component may cause car trouble or a fatal accident. Warranty repair will not be provided in case of product malfunction.

- The vehicle you purchased is made of a lot of precision parts passed through a large numbers of researches and tests, and these parts are linked and operate systematically.
- Modifying or changing any part arbitrarily or installing an unauthorized device may cause car trouble and affect the vehicle's performance, durability, and safety. It may lead to a fatal accident.
- Also, warranty repair will not be provided for a modified part as well as a problem that occurred due to the modification, even during the warranty period.

Do not install a separate accessory or auxiliary device to the vehicle operation device arbitrarily.

- Extending the gear shift lever or installing accelerator pedal or brake pedal pads available in the market arbitrarily may cause an operation mistake due to a change in the operating force of the vehicle. In such case, vehicle damage as well as a serious fatal accident may occur.

Do not modify the engine, driving, and exhaust systems.

- Do not adjust the preset value in the fuel supply system, intake, exhaust, and electric systems arbitrarily, or replace with or add a non-standard part in order to increase the engine output or adjust the exhaust sound. Doing so may cause a serious problem with the vehicle's durability. It is illegal.
- In particular, the modification to an LPG vehicle may adversely affect the vehicle's performance and durability. The engine system as well as the transmission and the wheel alignment are excluded from the warranty.

Do not modify the audio system or install additional electronic devices such as wireless communication equipment, rear view camera, TV, and remote starting devices.

- The electrical system of this vehicle consists of electric wires and fuses for installing standard electronic devices.
- Connecting a number of electric wires to the existing wire for installing various additional electronics may cause overloading, resulting in damage to electronic devices and a risk of fire.
- In addition, drilling for installing an antenna may cause the vehicle to rust.

Do not install non-standard tires or wheel-related parts.

- If you install wider or larger tires than the vehicle specifications, the tires and adjacent parts may come into contact with each other and result in wear and damage to the power train system when you operate the steering wheel or drive on an unpaved road.
- In addition, the degradation of driving performance may occur due to an increase in the fuel consumption and braking distance, vibration of the vehicle body, and degraded handling of the steering wheel, and an impact may occur when shifting with the automatic transmission.
- Moreover, it may affect the speedometer and odometer, displaying an incorrect driving speed or a driving distance longer than the actual driving distance.
- If you install a wheel dust cover in order to improve the appearance of the tires, friction heat generated during braking is not released smoothly, causing the fade or vapor lock phenomenon. This may lead to the degradation of braking performance and cause a serious problem.

Do not modify the high-voltage system.

- Do not modify the high-voltage system or perform unauthorized vehicle maintenance. The vehicle may malfunction, leading to unexpected hazardous situations (such as fire, electric shock, injury).

Do not install a sunroof available in the market or replace with colored glasses arbitrarily.

- If you cut the roof of the vehicle and install a sunroof, rust or water leaks may occur in the cut part.
- Installing colored glasses to improve the appearance and block UV rays after the vehicle is shipped may cause water leaks. Do not install such glasses.

Do not modify the floor inside of the vehicle arbitrarily.

- Do not install an auxiliary article such as floor coverings on the floor inside the vehicle to enhance the cushioning or convenience for cleaning. Doing so may damage the operating device of various electronic systems and electrical wires, and hinder the function of the seat rail that moves the seat forward and backward.
- Also, the locking system to fix the position of the seats may not operate properly. In such case, the seats may move forward or backward, causing an accident, when driving on a downhill road or an uphill road.

Do not replace the seat with a new one with a different function, or install a separate seat cover.

- There are various types of seats according to the function and role even for the same vehicle type and electric wiring has been applied accordingly.
- Do not bring and over-use or modify an adjacent electrical wire in order to replace a seat with a new one with different functions. In such case, it may damage electronic devices and create a risk of fire due to overloading.
- Replacing a seat cover incorrectly may damage electrical devices due to a short circuit or disconnection, or cause poor ventilation, fire and abnormal noise.

Do not install a bumper guide or a guide bar available in the market.

- If you install a bumper guide or a guide bar arbitrarily, problems such as difficulty in parking and stopping due to an increase in the total vehicle length, the waste of fuel due to an increase in the vehicle weight, and the occurrence of rust on the installation holes may occur. In addition, more serious injury may occur in the event of a collision accident due to the absence of a shock absorber in the bumper guide.

Do not attach a functional product that may decrease the driving resistance such as stickers, molding, air dam, or windproofing products.

- Adhesives of the stickers may damage the coated surface of the vehicle. When drilling is carried out on the vehicle in order to attach molding and other functional parts, the drilled area may rust or abnormal noises may occur while driving.
- Especially if such parts are not attached firmly, such parts may fall off while driving, causing damage to the vehicle as well as a fatal accident.

Checking before driving

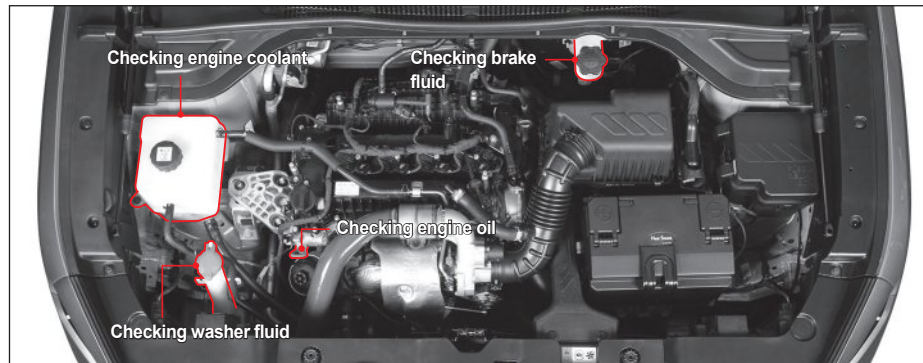
Daily inspection



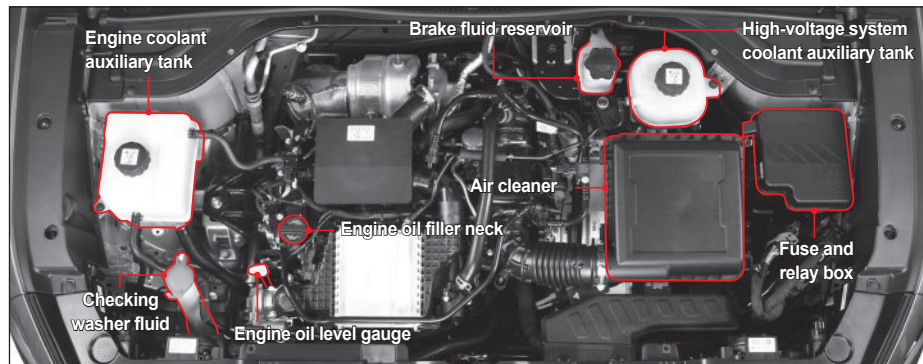
- Check the vehicle once a day before driving.
- Check the engine coolant, engine oil, brake fluid, washer fluid, and belts for abnormality.
- Check that the engine coolant and high-voltage coolant (drive motor, PCM, and intercooler) are not leaking.
- Check for leaks from the battery and the radiator.
- Check the bottom of the vehicle to see if there is an oil or liquid leak.
- Clean the front and rear windshields, rear glasses, side mirrors and room mirror.
- Check the operating status of the various lamps.
- Make sure that there are no obstacles that may hinder the driving around of the vehicle.

Checking engine room

G15DTF



G15DTF HEV



Checking engine & high-voltage system coolant



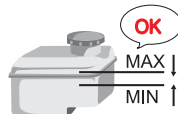
- Check the engine coolant after cooling the engine properly on level ground.
- Check if the coolant level is between the "MAX" mark and the "MIN" mark on the surface of the coolant reservoir. If the level is near or below the "MIN" mark, add coolant.

Checking engine oil



- Check the engine oil after stopping the engine on level ground and waiting for more than 5 minutes.
- Check if the oil level is between the "MAX" mark and the "MIN" mark on the oil level gauge. If the level is near or below the "MIN" mark, add oil.

Checking brake fluid (clutch fluid)



Check if the brake fluid (clutch fluid) level is between the "MAX" mark and the "MIN" mark. If the level is near or below the "MIN" mark, add brake fluid (clutch fluid).

Checking washer fluid

Check the level of washer fluid on the washer fluid tank and add as needed.



Caution

- If the level of engine coolant and various oils drops below the "MIN" mark, have your vehicle checked by KGM Authorized Service Center.

Checking belts

Start the engine and see if there is any abnormal noise.

Have the belts checked by our service center according to the periodic inspection and replacement interval table.

Checking tires



Warning

- Maintain the tire pressure in a proper condition. Driving the vehicle at a high speed with low tire pressure may cause the tires to burst due to the standing wave effect, resulting in a risk such as a rollover.
- Check to see if the wheel nuts (bolts) are tightened. Improperly tightened wheel nuts (bolts) can cause an accident.
- Using wheel and tire other than the specified sizes could cause unusual handling characteristics and poor vehicle control, resulting in a serious accident.
- The use of tire sizes other than the specified sizes may cause abnormal operation of the steering wheel, increased fuel consumption, increase braking distance, vibration, improper operation of ABS/ESC, or uneven tire wear. It may also damage to the powertrain of the vehicle.
- Use only the same tires from same tire manufacturer for all the wheels. Otherwise, the powertrain may be damaged.

- Always check the tread and side of the tires to see if there is a sign of wear, cracks, or damage.
- Check the conditions and pressure of the temporary (spare) tire as needed and always keep it available. The temporary tire should be replaced with a regular tire as soon as possible.
- Check the conditions of the emergency puncture service kit. The air compressor and sealant canister should be available at any time.
- Check the tire inflation and wear everyday and replace if necessary.



What is the standing wave phenomenon?

The standing wave phenomenon is the occurrence of a wave-shaped wrinkle on a tire with insufficient inflation pressure during high speed driving.

During driving, a tire that has normal inflation pressure repeats compression and restoration, but when a tire with insufficient inflation pressure rolls on the road with high speed, the tire will be compressed significantly and it comes into contact with the road surface again before it is fully restored. If such a situation occurs repeatedly, the standing wave phenomenon will appear.

If the standing wave phenomenon persists, a significant amount of heat is generated on the tire and the tire will be blown out in the end.

Checking the instrument cluster



Check if all the indicators and warning lamps are displayed correctly on the instrument cluster with the ignition switch in ON position.

- Also, check if all gauges (fuel gauge, vehicle speed gauge, engine RPM gauge, etc.) are operating properly.
- Check that the charge level of the drive (high-voltage) battery is appropriate.

Checking the parking brake



Operate the EPB (Electric Parking Brake) switch and check the operating sound and operation status.

If the parking brake is not applied, have the vehicle checked and repaired by a near-by KGM Authorized Service Center.

Notice

- In the P (Parking) position, the electronic parking brake (EPB) is engaged and cannot be released.

Checking the pedals

Check the operation status of the brake pedal, clutch pedal and the accelerator pedal.

If the operation status of the pedal is abnormal in comparison to its normal status, have it checked and repaired by KGM Authorized Service Center.

Cleaning up near the driver's seat

Keep the space near the driver's seat clean all the time. Never leave any object that hinders driving.

Always clean up the space near the driver's seat before driving.

Warning

- An empty bottle or an article below the pedal hinders the pedal operation and may cause an accident.
- If the floor mat is not fixed or is too thick, it may hinder the pedal operation and cause an accident.

Advisable driving position



Maintain an advisable position for safe and comfortable driving.

- Sit upright on the driver seat with the hip against the seat cushion.
- Adjust the position and height of driver seat in a way that the brake pedal (clutch pedal) can be depressed to the end comfortably.
- With your back against the seat back, adjust the position and height of the seat back and steering wheel so that you can rest your wrists on the top of the steering wheel.
- Adjust the height of the headrest in a way that the center of the headrest is aligned with the driver's eye level.



Warning

- Do not wear shoes such as slippers or high heels that may hinder driving. Such shoes may hinder the accelerator pedal or brake pedal operation and cause an accident.

Adjusting the seat, headrest, steering wheel, and mirrors

- Adjust the seat, headrest, steering wheel, and mirrors before driving the vehicle.
- If your steering wheel is adjustable, adjust it to an appropriate height and angle that fits your body and drive the vehicle.
- Adjust the rear glasses, side mirrors and room mirror to an angle that you can see the rear view well.



Warning

- If an additional adjustment is necessary while driving, make sure to stop the vehicle at a safe place and make the adjustments. Adjusting while driving may hinder driving, causing an accident.

Wearing the seat belt correctly



- Make sure that all occupants inside the vehicle wear a seat belt.
- Wear the seat belt with your body closely against the seat cushion.
- A child who cannot wear a seat belt should be seated in the rear seat using child restraints.
- For a vehicle where an adjustable top shoulder strap fixing device is provided, wear the seat belt by adjusting the shoulder strap control device to your body type.

Warning

- Do not wear the seat belt under the arm.



- Each seat belt is for one person. Two or more persons should not wear one seat belt together.



- Do not lock the seat belt with a clip or a clamp.



- Insert the seat belt latch only to the relevant buckle.



Safety and cautions for driving

Danger

No drugged, drunk, distracted and drowsy (4D) driving



- Avoid drugged driving. It is an illegal act that may be more dangerous than drunk driving depending on the type and dosage of a drug.
- Avoid drunk driving. Judgment is impaired under the influence of alcohol, making safe driving impossible. It is also an illegal offense that puts the life of occupants in other vehicles in danger.

- Avoid distracted driving. Using a mobile phone or the navigation system, watching DMB, or eating while driving may decrease your concentration, making a risk of an accident higher. In particular, using a mobile phone or watching DMB while driving is an illegal offense that hinders safe driving. When it is inevitable, stop or park the vehicle in a safe place and use the relevant device.
- Avoid drowsy driving. Driving for a long period of time without taking a rest will lead to drowsy driving that may cause an accident. Take a rest at least every 2 hours for safety.

Warning

Cautions for air bag

- The air bag system is an auxiliary safety device. Wearing the seat belt properly can minimize injury.
- Do not apply impact to the air bag by hand or with other articles. Doing so may cause the air bag to deploy.
- Do not place any object on, or attach a sticker or other accessories to the air bag inflation location where the air bag is installed. You may be injured by those objects during deployment.

- A passenger who is smaller than 140 cm should sit in the rear seat. Otherwise, the passenger may get injured during deployment.
- A safety device for infants and children should be installed on the rear 1st row. Installing it on the front seat may cause a serious injury or death if the air bag is deployed.
- A pet should be restrained in the rear seat using a dedicated safety device. A pet in the front seat may get injured if the air bag is deployed.
- When the air bag is deployed, the relevant components may be hot.
- A deployed air bag cannot be used again. Please replace it.
- The air bag system should be checked or replaced after 10 years from its installation even if the system has no abnormality. The air bag system should be checked or replaced by a professional technician in KGM Authorized Service Center.
- Do not modify any part of the air bag system arbitrarily. Do not attach any other electrical device to the air bag system.



Warning

Precautions for infants, children, old people, or pregnant women



- Never leave an infant, a small child or an old person unattended in the vehicle. They may touch a device inside the vehicle, resulting in an accident. When the doors are locked and the windows are closed during summer, the temperature inside the vehicle will increase, resulting in suffocation.
- Do not allow children to use the ignition key, various switches or buttons, and additional devices without permission. Failure to do so may cause car trouble or even an accident. Their body may get caught in the door, window, or sunroof, and receive injury.
- Do not let an infant, a child or an old person sit in the front seat. The impact from the air bag expansion may cause serious injury or death. An infant or a small child should be restrained with a seat belt or protective gear in the rear seat attended by an adult.



Warning

An infant or a small child must be seated in the rear seat with protective gear



- An infant or a small child should be seated in the rear seat with an adult.
- An infant or a small child should be restrained with a seat belt or proper protective gear. Failure to do so may cause serious injury or death in the event of sudden braking or a collision accident.
- Apply the child protection lock system to the rear doors so that children in the rear seats cannot open the rear doors.

 Refer to "Child safety door lock" (p.3-5)



Warning

No sleeping in a sealed vehicle



- Never sleep in a parked car with all the windows closed. In particular, if you sleep with the air conditioner or heater turned on, you can suffocate to death due to a lack of oxygen.
- If you sleep in a sealed space with the engine running, the exhaust gas may flow in, putting you at risk of suffocation.
- While sleeping, you may accidentally touch the gear shift lever or accelerator pedal and cause an accident.
- If you step on the accelerator pedal continuously while sleeping, the engine and the exhaust system may be overheated, causing a fire.

Warning

Do not drive with the doors or tailgate open



- Do not drive with the doors open. An occupant may fall out of the vehicle and suffer a serious injury.
- If you accidentally operate the door lever while driving and the door is open, it may cause a risk of a serious accident. In particular, do not allow a small child to touch the door lever while driving.
- Avoid driving the vehicle with the tailgate open. Exhaust gas may flow indoors, resulting in gas poisoning.
- If you drive the vehicle with the tailgate open, an article from the inside of the vehicle may fall out, causing an accident.

Warning

Do not hold a part of your body out of the window or sunroof



- While driving or stopping, do not hold a part of your body such as a hand or head out of the window or sunroof. You may get injured by a passing vehicle or an obstacle.
- In particular, do not allow a child or a pet to hold their hand or head out of the window.

Warning

Be careful not to have a part of your body caught when using the power window



- Use the power window only after checking that all passengers are safe.
- Before closing the window, check if a part of a passenger's body such as a hand or head is held out of the window and notify them that you will close the window.
- If a small child is seated in the rear seat, press the window lock switch to make the rear window switches inoperative.
 Refer to "Rear seat window lock function" (p.3-22)



Warning

Check for any vehicles or persons passing by when getting out



- When you get out, make sure to check the rear and the front of the vehicle to see if there is any vehicle or person passing by. In particular, opening the door without checking a vehicle or a motor cycle approaching from the rear may cause damage to the vehicle as well as injury.
- Warn other passengers to check around before opening the door.



Warning

Safe parking and stopping

- Never leave an infant or a child unattended in the vehicle with the doors and the windows locked after parking or stopping the vehicle. The temperature inside the vehicle may rise, resulting in suffocation or an accident.
- Always apply the parking brake while parking or stopping. Even a flat area may have a slope. Place the gear shift lever in the P (parking) position and always apply the parking brake.
- Do not stop or park on a steep road. The brake system may be released, causing the vehicle to move.
- When you park on a hillside road, make sure to apply the parking brake and place blocks under the wheels or adjust the wheels to face the wall.
- At this time, place the shift lever in the P (park) position for automatic transmission vehicles and in the 1st gear (uphill) or R (downhill) position for manual transmission vehicles.
- If the vehicle with an automatic transmission, do not use the P (park) position as an alternative to the parking brake, make sure the parking brake is firmly applied during parking.
- Do not park or stop at a place with flammable materials. The heated exhaust pipe may cause a fire.



Warning

Warming up the engine correctly

- Drive after warming up the engine properly. Driving immediately after starting the engine may decrease the engine's life expectancy.
- Warm up the engine just until the coolant temperature gauge begins to move. The warming up period may vary according to the outside temperature.
- Do not depress the accelerator pedal and increase the engine RPM rapidly during the warming up period. Doing so may damage the engine.
- Do not warm up the engine excessively. Doing so increases the fuel consumption and air pollution.
- Do not warm up the engine in a sealed space. Exhaust gas may flow indoors, resulting in gas poisoning.



Warning

Do not stop the engine while driving

- Do not stop the engine while driving. Doing so may make the steering wheel heavier and lower the brake performance, becoming very dangerous.

However, if you need to stop the engine in an emergency situation while driving due to an accident or a vehicle damage, refer to the following.

☞ Refer to "Stopping the engine while driving (in the event of emergency)" (p.4-5)

No sudden starting, acceleration or braking

- Do not start, accelerate, or brake the vehicle suddenly. Doing so may increase the fuel consumption or cause an accident.
- Accelerate or decelerate the vehicle gently.

Driving on unpaved and mountain roads

- Before driving, check road conditions in advance to see if the road ends suddenly, or if there is enough space to make a U-turn for emergencies.
- In sandy or dry roads with much soil, the vehicle may slide easily. Keep your speed low and steady.
- Drive carefully on mountain roads, since the outer part of the road has a danger of collapsing.
- When driving downhill, downshift, and drive slowly by applying the engine brake.



Warning

In high mountain area

- The operation stability of diesel engine is not guaranteed in high mountainous area over 2,500 meters. The short trip such as passing through tunnel in this area is acceptable. However, do not keep driving there for a long time. If you drive your vehicle in very high altitude for long time, the engine could be damaged. The engine power, climbing ability and emission are subject to the altitude.

Driving on a snowy or icy road

- If possible, drive slowly.
- Since the braking distance is longer than usual, maintain a proper distance from the car ahead.
- Accelerating or braking suddenly may cause your vehicle to slide, resulting in an accident.
- When you drive on a frozen or slippery road, use the engine brake after decelerating properly. Applying the engine brake suddenly may cause your vehicle to slide, resulting in an accident.
- Apply your brakes after decelerating the vehicle speed properly using the engine brake.
- Use snow tires for safer driving when driving on a snowy or icy roads.



Warning

Driving on a sandy or muddy road

- Keep your speed as low and steady as possible.
- Accelerating or stopping suddenly while driving may cause the vehicle to be caught in the sand or mud.
- If the vehicle is caught in the sand or mud, place a stone or a wooden plate below the wheels and drive off from the sand or mud. Or, depress the accelerator pedal slowly and drive off using inertia by forwarding and reversing repeatedly.
- If you depress the accelerator pedal excessively to drive off from the sand or mud, the tires may slip, causing damage to the transmission and relevant driving systems. If possible, have your vehicle towed by another vehicle.



Warning

Driving on a hillside road and downhill road

- Downshift in accordance with the road conditions.
- If you apply the engine brake suddenly while driving on a hillside road or a downhill road, the engine may get damaged. Reduce the vehicle speed and downshift.
- Use the brake pedal and the engine brake together on a long downhill road. Applying the brake pedal continuously on a long downhill road may overheat the braking system, lowering the braking performance and resulting in an accident.



Warning

Driving on a road with a pool of water or a river

- Avoid crossing a road with a pool of water or a river if possible. If water gets into the engine or the electric systems, it may cause serious damage to your vehicle.
- If you need to cross a road with a pool of water or a river unavoidably, select a shallower part where the exhaust pipe will not be submerged under water and cross slowly at a constant speed.
- Before crossing a river, get out of the vehicle and check the bottom of the river. Do not cross through a place where the bottom is sandy or covered with big rocks.
- If several vehicles cross the river together, the path where the vehicle ahead has crossed may have caved in. Cross through a different path if possible.

Cautions for crossing

- If the engine stops while crossing a road with a pool of water or a river, do not restart, and have your vehicle towed.
- Take particular caution not to allow water to enter into the engine through the air cleaner.
- Never change gears while crossing a road with a pool of water or a river.

Checking the vehicle after crossing

- If water gets into brake-related equipment, the brake performance will be lowered. After crossing a road with a pool of water or a river, drive slowly and depress the brake pedal slightly several times. Drive normally after drying the brake discs with the frictional heat and checking the braking performance.
- Check the parts at the bottom of the vehicle where oil and fluid are injected. If you discover any problems, have your vehicle checked immediately.
- Check the lamps and other electrical devices and replace them if necessary.
- Check for any damage on the vehicle body or at the bottom of the vehicle. If you discover any problems, have your vehicle checked immediately.
- If your vehicle is heavily soiled, wash your vehicle to protect the vehicle body.



Warning

Do not use a cellular phone or watch DMB while driving

- Using your cellular phone or watching DMB while driving will distract yourself and may cause an accident. If necessary, pull over your vehicle safely to use your cellular phone.



Warning

Driving on the expressway

- Before driving, check the weather information in advance, and check the fuel level, brake system, cooling system, level of tire wear and pressure, and maintain the vehicle thoroughly.
- Drive slowly for 2km after starting if possible.
- Always observe the speed limit and do not drive too fast.
- Keep a proper safe distance from the vehicle ahead.
- In case of bad weather, maintain more than twice the safe distance from the vehicle ahead than usual and reduce the speed by more than a half.
- Do not load the vehicle with unnecessary articles.
- Check and maintain the vehicle periodically to maintain the best vehicle condition.

Crossing an intersection or railroad crossing

- When you cross an intersection or railroad crossing, stop first, check for safety, and then cross promptly using a lower gear, without shifting if possible.
- If the engine stops in the middle of an intersection or railroad crossing, move the vehicle to a safe place promptly. If necessary, ask people around for help.



Warning

No sudden maneuvering of the steering wheel

- If you maneuver the steering wheel suddenly, the driving condition of the vehicle may become unstable, causing the risk of an accident.

Do not warm up the engine or check the vehicle in a sealed space

- Do not warm up the engine or check the vehicle in an airtight or badly ventilated space. The exhaust gas from the vehicle may cause gas poisoning.

Use of the engine brake

- When driving on a long downhill road, use the engine brake and the foot brake at the same time. When you downshift according to the driving conditions, the engine brake will operate.
- Using the foot brake excessively may cause the fade or vapor lock phenomenon due to overheating of the brake system, lowering the braking performance.



Warning

Use of regenerative braking and engine braking (HEV)

- When driving down a long downhill slope, do not just use the foot brake, but also use regenerative braking (increase the regenerative braking force with the paddle shift lever) and engine braking (when operating in hybrid mode).
- Excessive use of foot brakes can cause fade or vapor lock due to overheating of the brake system, which can reduce braking performance.
- When driving downhill after fully charging the high voltage battery, the regenerative braking system may not work. This may cause braking slippage during downhill driving, so be sure to drive at a low speed.

What is the fade phenomenon?

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

What is the vapor lock phenomenon?

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



Warning

Cautions for attaching accessories

- Do not attach accessories or unnecessary articles to the vehicle windows. They may interfere with your driving, and if attached accessories act as a lens (magnifying glass), a fire or an unexpected accident may occur.

Special cautions when checking the coolant

- Never open the engine coolant reservoir cap when the engine is hot. Doing so may cause hot steam or coolant to erupt, causing burns on your body parts including the hands or face.

Do not load hazardous materials

- Do not store any flammable materials such as gasoline, butane gas, or a disposable gas lighter, or explosive materials inside the vehicle. If the indoor temperature rises, the container may burst, causing a fire.



Warning



Do not remove the coolant reservoir cap when the engine and the radiator are hot. The cooling system may spray hot coolant if the cap is removed, causing serious injuries.



Caution

Cautions for vehicle ventilation

- For a new vehicle purchased within 1 year, harmful volatile organic compounds (VOC) to human body may be emitted in the cabin. In particular, riding a vehicle exposed to direct sunlight for a long period of time or without proper ventilation may cause headache, dizziness or nausea.
- Operate the fresh air inflow mode or open the windows periodically to ventilate air inside the vehicle for the health of passengers and a pleasant vehicle environment.



Caution

System protection function (delayed accelerator pedal response)

- Do not depress the brake pedal while driving with the accelerator pedal depressed. Doing so may affect the vehicle driving system and the response from the accelerator pedal may be delayed.
- This symptom is a safety function to protect the vehicle system. This symptom will disappear if you depress and release the accelerator pedal once with the brake pedal not depressed.

Placement of extinguisher

- An extinguisher is an essential item for early extinguishing when a fire occurs. It is recommended to purchase it from a fire-fighting appliance store and place it in the vehicle.

KGM Authorized Service Center and maintenance partners

KGM Authorized Service Center or maintenance partners for checking and repairing the vehicle. If you use other service centers or maintenance shops, warranty repair will not be available and warranty will not be provided for any consequent problems.

Cautions for the depletion of battery when connecting uninterruptible power supply to the black box system

If the vehicle is not operated for a long period of time with the uninterruptible power supply connected to the black box system, the vehicle battery may be depleted.

Turn off the black box system if you will not drive the vehicle for a long period of time.

Long-term parking mode

This mode is for preventing vehicle battery discharge. Set it on the instrument cluster and use it if necessary.

During setup, smart key search is stopped to minimize power and some functions are limited.

Notice

- If the vehicle is stored or parked for a long period, operate the air conditioning system for at least 15 minutes once a month.
- Running the air conditioner helps lubricate its components and maintain the overall performance of the climate control system.

Breaking in a new vehicle correctly

Break-in is not required for a new vehicle. However, the driving condition for the first 1,000 km significantly affects the life and performance of the vehicle. Pay attention to the following when driving during this period.

- Allow the engine to reach normal operating temperature before driving.
- Do not speed, accelerate, brake suddenly, or idle the engine excessively.
- Shift properly according to driving speed.
- Do not overload the engine while driving a sloping road.

- Do not tow a trailer during the first 1,000 km.
- During the first 1,000 km of towing a trailer, do not drive at a speed over 80 km/h or with full acceleration. Doing so may damage the engine or other components due to overload.
- Check the level of engine oil frequently until the first 5,000 km of operation and add oil if necessary.

Using genuine parts

Always use genuine parts for maintaining safety and the best performance of your vehicle. Warranty repair will not be provided for car trouble caused by using a non-genuine part.

You can verify a genuine part by its hologram and sticker with the product number.



Caution

- The warranty does not cover problems caused by using non-KGM genuine parts.
- You can distinguish an authentic KGM genuine part by its hologram.

Vehicle washing

After driving on a coastal road (salty road), a road where calcium chloride was spread, an area with excessive smoke or coal tar, or a muddy or dusty area, or when the vehicle is stained with tree sap or insects' or birds' droppings, wash the vehicle immediately since corrosion may occur on the vehicle body.

- Avoid direct sunlight and wash the vehicle in the shade. If your vehicle has been parked under direct sunlight, let it cool properly before washing.
- Dust off the vehicle with cold water.
- Mix cold water with detergent in a bucket and wipe the vehicle from top to bottom using a soft brush, sponge, or cloth.
- Wash off any foreign materials on the vehicle body without damaging the painted surface.
- Any scratched or damaged painted surface causes corrosion, so repair them with paint for repair.
- Remove moisture using a dry and soft cloth.
- After washing, drive the vehicle normally after driving it slowly, and checking the operating status of the brakes.



Caution

- Be careful not to damage the air spoiler when cleaning the vehicle in an automatic car wash.
- When you wash the bottom or exhaust pipe of the vehicle with water (including high pressure washing), be careful not to damage the sensors or connectors connected to the exhaust pipe and prevent water intrusion. Our warranty will not be provided for any consequent failure.
- Avoid washing with water when the brake discs are hot. Hot brake discs may be deformed or damaged if it comes into contact with water.
- If possible, avoid high pressure washing for maintaining and managing the vehicle performance.
- High pressure washing may damage the components and sensors installed on the exterior of the vehicle and the painted surface of the panels. In particular, be careful not to get water into the electrical devices and sensors at the bottom of the vehicle.
- When you use high pressure washing unavoidably, maintain a proper distance between the high pressure water nozzle and the vehicle. If the distance is too close, the sensors on the bumper may malfunction or the painted surface of the panels may be damaged due to the high water pressure.

- Do not use abrasive wax and strong cleaning materials such as steel wool which will scratch the vehicle body and bumper.
- Do not wash the engine compartment using liquid materials such as water or wax. If liquid materials get into the inside of the engine through the electrical devices (sensors) or air ducts located in the engine compartment, various electrical devices may malfunction or the vehicle's operation may not be possible.



Washing the bumper

- Wipe off foreign materials using a soft sponge.
- If the bumper is contaminated by engine oil or any lubricants, wash it off using soapy water.



Caution

- **Do not use abrasive wax or a brush to wipe the bumper or the vehicle body. Doing so may damage the bumper or the surface of the vehicle body (painted surface).**

Washing wheels

Clean the wheels after driving on a salty road to prevent the wheels from being corroded.



Caution

- **Do not use abrasive cleaners, polishes, solvents, wire brushes, and high speed washing brushes since they may damage the wheel surface.**
- **Using acid or alkaline detergents could damage the wheel surface (painted surface), so use neutral detergents for cleaning the wheels.**
- **Using strong cleaners may discolor the wheel surface. Make sure to use natural cleaners. A discolored wheel due to carelessness is not subject to free warranty repair.**

Cautions for polishing the vehicle

- Before waxing, remove dust or moisture from the vehicle.
- Apply a small amount of wax on a soft cloth, apply it to the whole vehicle body evenly, and scrub a wide area in the same direction to polish.
- After waxing, remove residual wax from the vehicle body completely.



Caution

- **Do not polish or wash the vehicle body using wax containing abrasives. Doing so may damage the surface of the vehicle body (painted surface).**

Cleaning and maintaining glass

- Clean the indoor and outdoor sides of glass windows using a glass cleaner and a soft cloth.
- When cleaning the glass windows, be careful not to damage the electric demister element.
- When automatic car washing is used, coating (wax) substance included in the cleaning fluids may adhere to the glass surface and it may not be wiped off easily when it is dried. Spray washer fluid and operate the wipers two or three times to remove coating (wax) substances using the cleaning substances included in the washer fluid.
- Do not wipe the glass surface with a towel stained with oil or wax. Doing so may cause vibrations and abnormal sounds when the wipers are operating and the front and rear windshields may not be cleaned properly when it rains. Also, the reflection of light may occur at night, causing poor visibility and affecting safe driving.

Cautions for window tinting

- All vehicles from our factory have tinted windshields and rear windows that meet the specified percentage of visible light transmission (VLT). Do not tint the windows of the product. Doing so will lower VLT, becoming subject to legal regulation.
- Tinting the windshield and rear window excessively may reduce front and rear visibility at night or in case of rain, causing an unexpected risk.
- When tinting the windshield and rear window, do not allow working solutions to enter into electrical and electronic devices. Failure to do so may cause a malfunction or failure of electrical and electronic devices.
- If the windshield and rear window are modified or tinted arbitrarily, the electric demister element may be damaged by a knife or a tool or an electrical shock.
- If the windshield and rear window are coated or tinted (metallic tinting film), the Hi-Pass system, rain sensor, and radio may not operate normally.
- Do not tint the front camera sensing part. Otherwise, the relevant system may malfunction.

Care and cleaning of the interior

- Use a dry towel for normal cleaning.
- For synthetic resin such as plastic, clean it with lukewarm water and soap and wipe off with a wet towel with no soap.
- Wipe using a dry towel to dry.
- Remove dust on the seats and mats using a vacuum cleaner.
- If the mats are heavily stained, spray a cleanser on them and wipe using a cloth.



Warning

- **To prevent from burning and electric shock, turn off the interior lights before cleaning the vehicle interior.**



Caution

- **When you use chemicals for cleaning the interior, the color or shape of the interior may change.**
- **Do not use chemical products such as acetone, enamel, and bleach for cleaning the interior.**
- **The Leather Seat Maintenance is necessary on Quarter basis with dedicated Leather Milk or Cream in order to feed the Leather and avoid any cracks on the seats and conserving the original look and comfort of the seat.**

Seat Belt Care

- Keep belts clean and dry.
- Clean seat belts only with mild soap and lukewarm water.
- Do not bleach or dye belts since this may severely weaken them.

Cautions for using the vehicle key

- Be careful not to lose your key.
- If your key is lost or stolen, replace the whole key set to prevent the vehicle from theft.
- Do not throw or drop your key. Doing so will damage your key. Do not drop your key in water.
- Use only the same standard battery for the key and be careful not to switch the polarity when inserting the battery.

Corrosion protection

Your car was designed to resist corrosion. When it was built, special and protective finishes were used on most parts of your car to help maintain a good appearance, strength and reliable operation. Some parts which normally are not visible (such as certain parts located in the engine compartment and the underbody of the vehicle) are such that surface rust will not affect their reliability. Therefore, corrosion protection is not needed or used on these parts.

Sheet Metal Damage

If your car is damaged and requires body panel repair or replacement, make sure the body repair shop applies proper anticorrosion material to the parts repaired or replaced so that corrosion protection is restored. (Also refer to "Finish Damage" on the next page).

Foreign Material Deposits

Calcium chloride and other salts, deicing agents, road oil and tar, tree sap, bird droppings, chemicals from industrial chimneys and other foreign materials may damage vehicle finishes if left on painted surface. Prompt washing may not completely remove all of these deposits. Other cleaners may be needed. When using chemical cleaners, be sure they are safe for use on painted surfaces.

Finish Damage

Any stone chips, fractures or deep scratches in the finish should be repaired promptly. Bare metal will corrode quickly and may develop into a major repair expense. Minor chips and scratches can be repaired with touch-up materials. Larger areas of finish damage can be corrected in your Distributor's body and paint shop.

Underbody Maintenance

Corrosive materials used for ice and snow removal and dust control can accumulate on the underbody. If these materials are not removed, accelerated corrosion (rust) can occur on underbody parts such as the fuel lines, frame, floor pan, and the exhaust system even though they have been provided with corrosion protection. At least every spring, flush these materials from the underbody with plain water. Take care to clean any area where mud and other debris can accumulate.

Sediment packed in closed areas of the frame should be loosened before being flushed. If desired, your KGM Distributor can do this service for you.



Caution

- When the engine is washed, fuel, grease or oil residues are washed off. Therefore you should use only a filling station or a KGM Distributor who has oil separator equipment in the car wash bay.
- Used engine oil, brake fluid, transmission fluid, antifreeze, batteries, and tires should be disposed by using the local authorized waste disposal facilities, or have them disposed of by the vendor who is under a statutory obligation to do so when you replace them.
- None of these items should be placed in the household recycling bins or poured into the sewage system.
- Everyone should be concerned about environmental protection.
- Help by doing your share.
- When a strong multi-purpose, acid, or alkaline detergent is used to clean up the surface of the painted body, side mirrors, windshield, plastic moldings or leather, changes, fading of colors or rusting can happen.

- When the windshield is cleaned with an oil-contained or waxed towel, strange sounds and vibrations may occur on the windshield surface when the wipers are operating. Also, decreased visibility, reflection at night, or poor removal of water on the windshield may happen. Do not clean the windshield with an oil-contained or waxed towel.
- An abrasive detergent may damage the painted surface of your vehicle, including the bumper. Do not buff or polish your vehicle with an abrasive detergent.
- An acid or alkaline detergent may damage the painted surface of the aluminum or alloyed wheels.
- When chemical products are used to clean up the interior, the chemical products may change some colors or distort the shape of some interior parts.
- When cleaning up interior parts, do not use chemical products such as acetone, enamel or bleach.

System safety mode

The protective measures including illumination of engine warning lamp and reduced engine power are taken (engine turned off in worst case) when there is a critical fault in the system or a malfunction in the major electrical or fuel system. This indicates the system entering the safety mode to protect the vehicle's drive system.



Danger

- If the safety mode is activated, pull over and stop the vehicle to a safe location immediately and contact your KGM Dealer. Then drive slowly or have the vehicle towed to a KGM Dealer or KGM Authorized Service Center according to the dealer's instruction and have your vehicle checked by a mechanic.
- If you continue to drive in this state, normal driving is not maintained due to the fixed engine rpm and engine can stop. But even more importantly, continued driving with this state may damage the drive system.

Vehicle Fueling from Drums or Storage Containers

For safety reasons (particularly when using noncommercial fueling systems) fuel containers, pumps and hoses must be properly earthed.

Static electricity build up can occur under certain atmospheric and fuel flow conditions if unearthed hoses, particularly plastic, are fitted to the fuel dispensing pump.

It is therefore recommended that earthed pumps with integrally earthed hoses be used, and that storage containers be properly earthed during all noncommercial fueling operations.

Fuel recommendation

Commercially available high-quality fuels are suitable. Fuel quality has a decisive influence on the power output, driveability and life of the engine. The additives contained in the fuel play an important role in this connection. You should therefore use only high-quality fuels.

Gasoline Engine

Fuel with too low an octane number can cause pre-ignition (detonation). KGM can not be held liable for resultant damage.

Fuel Recommendation

Type	Unleaded gasoline (Octane number 95 or higher)
Caution • For correct octane rating setting and other use of gasoline (ex. Leaded), consult your KGM Dealer.	





Caution

Engine and exhaust system will be damaged.

- **Do not use leaded fuel to the vehicle for unleaded fuel.**
 - **Use the fuel with specified or higher Research Octane Number recommended for your country by KGM.**
- It is not covered by warranty.**

Do not Use Methanol

Fuel containing methanol (wood alcohol) which is not qualified EN228 standard should not be used in your TORRES/HYBRID. This type of fuel can reduce vehicle performance and damage components of the fuel system.

The warranty policy will not cover damage of the fuel system and any performance problems that are caused by the use of methanol or fuel containing methanol.

Engine check indicator



The engine check indicator on the instrument cluster turns on when the fuel system of the engine or main electrical systems are not working properly. At this time, the driving power of the engine may decrease or the engine may turn off.

If it occurs, have your vehicle checked and maintained by our service center.

High voltage warning lamp



The high-voltage warning light turns on when there is an issue with sensors or other components related to the hybrid control system.

This may result in reduced motor drive or ignition off.

If this occurs, have the system checked at the KGM Dealer or KGM Authorized Service Operation.

Other maintenance

After driving on a calcium chloride (salt) sprayed road, wash the bottom of your vehicle as soon as possible to avoid any rust.

When parking on a snow-covered road, the brake system may begin to have some ice on it. The ice will decrease your vehicle's braking ability. If this happens, drive at a low speed and use the brake frequently to remove the ice. After regaining the braking ability, drive your vehicle at a normal speed.



Warning

- **When there is ice on the wiper blades, turning on the wiper switch may put an extra burden on the wiper motor and damage it. Avoid using the wipers when ice is on the blades.**
- **When driving on a snow-covered road, a large amount of snow may build up under each wheelhouse. This buildup prevents the steering wheel from moving freely. Therefore, remove the snow buildup frequently.**

2. Safety Units

You can check information regarding units that allow you to drive the vehicle safely and how to use such devices.

An explanation is provided for seat belts, a child restraint for an infant or a small child, airbags, anti-theft and warning system.

Seat belt

The seat belt is the most fundamental safety unit that protects an occupant and prevents or reduces injury when an accident occurs.

If you do not fasten the seat belt or fasten the seat belt incorrectly, the seat belt does not function properly and you may also get injured by the seat belt.



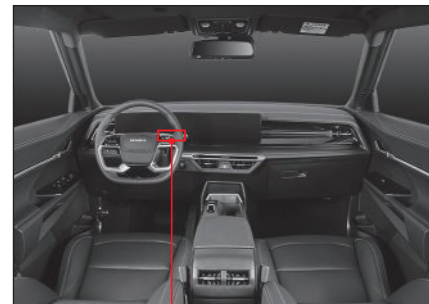
Warning

- **All occupants must fasten their seat belt before driving. Failure to do so may lead to a fatal accident, in case of emergency or when the brake is applied suddenly.**
- **The air bag can ensure the safety only when the seat belt is fastened correctly. If the air bag inflates when you do not fasten the seat belt or fasten it incorrectly, you may get injured by the inflated air bag.**

Seat belt warning

If the occupants in the driver seat and the front passenger seat do not fasten their seat belts, the warning lamp on the instrument cluster blinks along with a warning buzzer.

The rear seat (left, center and right) reminder illuminates the warning lamp or sounds the buzzer depending on the vehicle conditions and whether the seat is occupied or not.



- 1 Warning lamp for driver and front passenger
- 2 Rear (left) seat warning lamp
- 3 Rear (center) seat warning lamp
- 4 Rear (right) seat warning lamp

Front seat (driver / passenger) belt reminder

- The seat belt reminder warning lamp and buzzer are triggered only when the ignition switch is turned on or the engine is started.
- If you turn the ignition switch on or start the engine with the seat belt not fastened, the warning buzzer sounds and warning lamp flashes for about 6 seconds. At this time, when the seat belt is fastened, the warning buzzer stops and the warning lamp flashes for the rest of the time.
- If you turn the ignition switch on or start the engine with the seat belt fastened, only the warning lamp flashes for about 6 seconds.
- If you fasten and then unfasten the driver seat belt, the warning buzzer sounds while the warning lamp flashes for about 6 seconds. However, for the passenger seat, the warning lamp and buzzer do not work even if the seat belt is fastened and then unfastened.
- When driving the vehicle at a speed of about 10 km/h or higher with the seat belt not fastened, the warning lamp comes on for about 100 seconds and the warning buzzer sounds. After 100 seconds, the warning buzzer stops and only the warning lamp stays on.

Rear seat (left / center / right) belt reminder*

- The rear seat belt reminder warning lamp comes on for 70 seconds when the ignition switch is turned on regardless of whether the seats are occupied or not and the warning buzzer does not sound.
- The rear seat occupancy sensor recognizes that the corresponding (left, center and right) seat is occupied when the rear seat belt is fastened and then unfastened with the ignition switch turned on.
- If the seat belt is fastened when the warning lamp comes on for 70 seconds by turning the ignition key on the corresponding warning lamp goes off.
- If the rear seat belt is fastened and then unfastened at a vehicle speed of 10 km/h or less, the corresponding warning lamp stays on until the seat belt is fastened. At this time, the warning buzzer does not sound.
- If the rear seat belt is fastened and then unfastened at a vehicle speed of 10 km/h or higher, the corresponding warning lamp keeps flashing until the seat belt is fastened and the warning buzzer sounds for 70 seconds.
- The rear seat occupancy is reset when: the rear door is open and closed with the vehicle stationary (speed of 0 km/h) and ignition switch turned on.



Caution

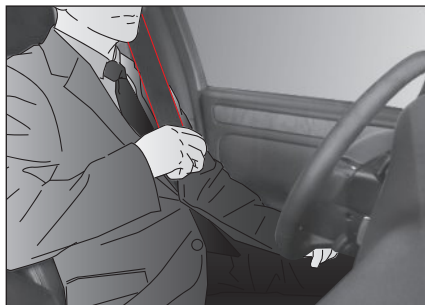
- The passenger seat belt warning operates only when an occupant on the front passenger seat is detected. When the occupant on the front passenger seat is positioned inappropriately or is too small, the occupant may not be detected.
- When an object is placed on the front passenger seat, the occupant detection sensor may operate and the passenger seat belt warning may operate.
- If the warning lamp or the warning buzzer persists after fastening the seat belt, have your vehicle checked and serviced at a KGM Authorized Service Center.

Notice

- Seat belt warning may persist until the seat belt is fastened depending on the vehicle condition.
- When the gear shift lever is maintained at the R (reverse) position for 1.5 seconds or longer, the seat belt warning (reminder) does not operate.
- If the vehicle speed falls below about 10 km/h while the seat belt reminder is in operation, the seat belt reminder is deactivated and a seat belt warning is activated.

Fastening the seat belt

- 1 Sit upright on the seat with the hip against the seat cushion.
- 2 Hold the seat belt latch and pull it slowly in the direction of the buckle.



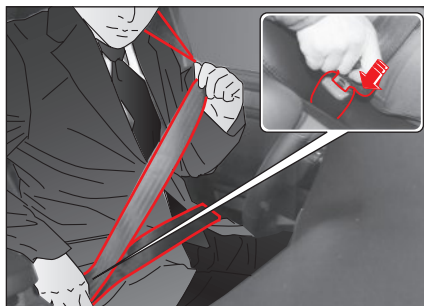
Warning

- Wear the seat belt in a way that it is not twisted. If the seat belt is twisted, it cannot distribute the impact at the time of an accident properly.

Notice

- If the seat belt is locked and does not move, loosen the seat belt a little bit and pull it slowly or strongly. In some cases, you have to pull the seat belt strongly for approximately 2 to 3 seconds to move it.

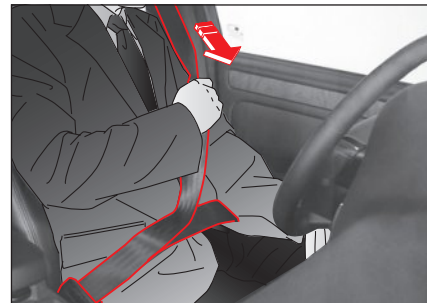
- 3 With the shoulder belt webbing positioned across the chest and the lap belt webbing positioned across the hips, insert the belt latch into the buckle until it clicks.



Warning

- Fasten the seat belt in a way that the shoulder belt webbing is positioned across the chest. If the shoulder belt webbing is positioned across the neck, a serious injury may occur by the belt in the event of an accident.
- Position the lap belt webbing as low as possible across the abdominal area. If the lap belt webbing is positioned across the abdominal area, an impact may happen in the event of an accident, resulting in a serious injury.
- Pull the belt latch to make sure that it is securely locked into the buckle.

- 4 Adjust the height of the shoulder belt webbing using the seat belt height adjuster if needed.
- 5 Adjust the belt webbing on the chest and the hips to not be slack.

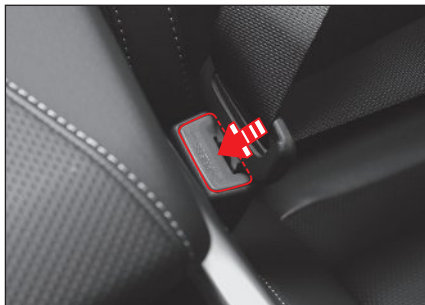


Warning

- Do not fasten the seat belt higher than the body or loosely. Doing so may cause the body to slip below the seat belt in the event of a collision accident, resulting in injury.

Unfastening the seat belt

- 1 To unfasten the seat belt, press the red button on the buckle and separate the belt latch from the buckle.



- 2 Hold the belt latch and let the seat belt webbing to be wound slowly.

Managing the seat belt

Adjusting the height of the front seat belt

You can adjust the height of the shoulder belt anchorage to prevent the seat belt from being positioned across the neck.



Warning

- Adjust the height of the seat belt before driving.

- 1 With the top of the seat belt height adjuster pressed, raise or lower the seat belt holder.



- 2 Release it at the desired position.
The seat belt holder is secured.

Rear seat belt storage

If you do not use the rear seat belts or wish to fold the rear seat back, insert the seat belt into the webbing guide installed on the wall as shown in the figure.



Caution

- Remove from the webbing guide first if you wish to use the seat belt. Pulling the seat belt with the webbing guide inserted may damage the webbing guide or the seat belt.

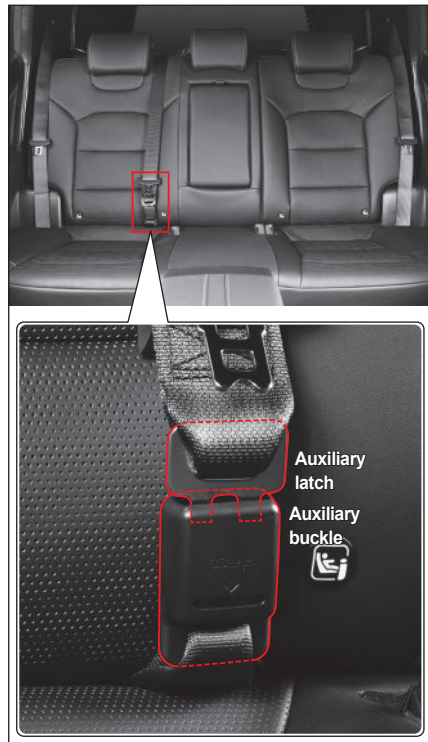
Rear seat buckle storage

If you do not use the rear seat belts, insert the buckle into the buckle storage as shown in the figure.



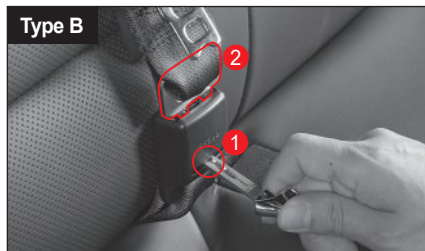
Rear center seat belt storage

Have the auxiliary latch inserted into the auxiliary buckle always if you do not use the rear center seat belt.



Rear center seat belt release

- 1 Press the auxiliary buckle hole (1) using the emergency key.



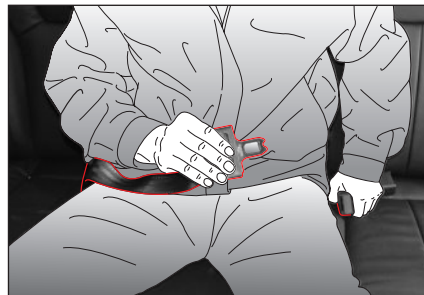
- 2 Hold the auxiliary latch (2) and left the seat belt to be wound slowly.

Warning

- If the auxiliary latch retracts at high speed, an adjacent occupant may get injured.
- Do not allow a child to pull and release the auxiliary latch repeatedly.

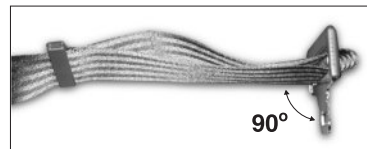
How to fasten the seat belts (2-point) in rear center seat

- 1 Pull out the latch plate at the bight of the seat.



Warning

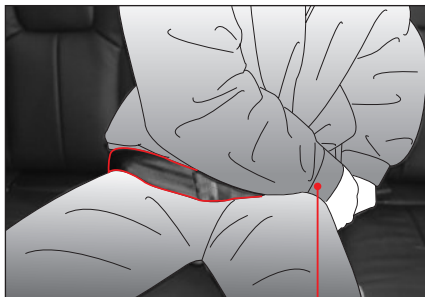
- Put the lap belt as low as possible across the hips. Do not put it across waist. In an accident, the belt may apply pressure to your abdomen. This may cause serious internal injuries.



To lengthen, hold the metal latch plate at a right angle to the belt and pull the belt. To shorten, pull the free end of the belt away from the latch plate,

then pull the belt clip to take up the slack.

- 2 Insert the metal latch plate into the buckle until it clicks. Position the belt as low as possible across your hips, not across your abdomen.



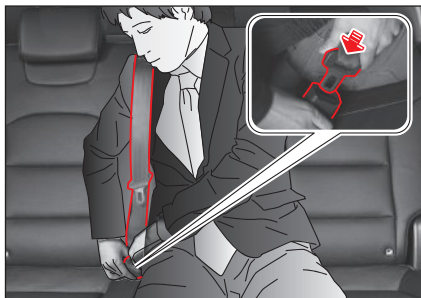
- 3 If the belt is too tight or slack on your hips, readjust the belt.
- 4 To unfasten the seat belt, press the red button on the buckle.

How to fasten the seat belt (3-point) in rear center seat

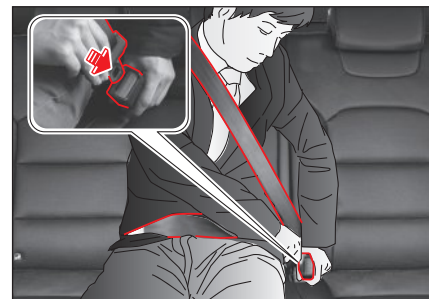
- 1 Pull out the latch plate from the retractor. If the seat belt is locked when being pulled out, rewind it completely in the retractor, then pull it out to the desired length.



- 2 Insert the latch plate into the right mini buckle until it clicks.



- 3 Position the shoulder belt across the body and the lap belt as low as possible across the hips. Insert the latch plate into the buckle until it clicks.
- 4 Pull the latch plate to make sure it is securely locked. A slack belt will greatly reduce the protection afforded to the wearer.
- 5 To unfasten the seat belt, press the red button on the buckle.





Warning

- Make sure to fasten the seat belt according to the order as described so that it functions properly.
- To prevent the seat belt from bumping against the rear glass, unfasten the seat belt while holding it.
- This seat belt is designed only for a passenger who sits on the center seat in the rear seat.
- Tug on the seat belt to make sure that the latch plate is securely locked.
- Make sure that the seat belt is not twisted.
- Improper wearing of seat belts increases the chance of injury or death in case of a collision.
- Position the seat belt away from your neck and abdomen.



Caution

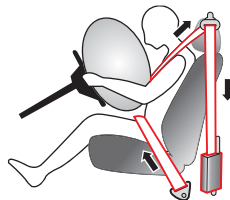
- Stow the seat belt into the console when it is not in use.

Seat belt pretensioner and load limiter

The seat belt pretensioner and the load limiter are the units that operate at the same time when the driver and front passenger air bags operate, increasing the safety effect of the seat belt and the air bag.

Pretensioner

The seat belt pretensioner is a protection unit that draws back the seat belt on the occupant's chest and hips instantaneously and secures the occupant to the seat to prevent the occupant from bouncing forward in the event of a strong front collision.

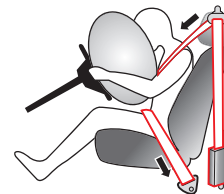


Danger

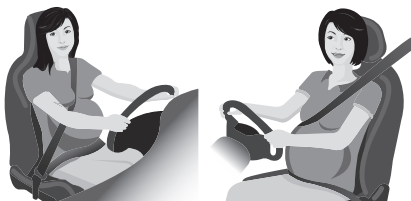
- The seat belt pretensioner is designed to operate only once. After it operates, replace the seat belt.

Load limiter

The seat belt load limiter is a protection unit that releases the seat belt right after a vehicle collision to prevent a secondary injury due to belt force.



Fastening the seat belt by a pregnant woman



Warning

- It is dangerous for a pregnant woman to drive, so please avoid it if possible. If it is unavoidable, consult a doctor about the precautions and fastening the seat belt during pregnancy.
- Fasten the seat belt before driving. If an accident occurs without fastening the seat belt, may be dangerous for both the pregnant woman and the fetus.
- When a pregnant woman fastens the seat belt, make sure that the belt is not positioned across her abdomen. If the belt presses her abdomen, in the event of a vehicle collision or when applying a sudden brake, may be dangerous for both the pregnant woman and the fetus.

Warnings for the seat belt

Warning

Infants, small children, pregnant women or patients

- The child restraint should be used for an infant or a small child. In particular, please note that the three-point seat belt is designed for a person who is taller than 140 cm.
- In the event of a sudden stop or an accident while a pregnant woman or a patient is wearing the seat belt, strong force may apply to the abdomen or other body parts. Make sure to consult a doctor before fastening the seat belt.

Position and method to fasten the seat belt

- The seat belt is designed for only one person. Two or more persons should not share one belt.
- If the position of the seats is incorrect, it is impossible to fasten the seat belt correctly. Always adjust the position of the seats to their normal status for driving.
- Fasten the seat belt after keeping the seat upright and leaning the back against the seat backrest with the hip against the seat cushion. If the seat belt is positioned too high or fastened too loose, the body may fall out from the shoulder belt webbing or the lap belt webbing, resulting in a serious injury or death.

- If a strong impact occurs while the seat belt is fastened with the seat backrest reclined too much, the body may fall out below the belt, causing the belt to hang around the neck and result in a serious injury.
- If the seat belt is positioned across the neck, a serious injury may occur by the seat belt when an accident occurs. Make sure to wear the three-point seat belt in a way that the belt webbings are positioned across the chest and the hips.
- Do not pull your arm over the shoulder belt. Doing so prevents the seat belt from effectively blocking the body from bouncing forward in the event of a collision. A head or neck injury may occur accordingly and the impact is applied to the ribs that are weaker than the shoulder bone, causing a serious injury.
- When the shoulder belt webbing is positioned across the abdomen, the body may fall out below the belt or a great impact may be applied to the abdomen, causing a serious injury such as intestinal rupture.
- If the belt latch is inserted into another buckle that is not the relevant buckle, the safety belt may not fit the body correctly so that it cannot protect the body properly.
- In addition, if the lap belt webbing of the two-point seat belt is too loose or the seat belt is fastened incorrectly, just as fastening a twisted seat belt, a fatal injury may occur in the event of an accident.

No modification of the seat belt and no attachment of illegal fixtures

- A modified seat belt cannot guarantee safety. Never modify the seat belt.
- Inappropriate work on safety units may adversely affect or hinder the operation of the units. Be sure to have the safety units serviced at a KGM Authorized Service Center that possess the required expertise, knowledge and special tools.
- If you attach an auxiliary device or accessory to the seat belt separately, the seat belt may not operate normally. Never attach any auxiliary device or accessory to the seat belt.
- Do not loosen the seat belt by locking it with a clip or a clamp. Doing so may cause a fatal injury due to a secondary impact in the event of a collision.

Checking and managing the seat belt and the importance of safe driving

- Do not allow foreign materials to enter into the seat belt buckle.
- If the seat belt and the relevant components are damaged, the seat belt may not operate normally. Check the seat belt frequently for any damage and the status of normal operation, and if any abnormality is discovered, have the seat belt repaired at a KGM Authorized Service Center immediately.

- If a strong impact has been applied to the seat belt due to an accident, etc., make sure to have the seat belt checked and replaced with a new one as needed even if there is no abnormality visually. Also check and replace the retractor and the seat belt anchorage if there is an abnormality.
- Care should be taken to prevent the seat belt from being contaminated by polishes, oils, chemicals and especially battery acid. When cleaning, wipe the seat belt carefully using a neutral detergent and water. Replace the seat belt if the webbing is frayed, contaminated or damaged.
- Do not place a hard or sharp object in the clothes or a pocket where comes into contact with the seat belt.
- The seat belt can reduce serious injuries. However, it cannot block fatal accidents and injuries completely. Keep this in mind and drive safely.

Child restraint for an infant or a small child

For an infant or a small child who cannot wear the three-point seat belt, have the infant or the small child be seated in a rear seat using a child restraint for an infant or a small child whose quality is certified by the government.

If the infant or the small child sits in the front passenger seat, the infant or the small child cannot be protected from an inflated air bag or other impacts in the event of a vehicle collision.



Warning

Seating an infant or a small child

- Do not let an infant or a small child sit in the front passenger seat. Doing so may cause a serious injury or death due to the inflation impact of the front air bag in the event of a collision accident.
- Do not ride with an infant or a small child in your arms or sitting on your lap. Doing so may cause a fatal injury to the infant or the small child in the event of a collision accident.
- If an occupant who is smaller than 140 cm wears the three-point seat belt, the seat belt cannot function fully. In such case, install and use a child restraint that fits the physical condition of the occupant.

Installing the child restraint

- Never use a rearward facing child restraint on a seat Protected by an ACTIVE AIRBAG in front of it, DEATH or SERIOUS INJURY to the CHILD can occur.
- Use a child restraint for an infant or a small child that passed through the certification and the safety inspection carried out by a certified government agency. Follow the manufacturer's owner's manuals for the installation and precautions of the child restraint.
- If the child restraint for an infant or a small child is installed incorrectly, it may not provide the appropriate protection function. In such case, it may result in a serious risk when an accident occurs.
- If the child restraint for an infant or a small child is not secured completely, injury or death of an infant or a small child may occur in the event of a collision accident.
- Never install a rear-facing child restraint in the front seat with front passenger air bag.
- Install the child restraint for an infant or a small child on the left or right side of the rear seat where the three-point seat belt is installed. If it is installed on the front passenger seat, a fatal injury may occur when the air bag inflates.
- When installing the child restraint for an infant or a small child in the rear seat of a vehicle where a curtain air bag is installed, install it as far as possible from the door. Failure to do so may cause serious injury or death of an infant or a small child when the curtain air bag inflates.
- When the child restraint for an infant or a small child is installed on the rear seat where the three-point seat belt is installed, be careful not to position the seat belt across the neck or face of an infant or a small child.

Using the child restraint

- When the child restraint for an infant or a small child is used, observe instructions provided by the manufacturer. Failure to do so may cause a fatal injury when an accident occurs.
- After installing the child restraint for an infant or a small child, make sure to check if it is secured correctly.
- Make sure that the child restraint is secured correctly by pushing or pulling it in various directions before letting an infant or a small child sit in the child restraint.

Managing the child restraint

- Do not carry the child restraint for an infant or a small child in the vehicle without installing or securing it. Doing so may cause the child restraint to bounce, causing an injury to the occupants in the event of sudden braking or an accident.



Caution

- This information is to help in understanding the necessity and usage of the child restraint for an infant or a small child. Use this information for reference purposes.
- When the child restraint for an infant or a small child is used, install and use it according to the owner's manual provided by the manufacturer.

Infant and child safety

Child Seat

Children that are too small to use the seat belts must be properly secured in a child restraint system.



Warning

- Never install a rear-facing child restraint in the front passenger seat with front passenger air bag.
- Because of the danger that an inflating passenger air bag could impact the rear-facing child restraint and kill the child.
- Use only the qualified child restraint systems. Follow the manufacturer's instructions for installation and use of the child restraint systems.
- Do not carry your child on your lap while driving. You cannot resist against the impact pressure in an accident. The child could be crushed between you and the parts of vehicle.
- Remember that a child restraint seat left in a concealed vehicle can cause it to be very hot. Check the seating surface before putting your child in the child restraint.
- When your child restraint is not in use, remove it from the vehicle or keep it secured with a seat belt to prevent it from being thrown forward in case of a sudden stop or an accident.
- When installing a child restraint, do not let the seat belts come across the child's neck.

Table of Vehicle Handbook Information on Child Restraint Systems Installation Suitability for Various Seating Positions



Rear-facing child seat



Forward-facing child seat



TYPE A



TYPE B

Booster seat

Mass group	Restraint device figure	Front Passenger		Rear Centre ^{*1)}	Rear Out Board
		Air bag off	Air bag on		
O ~ up to 10 kg (0 ~ 9 month)	Rear facing child seat	U	X	U	U
O+ ~ up to 13 kg (0 ~ 2 year)	Rear facing child seat	U	X	U	U
I ~ 9 to 18 kg (9 month ~ 4 year)	Rear facing / Forward facing child seat	U	X	U	U
II ~ 15 to 25 kg (4 year ~ 6 years)	Booster seat	U	U	U	U
III ~ 22 to 36 kg (6 year ~ 12 years)	Booster seat	U	U	U	U

※ Child restraint system are classified into the 5 groups according to the ECE R44

*1) Do not install a CRS with support leg in this seating position

NOTE:

U: Suitable for "universal" category restraints approved for use in the mass group.

UF: Suitable for forward-facing "universal" category restraints approved for use in the mass group.

L: Suitable for particular child restraints given on attached list. These restraints may be of the "semi-universal" categories.

X: Seat position not suitable for children in the mass group.

**Table of Vehicle Handbook Information on ISOFIX Child Restraint Systems
Installation Suitability for Various ISOFIX Positions**

Mass group	Size Class	Fixture	Vehicle ISOFIX Positions		
			Frt Passenger	Rear Centre	Rear Out Board
CARRYCOT	F (1)	ISO/L1	X	X	X
	G (1)	ISO/L2	X	X	X
GROUP 0 UP TO 10KG	E (2)	ISO/R1	X	X	IL
GROUP 0+ UP TO 13KG	E (2)	ISO/R1	X	X	IL
	D (2)	ISO/R2	X	X	IL
	C (2)	ISO/R3	X	X	IL
GROUP I 9 TO 18KG	D (2)	ISO/R2	X	X	IL
	C (2)	ISO/R3	X	X	IL
	B (3)	ISO/F2	X	X	IUF/IL
	B1 (3)	ISO/F2X	X	X	IUF/IL
	A (3)	ISO/F3	X	X	IUF/IL

NOTE: Key of letters be inserted in the above table

IUF: Suitable for ISOFIX forward child restraints systems of universal category approved for use in this mass group.

IL: Suitable for particular ISOFIX child restraint systems (CRS) given in attached list. These ISOFIX CRS are those of the “specific vehicle”, “restricted” or “semi-universal” categories.

X: ISOFIX position not suitable ISOFIX child restraint systems in this mass group and/or this size class.

- (1) Some child seats are installed transversely and occupy two seats. Make sure that the feet of child are facing the door.
- (2) Slide the front seat forward all the way to install the rear-facing child restraint. Then, slide the front seat back as directed in the manual provided with the child restraint.
- (3) When using a forward-facing child restraint, do not slide the front seat backwards more than halfway for child's safety. In addition, do not tilt the front seat backrest backwards too far (max. 25°) and raise it as high as possible.

Table of Vehicle Handbook Information for Installation in Various Seating Positions on i-Size Child Restraint Systems

Seating Posion	i-Size Child Restraint Systems
Front Passenger Outboard	X
Rear Outboard Left	i-U
Rear Outboard Right	i-U
Rear Center	X

Key of letters to be inserted in the above table:

i-U: Suitable for i-Size “universal” Child Restraint Systems forward and rearward facing.
(valid position for forward facing and rearward facing child restrant systems approved under ECE R129)

i-UF: Suitable for forward-facing i-Size “universal” Child Restraint Systems only.

X: Seating position not suitable for i-Size “universal” Child Restraint Systems.(invalid position for child restrant systems approved under ECE R129)

List of suitable universal Child Restraint Systems (CRS)

Please read carefully the installation manual of your child restraint

Mass group	Child Restraint	Features
0	< 10 kg	-
0+	< 13 kg	Maxi Cosi CabrioFix
I	9 to 18 kg	Römer King II LS
II	15 to 25 kg	Römer KidFIX II XP SICT
III	22 to 36 kg	Römer KidFIX II XP SICT Peg-Perego Viaggio 2~3 shuttle

List of suitable ISOFIX Child Restraint Systems (CRS)

Please read carefully the installation manual of your child restraint

Mass group	Child Restraint	Features
0	< 10 kg	-
0+	< 13 kg	Maxi Cosi CabrioFix & FamilyFix
I	9 to 18 kg	Römer Duo+
II	15 to 25 kg	Römer KidFIX II XP SICT
III	22 to 36 kg	Römer KidFIX II XP SICT Peg-Perego Viaggio 2~3 shuttle

List of suitable i-Size Child Restraint Systems (CRS)

Please read carefully the installation manual of your child restraint

Mass group	Child Restraint	Features
67 cm - 105 cm ≤ 18.5 kg	Maxi Cosi 2way Pearl & 2wayFix	ISOFIX & Support Leg Rearward facing
> 15 months 105 cm ≤ 18.5 kg		ISOFIX & Support Leg Forward facing
100 cm - 135 cm	Besafe iZi Flex FIX i-size	ISOFIX & Support Leg (without side bumpers)

Installation of crs secured by the seatbelt

Front-facing Child Seat



Secure the child restraint with a seat belt as shown in the figure.



Caution

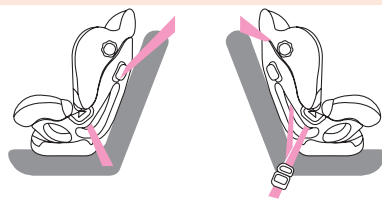
- When installing a child restraint system, follow the instructions provided by the manufacturer.



Warning

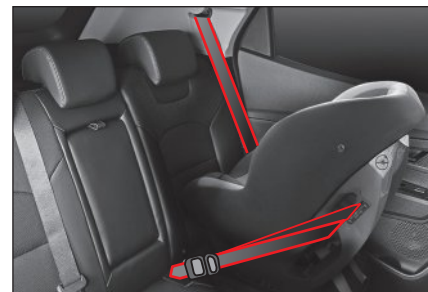
Do not use the car seat unless the followings are met.

The child seat may not perform as intended, which may result in a serious injury.



- Make sure that the buckle of the seat belt is securely engaged.
- Make sure that the seat belt is not loose or twisted.
- Make sure that the base does not move due to excessive play in all directions.
- You can't adjust the angle of the backrest with the child seat installed. If you're trying to do so, the seat belt will be slack, which incurs danger. Always adjust the angle of the backrest before installing the child seat.

Rear-facing Child Seat



Secure the child restraint with a seat belt as shown in the figure.



Caution

- Never install a rear facing child restraint on the front seat without ensuring that the front airbag is deactivated. KGM recommends that a child restraint to be installed on the rear seat.

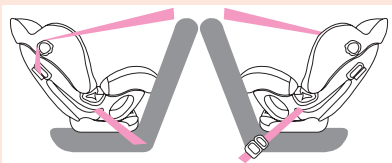
When installing a child restraint, adjust the seat back angle as desired.



Warning

Do not use the child seat unless the followings are met.

The child seat may not perform as intended, which may result in a serious injury.



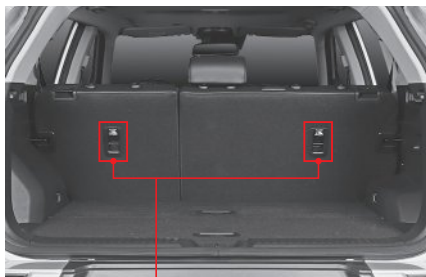
- Make sure that the buckle of the seat belt is securely engaged.
- Make sure that the seat belt is not loose or twisted.
- Check if the angle of the backrest is set to 4 stage.
- Make sure that the base does not move due to excessive play in all directions.
- Make sure that the seat belt is routed through the rear-facing belt path and buckled up.

Securing a child restraint system with “ISOFIX/i-Size” system and “Tether Anchorage” system*

ISOFIX/i-Size system is a standardised method of fitting child seats that eliminates the need to use the standard adult seatbelt to secure the seat in the vehicle.

This enables a much more secure and positive location with the added benefit of easier and quicker installation. An ISOFIX/i-Size-seat can only be installed if it has approval in accordance with the requirements of ECE R44 or ECE R129.

Locations of ISOFIX/i-Size Lower Anchors and Top Tether



- 1 Two ISOFIX/i-Size lower anchors are installed at the bottom of the seatback at each outboard seat as shown in the figure.
- 2 The ISOFIX/i-Size lower anchors can be identified by the symbol attached on the top surface.



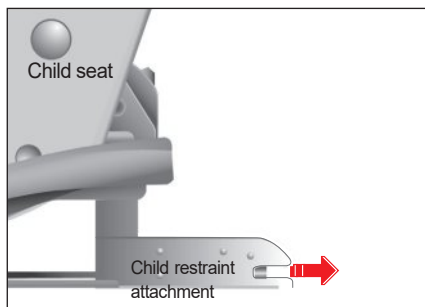
- 3 Two (for EURO countries) or three (Australia) ISOFIX/i-Size top tethers are installed at the upper side of seatback.

How to use ISOFIX/i-Size Lower Anchor

The ISOFIX/i-Size lower anchor is exposed when you widen the space between seatback and cushion.



- 1 Now, you can see the ISOFIX/i-Size lower anchors.



- 2 Insert the child restraint attachments into the ISOFIX/i-Size lower anchors until it clicks.
- 3 Adjust the seatback angle as desired.

Warning

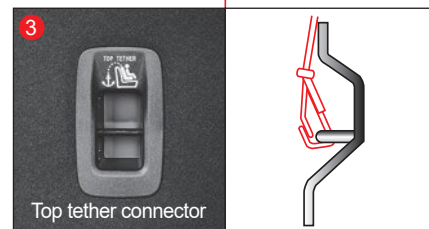
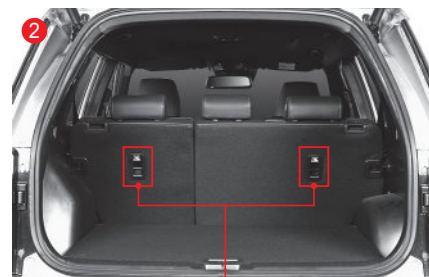
- When using the ISOFIX/i-Size lower anchor, make sure that no interference are around the bar and the seat belt is not stuck.
- Rock the child restraint to check if it is securely installed. Refer to instructions provided by the manufacturer of the child restraint.
- Do not install the child restraint if it hinders the operations of front seat.

How to use Top Tether

- 1 Adjust the seatback angle as desired.



- 2 Connect the top tether connector in child restraint to the top tether on the seatback of the second row seat.
- 3 Securely tighten the child restraint by adjusting the webbing of top tether connector.



Warning For Child Restraint

- **Use only the officially approved child restraint.**
KGM is not responsible for the personal injury and property damage due to the defect of child restraint.
- **These seats are subject to the ECE R44 or ECE R129 standard.**
- **Use only the child restraint with proper type and size for your baby.**
- **Use only the child restraint at proper location.**
- **Child restraint has 5 categories based on the weight as below according to ECE R44.:**
GROUP 0: 0 ~ 10KG
GROUP 0+: 0 ~ 13KG
GROUP I: 9 ~ 18KG
GROUP II: 15 ~ 25KG
GROUP III: 22 ~ 36KG
- **Group 0 & 0+**
Rear facing child restraint fitted on the rear seat
- **Group I**
Rear facing or forward facing child restraint fitted on the rear seat
- **Group II & III**
Booster seat fitted on the rear seat with seat belt fastened

Always follow the installation and use instructions provided by the manufacturer of the booster seat.

- **i-Size:** child seats with i-Size approval must meet the requirements prescribed in the ECE R129 standard in relation to installation and safety. Child seat manufacturers can tell you which seats have i-Size approval for this vehicle.



Caution

- Top tether is the supplemental device to secure the child restraint system after engaging it by the lower latches. Therefore, do not secure the child restraint system only with the top tether. The increased load may cause the hooks or anchors to break, causing serious injury or death.
- If a child restraint is not properly secured to the vehicle and a child is not properly restrained in the child restraint, the child could be seriously injured or killed in a collision. Always follow the instructions provided by the manufacturer for installation.
- Make sure the latches of the child restraint system are latched to the lower latches. In this case, you can hear the “click” sound.
- The child restraint seat strap may not work properly if attached somewhere other than the correct top tether.
- Make sure that the child restraint system is firmly secured by rocking it in different directions.
- Incorrectly installed child restraint system may cause an unexpected personal injury.

Air bag*

The air bag is an ancillary safety unit that inflates instantaneously in the event of a vehicle collision, protecting an occupant from the impact.

The air bag system is composed of the air bag crash sensor, air bag control module and air bag.

The air bag operates according to various factors including the strength and direction of a vehicle collision, strength of a colliding object, vehicle speed and the condition of the occupant.

Warning

- The air bag is an auxiliary unit that supplements the protection function of the seat belt and it cannot replace the seat belt. The seat belt should be fastened during driving.
- The air bag includes electric sensors and control modules and it only operates when the ignition switch is in the On position or the engine is running.
- The air bag is installed on the part where “AIRBAG” is displayed. Do not apply an impact to, place an article on or attach an accessory to the part where the air bag is installed. Doing so may cause a serious injury when the air bag inflates.
- When 10 years have passed after the air bag is installed, make sure to have the air bag checked at a KGM Authorized Service Center even if there is no abnormality in the air bag system visually.

Air bag warning label

The air bag warning label displaying the risk of secondary damages in case the air bag inflates and safety information is attached to the passenger side sun visor. Read and familiarize yourself with the safety information before driving.



Warning

- The air bag is a unit that explodes a type of gunpowder in the unit and inflates the air bag instantaneously to protect the occupant. Therefore, noise, glare and smoke occur due to the explosion of gunpowder when the air bag inflates.
- The occupant may get burned when the air bag inflates. In some cases, the occupant may suffer injuries such as a bruise, bone fracture, abrasion and facial blows due to the inflated air bag and secondary damages such as broken glass.

Air bag warning lamp

The air bag warning lamp turns on when the ignition switch is turned On, and it turns off when there is no abnormality in the air bag system.



Warning

- If the air bag warning lamp stays on continuously, it indicates that there is abnormality in the air bag or the seat belt pretensioner system. Have your vehicle checked and serviced at a KGM Authorized Service Center immediately.

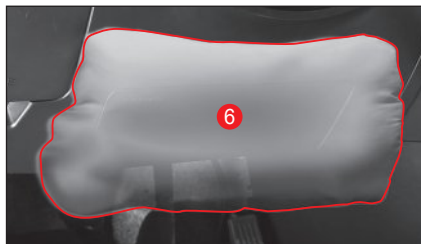
Air bag crash sensor and air bag control module

The vehicle is equipped with sensors that can detect a collision and a module that controls the air bag operation.



- 1 Air bag control module
- 2 Front impact sensor (G-sensor type)
- 3 Side impact sensor (pressure sensor type)
- 4 Side impact sensor (G-sensor type)

Configuration of air bag



- 1 Driver air bag
- 2 Front passenger air bag
- 3 Curtain air bag
- 4 Front seat side air bag
- 5 Far side air bag
- 6 Driver knee air bag

Passenger Air Bag ON/OFF Switch*



The front passenger air bag is disabled (not inflatable) when placing the passenger air bag ON/OFF switch to "OFF" position. This switch is located on the right side of the instrument panel, and you can see it when opening the front passenger door. Press and turn this switch to operate.

"OFF" position: disabled (not inflatable)

"ON" position: enabled (inflatable)

Driver air bag

The driver air bag protects the driver's head in the event of a front collision.

The driver air bag is installed in the center of the steering wheel.



Warning

- The driver should sit as far as possible from the steering wheel within the range that it does not hinder the driver from controlling the vehicle. If the driver sits too close to the steering wheel, a fatal injury may occur when the air bag inflates.
- Do not place any object on or attach an accessory or a sticker to the air bag cover (steering wheel cover). Doing so may hinder the air bag from operating normally and increase a risk of injury when the air bag inflates.

Driver knee air bag

The driver knee air bag operates along with the driver air bag at the same time in the event of a front collision, protecting the driver's knees.

The driver knee air bag is installed in the dashboard under the steering wheel.



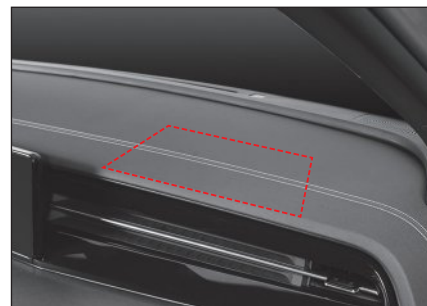
Warning

- Sit as far as possible from the dashboard where the front passenger air bag is installed. If the front passenger sits too close to the dashboard, a fatal injury may occur when the air bag inflates.

Front passenger air bag

The front passenger air bag protects the front passenger's head in the event of a front collision.

The front passenger air bag is installed inside of the dashboard in front of the front passenger seat.



Notice

- The front passenger air bag operates along with the driver air bag at the same time.

Front seat side air bag

The front seat side air bag protects the side of the front seat occupant in the event of a side collision that meets the condition for inflating the air bag.

The front seat side air bag is mounted in the side of the driver seat backrest and the front passenger seat backrest.



Warning

- Do not hang clothes or accessories or use seat covers on the seats where the side air bag is mounted.
- Do not apply impact to the area where the collision detection sensor for the side air bag (bottompart of B pillar) is installed. Doing so may cause the side air bag to malfunction.

Far side air bag

The far side airbag unfolds between the passenger and the driver in the event of a side collision to prevent the passengers from being injured by a physical collision between them.



Warning

- Do not use seat covers or hang clothes/ accessories on the seats with far side air bag.
- Do not apply impact to the area where the collision detection sensor for the far side air bag (bottompart of B pillar) is installed. Doing so may cause the far side air bag to malfunction.

Curtain air bag

The curtain air bag protects the head of the front seat occupants and the rear seat occupants in the event of a side collision that meets the condition for inflating the air bag.

The curtain air bag is mounted on the roof at the top of the front and rear doors on both sides.



Warning

- Do not apply impact to the curtain air bag crash sensor (bottompart of the B pillar). Doing so may cause the curtain air bag to malfunction.
- Do not slam the door. Doing so may cause the air bag to malfunction.

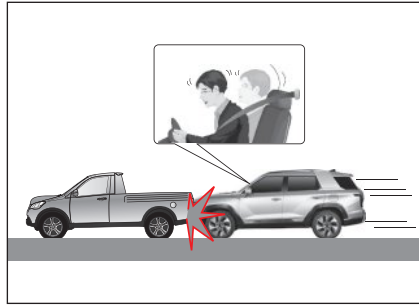
Notice

- The side air bags and the curtain air bags operate at the same time in the event of a side collision, but the left and right side air bags and curtain air bags operate separately.

Cases where the air bag does not inflate

The air bag does not inflate in all collision accidents. The air bag may not inflate, in any of the following cases:

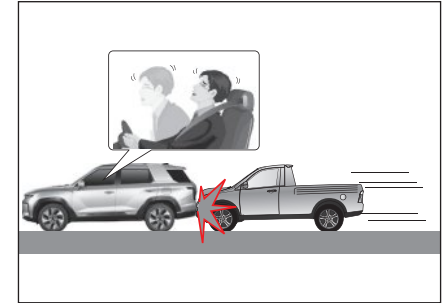
In the event of a slight collision



The air bag may not inflate in the event of a slight collision that the collision detection sensor cannot detect or the strength of collision is weak.

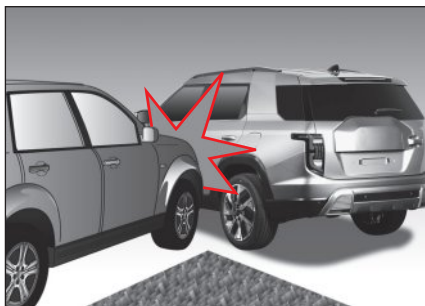
In such case, the seat belt can provide enough protection and the air bag operation may instead give secondary damages to the occupant such as a burn or an injury.

In the event of a rear end collision



In the event of a rear end collision by another vehicle, the body of the occupants move backwards, so the air bag cannot provide enough protection even if it inflates. In such case, the air bag may not inflate.

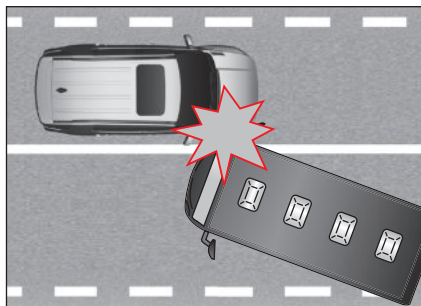
In the event of a side collision



In the event of a side collision, the occupants cannot be protected by the front air bags, so the front air bags may not inflate.

However, the curtain air bags and the side air bags operate depending on the degree of impact in the event of a side collision, protecting the front seat occupants.

In the event of a diagonal collision



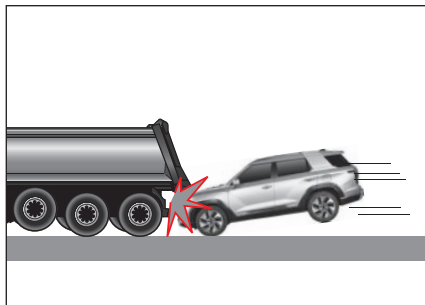
Since the impact of a collision in the diagonal direction is weaker than the impact of a collision in the front or side direction, the air bag may not inflate.

In the event of a collision with a narrow object



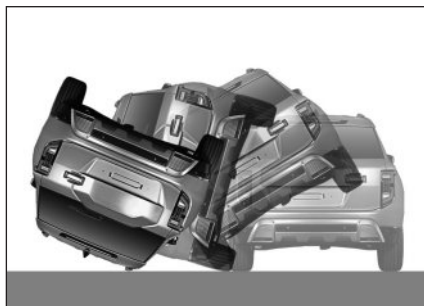
In the event of a collision with a narrow object such as a street light, utility pole or tree, the degree of impact applied to the sensor may not be enough, so the air bag may not inflate.

In case the vehicle moves beneath another vehicle



Generally, most drivers apply a sudden brake when an accident occurs, so the front part of the vehicle becomes lower. Therefore, the vehicle often moves beneath the opposing vehicle in the event of an accident against a tall vehicle such as a bus or a truck. In such case, the air bag may not inflate.

In the event of a rollover accident



If the vehicle turns over or rolls over, the occupant cannot be protected fully by the air bag alone. In such case, the air bag may not inflate.

However, the curtain air bag or the side air bag may inflate according to the degree of impact applied to the side when the vehicle turns over.

Secondary injury due to air bag deployment



If the air bag control module detects the impact during an accident, it transmits the signal to deploy the air bag. This signal triggers the explosion of the powder, which is included in the air bag module, and the air bag deploys in a very short time to protect the occupants. When the air bag inflates, there will be heavy noise, glare and smoke. You could suffer secondary injuries caused by inflated air bag such as an abrasion, a bruise, a burn or injury by broken glasses.

Other cases

Cases where the driver/front passenger air bags do not inflate

- When the air bag warning lamp is on
- When an impact is applied to the top of the engine hood by a falling rock, etc.
- When the vehicle falls into a drainage ditch or a puddle

Cases where the side air bags or curtain air bags do not inflate

- When the air bag warning lamp is on
- In case of a front or rear collision
- When the vehicle rolls over or turns over in the side direction with a moderate degree of impact

Warnings for the air bag



Warning

Seating an infant or a small child

- Do not let an infant or a small child sit in the front passenger seat or ride with an infant or a small child in your arms. The infant or the small child and you may get seriously injured or killed when the air bag inflates.
- Do not install a child restraint for an infant or a small child in the front passenger seat. If the air bag inflates, the infant or the small child may get seriously injured or killed due to the impact.
- When installing the child restraint for an infant or a small child in the rear seat of a vehicle where the curtain air bag is installed, install it as far as possible from the door. Failure to do so may cause serious injury or death of an infant or a small child when the curtain air bag inflates.

Driving and riding position

- Only hold the rim of the steering wheel when driving. Doing so ensures that the air bag inflates fully when it operates.
- Do not lean against the steering wheel or maintain your arms in an “X” shape. You may get seriously injured when there is a problem in the air bag operation or the air bag inflates.
- Do not drive while leaning forward or come too close to the steering wheel. You may get hit by the air bag and seriously injured on your head and neck or even killed before it inflates fully.
- If you wear the seat belt in an unstable position or while leaning to one side, the air bag cannot provide enough protection. You may even get seriously injured by the air bag.
- Do not place your feet or hands on the dashboard. You may get seriously injured when the air bag inflates.
- Do not lean against the door or stick your arm out of the window. You may get seriously injured when the curtain air bag inflates.

Handling the air bag

- Do not apply impact to air bag-related devices including the steering wheel, the part where the air bag is installed, wires and the seat belt pretensioner system. You may get seriously injured when the air bag inflates suddenly.
- Do not apply impact to the seat backrest where the side air bag is installed. Doing so may cause the side air bag to malfunction.
- Do not slam the door when closing the door. Doing so may cause the curtain air bag or the front air bag to malfunction.
- Do not place any object between the air bag and the occupant. Doing so may hinder the operation of the air bag and you may get injured by such an object when the air bag inflates.
- After the air bag and the seat belt pretensioner operate, their relevant components become very hot. Never touch such components until they have cooled down.

Operation of the air bag

- The air bag is a unit that protects the life of a passenger from a sudden accident, and it inflates at high speed by hot gas. The occupant may suffer injuries such as a burn, abrasion or bruise according to the circumstances at the time when the air bag inflates.
- A loud noise, dust, smoke or gas that occurs when the air bag or the seat belt pretensioner operates is normal.
- Gas generated when the air bag or the seat belt pretensioner operates is nontoxic, but if your skin, eyes or nose becomes irritated, wash with clean water. If the symptom persists, consult your doctor.
- Caution should be taken that the windshield or window glasses may be broken due to an impact from the operation of the front seat air bag or curtain air bag.

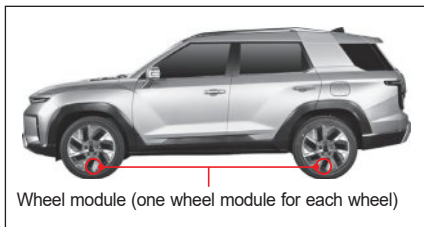
Do not modify the air bag or change the structure

- Do not modify or change the structure of any air bag-related devices including the steering wheel, the part where the air bag is installed or the wires. Do not check an air bag-related circuit with a tester. Doing so may cause the air bag system to malfunction or break down, resulting in personal injury and property damage.
- Do not replace the steering wheel with a product which is not a KGM genuine part. Doing so may cause the air bag in the steering wheel not to operate normally.

Tire pressure monitoring system (TPMS)*

The tire pressure monitoring system (TPMS) is an auxiliary safety unit that detects if the tire pressure is abnormally high or low and informs such fact to the driver, preventing an accident that may occur due to the tire pressure.

- The TPMS warning light (⚠) comes on if the tire pressure is abnormal.
- Also, if there is abnormality in the tire pressure monitoring system (including the sensor), the TPMS warning light (⚠) blinks and stays on.



The electronic control unit of the TPMS receives various data including the tire pressure and temperature from the wheel module mounted on each wheel and displays such data on the instrument cluster.

- Proper tire pressure: 34 psi, 2.3 bar
- The proper tire pressure is the value measured at room temperature (20 °C) in the condition of an empty vehicle when the tires have been cooled properly.

Notice

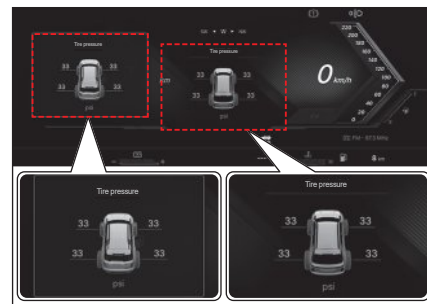
- If the vehicle is driven at a speed of 30 km/h or faster after the engine is started, the tire pressure is detected within 5 minutes although it might be slightly different depending on the system status. If the tire pressure is not sensed, “...” will be displayed.



Caution

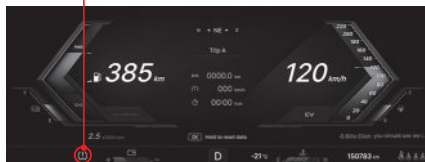
- The tire pressure displayed on the display of the instrument cluster can be changed by various environmental factors including the driving status of the vehicle, number of occupants in the vehicle and the status of air injection into the tires.
- When air is injected into a tire, airs with different temperature are mixed, so the tire pressure may be changed until a temperature balance is reached.

Checking the tire pressure



By selecting TPMS status from the main menu of the instrument cluster, you can check all tire pressures from the display of the instrument cluster.

If the tire pressure or the TPMS is abnormal



If the tire pressure or the tire pressure monitoring system is abnormal, the TPMS warning light blinks or comes on.

- Abnormal tire pressure (low/flat): The TPMS warning light stays on.
- Abnormal tire pressure monitoring system (including the sensor): The TPMS warning light blinks for approximately 70 seconds and stays on.

Warning

- If the TPMS warning light comes on in the instrument cluster, the tire pressure is insufficient, excessive or uneven. Make sure to park your vehicle at a safe place and check the tire pressure.
- If the TPMS warning light stays on after checking the tire pressures, starting the engine and driving the vehicle for more than 10 minutes at a speed over 20km/h, have your vehicle checked and serviced at a KGM Authorized Service Center.
- A sudden tire damage due to an external factor such as a nail or a road debris, etc. may not be detected immediately. If the vehicle becomes unstable while driving, slow down, move the vehicle to a safe place and check the vehicle.
- Do not modify or remodel your vehicle in a way that hinders the operation of the TPMS.
- For safety, always use genuine wheels equipped with the tire pressure monitoring sensor.

Caution

- Adjust the tire pressure when the tires are cold (no driving for 2 or 3 hours).
- Even if the tire pressure has been adjusted to a proper tire pressure, the TPMS warning light () may come on due to a difference in the internal tire temperature and air temperature. This is the phenomenon that the tire pressure drops in proportion to the temperature and this does not indicate that the TPMS is abnormal.
- If you need to drive while the ambient temperature rises or drops rapidly, check and adjust your tire pressure to the prescribed inflation pressure in advance before driving.
- For safe driving, check your tire pressure regularly without simply depending on the TPMS.

Display of the TPMS status on the instrument cluster

Item		Pop-up	Operating condition
Tire pressure OK			It is displayed when the tire pressure is normal.
Low pressure		-	In order to detect whether the tire pressure is normal or insufficient, the TPMS wheel module must be properly installed on each wheel. After IGN ON, it takes several seconds for the TPMS ECU and TPMS wheel module to communicate normally, and during this time, each state is displayed.
			It is displayed when the tire pressure is insufficient to the extent that it is to be checked (approximately 20% less than the specified tire pressure). The corresponding tire's pressure indicator blinks (alternating white and red) and the TPMS warning light turns on.
Check tires			It is displayed when the tire pressure is insufficient to the extent that it is to be checked (approximately 23.9 psi or less). The corresponding tire's pressure indicator blinks (alternating white and red) and the TPMS warning light turns on.

Item		Pop-up	Operating condition
Flat tire			It is displayed when the tire pressure drops sharply or there is a flat tire. The corresponding tire's pressure indicator blinks (alternating white and red) and the TPMS warning light turns on.
High pressure			It is displayed when the tire pressure is excessive. The corresponding tire's pressure indicator blinks (alternating white and red).
Pressure imbalance			If the left/right tire pressure differs by more than 5 psi, the corresponding tire pressure indicator blinks (alternating white and orange).
Notice	- If a certain tire pressure is shown as "--" while the other tire pressures are shown normally, the TPMS wheel module of the relevant tire may be abnormal. Have your vehicle checked and serviced at a KGM Authorized Service Center immediately. - If all tire pressures are displayed as "--", it is possible that two or more TPMS wheel modules are defective or communication with the ECU has failed. In this case, immediately have the vehicle checked and serviced at a KGM Dealer or KGM Authorized Service Center.		

When low tire pressure is detected

When a tire with significantly low pressure is detected, the TPMS warning light () comes on and the position of the relevant tire with low pressure is indicated on the instrument cluster.

In such case, slow down, bring your vehicle to a KGM Authorized Service Center and have your vehicle checked and serviced.



Caution

- If you drive the vehicle continuously with a low tire pressure, the life of the tires, vehicle operating force, brake force and vehicle fuel efficiency may decrease.
- If you cannot bring your vehicle to a KGM Authorized Service Center, add air to the tire using the service kit for tire repair.
 Refer to "Inflating a tire" (p.5-18)

When you have rotated the tires

When you have rotated the tires, the TPMS resets the position of each tire.

If the vehicle is driven at a speed of 20 km/h or faster, typically the system completes the reset within 5 minutes although it might be slightly different depending on the system status.

 Refer to "Rotating the tire positions" (p.6-53)



Warning

- If you replace a tire where sealant has been injected for repairing the tire, be sure to have the exterior of the TPMS sensor and the TPMS checked for normal operation at a KGM Authorized Service Center.



Caution

- If you rotated the tires or replaced a wheel module including the tire pressure detection sensor, the tire position may not be recognized correctly at the beginning of driving so that the previous tire pressure may be displayed or the TPMS warning light () may turn on. This is a temporary state which is not a failure.
- The time taken for resetting the tire position may vary depending on the driving condition of the vehicle.

Cautions for the TPMS



Caution

- If a wheel without a wheel module (tire pressure detection sensor) is installed to the vehicle, the TPMS warning light turns on and the TPMS does not operate.
 - Do not rely too much on the TPMS and be sure to check the tire pressure status before driving the vehicle.
 - The TPMS operates in a way that it communicates with the wheel module by wireless. Therefore, if an electronic device such as a mobile speed camera detector that can create radio interference is installed to the vehicle, the TPMS may not operate normally.
 - In an area with a strong electromagnetic field (police stations, government offices, broadcasting stations, military facilities, transmitting towers, etc.), the TPMS may fail and the TPMS warning light (ⓘ) may turn on.
 - If any foreign object is caught in the transmitter attached to the tire wheels while driving on a muddy or snowy road, hindering the communication with the receiver of the vehicle, the radio interference occurs due to strong external waves or a metal object is located near the TPMS, the tire pressure may be displayed with a time delay or may not be displayed normally.
- When you drive the vehicle with snow chains installed, the snow chains may hinder the communication between the wheel module and the antenna so that the TPMS may not operate normally. However, this does not impair the operation of the vehicle.
 - When air is injected into a tire, the tire pressure displayed on the air injection device may be different from the tire pressure displayed on the TPMS. This difference is caused by factors including the driving status of the vehicle, number of occupants in the vehicle and the status of air injection into the tire and this does not indicate the failure of the TPMS.
 - Be careful not to damage the wheel module when the tires are replaced. If the wheel module receives an impact or is damaged when the tires are replaced, the tire pressure detection function does not operate.
 - If you have your tires replaced at a tire shop other than a KGM Authorized Service Center, be sure to inform that the TPMS has been fitted to the tires.
 - The life of the battery in the tire pressure detection sensor (wheel module) may be reduced if abnormalities such as checking tire pressure, low pressure, high pressure and pressure imbalance occur frequently.

Immobilizer system*

The immobilizer system is a vehicle anti-theft system that prevents it from starting the engine unless a permitted key is used.

The engine can be started only when the code of the transponder integrated in the smart key (rekes key) has been authenticated by comparing it with the code of the engine control unit.

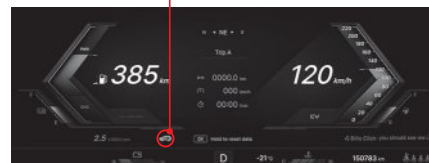
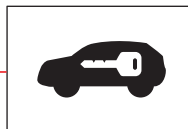


Caution

- The immobilizer system cannot be removed from the vehicle under any circumstance. If you arbitrarily remove or damage the immobilizer system, you cannot start the engine. Never remove, damage or modify the immobilizer system.
- The immobilizer system should be repaired only by a licensed technician at a KGM Authorized Service Center.
- When the code of the transponder is deleted or an additional key is registered, observe the process in person.
- Do not install a metallic accessory near the smart key (rekes key) or the ignition switch. Such accessory changes the signal delivered to the ignition switch, preventing it from starting the engine.
- Do not drop the smart key (rekes key) or apply impact to it. Doing so may damage the transponder.
- Do not modify the vehicle arbitrarily to install a remote starting device. Doing so may cause a problem in starting the engine or a fatal accident.

Immobilizer/smart key warning light

If the immobilizer or the smart key system is abnormal, the immobilizer/smart key warning light will blink.



Notice

- The communication time between the transponder and the engine control unit varies depending on the case. If the communication time is short, the warning lamp may not be lit.

If the engine does not start

In the event of the communication error between the transponder and the engine control unit due to a system internal fault or external communication obstacle, the engine will not start.

In such case, the immobilizer warning light will blink.

You may not be able to start the engine in a vehicle with the immobilizer system, in any of the following cases:

- When two or more smart keys come into contact with each other are used
- When the smart keys is used near a device that sends or receives electromagnetic fields or waves
- When the smart keys is used near electric or electronic devices such as lighting equipment, security keys or security cards
- When the smart keys is used near a key chain, a magnet, a metallic object or a battery
- When you start the engine before the engine preheating time ends



Caution

- **You may not be able to start the engine due to an external factor (key chain, magnet, etc.) or early starting before the engine preheating time to cause communication failure with the immobilizer. In such case, eliminate the factor preventing it from starting the engine, place the smart key outside the operation range of the antenna for approximately 10 seconds or longer and start the engine again.**
- **If the immobilizer/smart key warning light blinks continuously and you still cannot start the engine after eliminating the external factor, have your vehicle checked and serviced at a KGM Authorized Service Center.**

When the transponder is damaged

You can't start the engine with a key whose transponder is damaged. In such case, replace the smart key with a new one and register the relevant code on the engine control unit.

When you lose the key

When you lose your key, the transponder code of the lost key registered on the engine control unit should be deleted.

Have KGM Authorized Service Center take measures for preventing vehicle theft by a lost key.

Theft deterrent system

The theft deterrent system is a device that prevents theft of the vehicle by activating the anti-theft alarm when the door, tailgate or engine hood is open in an armed mode.

Entering the theft monitoring mode

When the door lock button (including the door lock/unlock button on the exterior of the front doors) of the remote key or smart key is pressed with all doors, tailgate and engine hood closed, the system enters the theft monitoring mode.

- When the system enters the theft monitoring mode, the warning light blinkstwice and the warning buzzer sounds once.
- **Remote control key:** When the theft deterrent system is armed, the hazard flashers blink twice. However, if you press this button once again in 4 seconds, the hazard flashers blink twice and the buzzer sound once.
- **Smart key:** When the theft deterrent system is armed, the hazard flashers blink twice and the buzzer sound once.
- If approximately 30 seconds have passed without opening the door after unlocking the door using the remote key or smart key in the theft monitoring mode, all doors are locked again and the system enters theft monitoring mode.



Caution

- If you insert the key into the door key hole and lock the doors, only the doors are locked but the theft deterrent system is not activated.
- The system enters the theft monitoring mode only when the ignition switch is on Off and all doors, tailgate and engine hood are closed completely.
- If the ignition switch is on Acc or On or the engine is being started, the system does not enter the theft monitoring mode.

Activating the theft alarm

In the theft monitoring mode, the warning light and the warning buzzer operate at an interval of 1 second for 30 seconds in any of the following cases:

- When an attempt to open the door, tailgate or engine hood without using the smart key is made
- When the key is inserted into the key hole to open the door
- When the door lock lever is placed in the unlock position forcibly

When the theft deterrent system is activated, the alarm stops in any of the following cases: However, the theft monitoring mode is maintained at this time.

- When the door lock button or door unlock button on the smart key is pressed
- When the door lock/unlock button on the exterior of the front door is pressed
- When the ignition switch is On
- **Remote control key:** pressing "Lock", "Unlock", "Panic" button on the remote control key, or turning the ignition switch to "ON" position
- **Smart key:** pressing "Lock" or "Unlock" button on the Smart key, pressing the "Lock/Unlock" button on the outside door handle, or turning the ignition switch to "ON" mode by pressing it.

Holding the theft alarm

The alarm does not sound and is on hold in any of the following cases:

- When the tailgate is opened by pressing the open tailgate button on the smart key
- When the tailgate is opened by pressing the open button inside the tailgate door handle with the smart key detected

Notice

- **An armed mode is maintained even if the tailgate is open in an anti-theft alarm hold state. When the tailgate is closed, it also returns to an armed mode.**

Canceling the theft monitoring mode

The theft monitoring mode is canceled when the door is switched to the Unlock position using the remote key or smart key (including the door lock/unlock button on the exterior of the front doors).

Notice

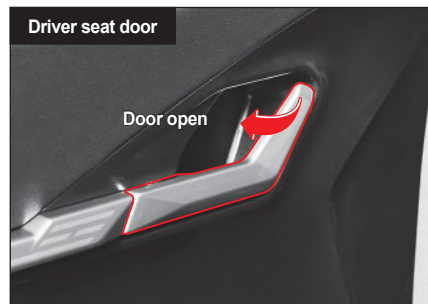
- **When the theft monitoring mode is canceled, the warning light blinksonce and the warning buzzer sounds twice.**
- **All doors are locked again and the system enters theft monitoring mode, when approximately 30 seconds have passed without opening the door after unlocking the door using the smart key in the theft monitoring mode.**

3. Convenient Equipment

You can check information regarding devices that allow you to drive the vehicle conveniently and wisely and how to use such devices.

An explanation is provided for doors, seats, windows as well as various convenient equipment including the tailgate, various lights and lamps, mirrors, heater and air conditioner, Smart Audio, storage and cargo box.

How To Lock/Unlock & Open Door



Door Opening Lever

- Driver door opening lever
Pulling the door opening lever with the door locked will unlock all doors and open the driver's door.
- Front passenger door opening lever
Pulling the door opening lever with the door locked will unlock all doors. At this time, pull the door opening lever again to open the front passenger's door.
- Rear door opening lever
Pulling the door opening lever with the door locked will unlock that rear door only. At this time, pull the door opening lever again to open the door.

Warning

- Take care not to allow the door to open by pulling the door opening lever while driving. If any door is open while driving it can pose a serious risk.

How To Check If Door Locked/Unlocked



- The buttonless integrated control panel allows you to confirm that the door is locked/unlocked.

Notice

- When any door is unlocked, the door unlock indicator is displayed.

Door Lock/Unlock button

Each time the door Lock/Unlock button on the driver seat is pressed, the status of all doors and the tailgate is changed between locked and unlocked alternately.



Caution

- You cannot lock the door using the door Lock/Unlock button or the smart key when the door is opened even slightly.
- You cannot unlock the door with the driver door Lock/Unlock button in theft monitoring mode.



Warning

- Before driving the vehicle, lock all doors from the driver seat using the door lock/unlock lever. Be sure to drive the vehicle with all doors locked when a child is present in the vehicle. If the door is opened suddenly while driving, you may face a serious risk.
- Before you get out of the vehicle, check the rear and front sides of the vehicle first to see if there is any vehicle, motor cycle, bicycle or person passing by. In particular, opening the door without checking the rear side may lead to an accident.

Auto door lock function at the time of driving

When the vehicle speed exceeds the set speed, all doors and tailgate are automatically locked.

Notice

You can set at Vehicle settings  → Door / Tailgate → Auto locking in the hypervisor control panel.

Auto door unlock function at the time of collision

When a collision accident occurs with all doors locked and the air bag is activated, all doors are unlocked automatically.



Warning

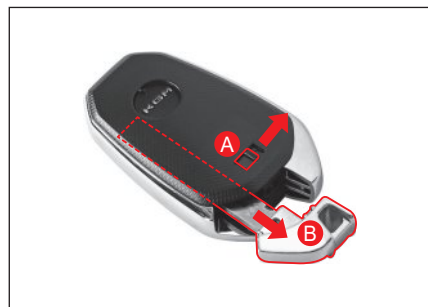
- If the vehicle body or a door has been deformed due to an impact from an accident, the auto door unlock function may not operate normally.

How To Lock Doors In Emergency

If you cannot lock the doors using a smart key because of dead battery, wave interference or etc., you may use the mechanical key (secondary key) to lock the doors manually. (excluding driver door)

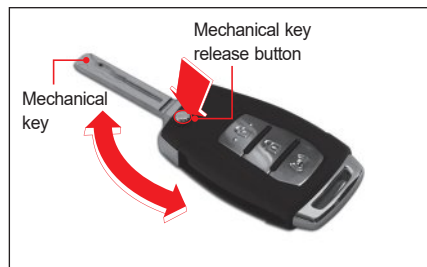
☞ Refer to “Unfolding/folding the emergency key” (p.4-18)

Smart key



- Remove the emergency key (B) from its body while pressing the emergency key lock (A) at the smart key in the direction of the arrow.

REKES key



- Pull out the mechanical key by pressing the mechanical key release button of the REKES key.
- To fold in the mechanical key, fold the mechanical key while pressing the mechanical key release button.

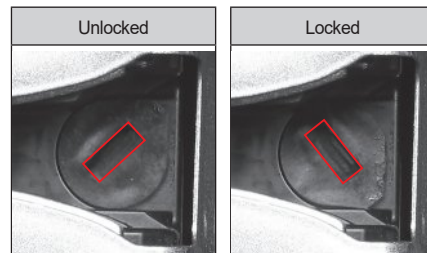


Caution

- Attempting to fold in the mechanical key without pressing the mechanical key release button can lead to REKES key breakage.

To lock doors with mechanical key (excluding driver door)

- Open the door, insert the mechanical key into the emergency lock located behind the door and turn the key in the direction of the arrow.



- 2 Close the door with the groove of the emergency lock still locked.



Caution

- If the door is locked using an emergency lock, the door can be unlocked using the Smart key/REKES key or by pulling the door opening lever from the vehicle interior.

Child safety door lock

The child safety door lock is installed in order to prevent a child from opening the door in the vehicle when a child is present in the rear seats.

The child safety door lock is provided at the inner side of the rear seat doors.

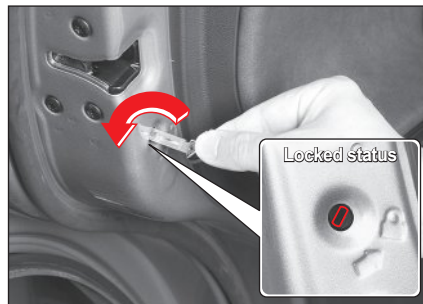


Locking/unlocking the door lock

When the child safety door lock is locked, the rear seat doors cannot be opened with the door open lever in the vehicle even if the rear seat doors are unlocked. In such case, the rear seat doors can be opened only from the outside of the vehicle.

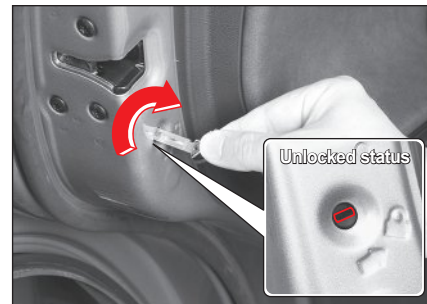
Locking the child safety door lock

Place the child safety door lock lever in the lock position by turning it counterclockwise.



Unlocking the child safety door lock

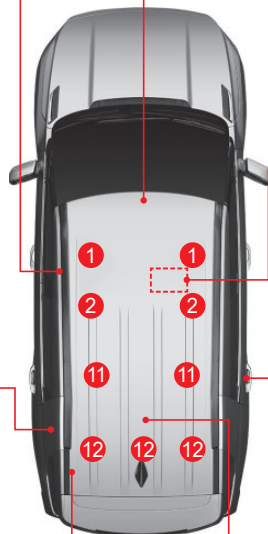
Place the child safety door lock lever in the unlock position by turning it clockwise.



Warning

- When a child is present in the vehicle, place the child safety door lock lever in the lock position to prevent the child from opening the door in the vehicle.

Seat & adjustment switch / button / lever



Front seat

- 1 Front seat
- 2 Sliding head restraint
- 3 Driver seat heating and ventilation switch
- 4 Passenger seat heating and ventilation switch
- 5 Seatback reclining adjustment lever
- 6 Seat cushion tilt adjustment lever
- 7 Seat height adjustment lever
- 8 Seat position adjustment lever
- 9 Lumbar support adjustment button
- 10 Walk-in button for passenger seat adjustment

Rear seat

- 11 Rear seat (4:6 split type)
- 12 Head restraint
- 13 Rear seat warmer button
- 14 Rear seat armrest (cup holder)
- 15 Rear seat webbing guide
- 16 Seatback reclining adjustment lever (folding)

Front seat

Adjusting the headrest

- The headrest gives comfort and helps protect your head and neck in the event of collision. Adjust it to where you want it to be.
- The closer distance between the headrest and the head, the better the neck can be protected in the event of a rear collision.

Adjusting the front and rear positions

- Push the rear section of the headrest (1) in the arrow direction. The angle of the headrest can be adjusted in 3 levels.
- To return the headrest to its original position, push it to the end in the arrow direction again and release it.



Caution

- Do not hang heavy clothing from the hanger-type headrest. Doing so can damage hanger-type hooks.

Adjusting the height

- To raise the headrest, hold and pull the headrest up.
- To lower the headrest, push the headrest down with the Lock button (1) pressed in the arrow direction.



Warning

- Do not drive the vehicle with the headrest lowered excessively. Doing so may cause fatal injury to body parts including head, neck or spine if an accident occurs.

Separation/installation

Separating the headrest

- 1 Recline the seat backrest to secure necessary space for separating the headrest safely.
- 2 With the Lock button (1) pressed in the arrow direction, separate the headrest by lifting it to the end.



- 3 Return the seat backrest to its original position.



Warning

- Never drive the vehicle with the headrest separated. Doing so may cause head, neck or spine injury.

Installing the headrest

- 1 Recline the seat backrest to secure necessary space for installing the headrest safely.
- 2 Insert the headrest into the groove of the seat backrest.
- 3 With the Lock button (1) pressed in the arrow direction, pull down the headrest to the desired position.
- 4 Return the seat backrest to its original position.

Adjusting the power seat*

Front and rear position adjustment (driver seat/front passenger seat)

Set the seat to the desired position by pulling or pushing the front and rear position adjustment lever.



Adjusting the height (driver seat/front passenger seat)

Set the desired height by raising or lowering the height adjustment lever.



Adjusting the cushion angle (driver seat/front passenger seat)

Set the desired angle by raising or lowering the cushion angle adjustment lever.



Adjusting the backrest angle (driver seat/front passenger seat)

Set the desired angle by pulling or pushing the backrest angle adjustment lever.



3

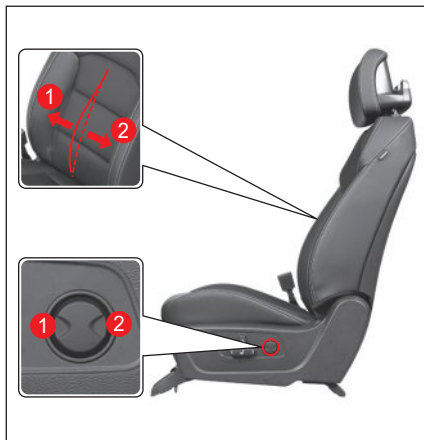
Warning

- Adjust the seat backrest to be upright as possible to maintain a comfortable position. Reclining the seat backrest excessively may cause the occupant to slip down below the seat belt in the event of a vehicle collision or sudden stopping. In such case, the occupant cannot be protected by the seat belt and the air bag, so the occupant may receive a serious injury or lose his/her life.

Adjusting the lumbar support (driver seat)

Set the lumbar support to the desired position by pressing the Lumbar support adjustment button.

- When you press the Forward/Backward adjustment button (1 / 2), the lumbar support is extended or retracted.



Warning

- Never adjust the seat while driving. If the seat moves suddenly, it may lead to a dangerous situation.
- After adjusting the seat, check that the seat is secured firmly.
- If there is an occupant in the rear seat, adjust the seat while paying attention to the safety of the occupant.
- If the power seat does not operate, drive the vehicle after checking and taking measures.

Caution

- Operating the power seat excessively may damage the electric devices. Use it only for adjusting the seat.
- Operating a number of seat adjustment switches at the same time may damage the motor. Be sure to finish using one function before using another function.
- The power seat operates even when the START/STOP switch is in the OFF status. However, caution should be taken that operating the power seat too frequently when the vehicle is turned off may cause depletion of the battery.
- If the height of the seat and headrest is high with the front seats pulled forward, be careful when folding the seat backrest forward. Failure to do so may cause the front seats, headrest, sun visor and other components to bump against each other, causing damage.
- If the power seat comes into contact with an object so that it does not move or operate, do not operate it forcibly. Operate it again after eliminating the cause. If there is abnormality, have your vehicle checked and serviced at a KGM Authorized Service Center.

Adjusting the seat manually

Front and rear position adjustment (driver seat/front passenger seat)

With the front and rear position adjustment lever pulled up, set the seat to the desired position by pulling or pushing the seat.



Adjusting the backrest angle (driver seat/ front passenger seat)

With the backrest angle control lever pulled up, move and set the backrest at the desired angle.



Warning

- Adjust the seat backrest to be upright as possible to maintain a comfortable position. Reclining the seat backrest excessively may cause the occupant to slip down below the seat belt in the event of a vehicle collision or sudden stopping. In such case, the occupant cannot be protected by the seat belt and the air bag, so the occupant may receive a serious injury or lose his/her life.

Adjusting the height (driver seat)

Set the desired height by raising or lowering the height adjustment lever.



Front passenger walk-in switch*

The front and rear position of the front passenger seat and the angle of its backrest can be adjusted from the driver seat or the rear seats for improving the convenience of occupants.

Adjusting the front and rear positions

Set the seat to the desired position by pressing the Front and Rear position adjustment button (1 / 2).



Adjusting the angle of the backrest

Set the backrest at the desired angle (1 / 2) pressing the Backrest angle control button.



Warning

- Adjust the seat backrest to be upright as possible to maintain a comfortable position. Reclining the seat backrest excessively may cause the occupant to slip down below the seat belt in the event of a vehicle collision or sudden stopping. In such case, the occupant cannot be protected by the seat belt and the air bag, so the occupant may receive a serious injury or lose his/her life.

Caution

- Do not use the Front passenger walk-in button when an occupant is sitting in the front passenger seat. Doing so may cause injury to the occupant.
- The Front passenger walk-in button operates even when the engine is not running. However, caution should be taken that operating the Front passenger walk-in button too frequently when the engine is turned off may cause depletion of the battery.

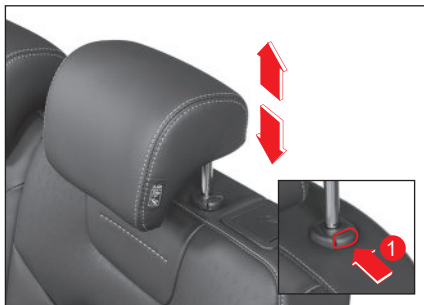
Notice

- When you operate the Walk-in button and the power seat adjustment lever at the same time, the power seat adjustment lever operates on the preferential basis.

Rear seat

Adjusting the height of the headrest

- To raise the headrest, hold and pull the headrest up.
- To lower the headrest, push the headrest down with the Lock button (1) pressed in the arrow direction.



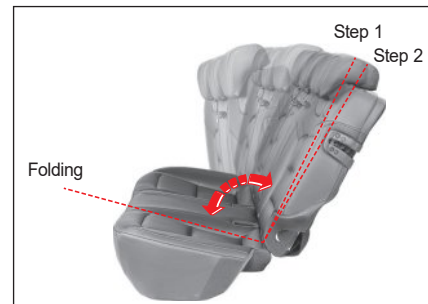
Warning



- Adjust the height of the head restraint so that the center of the head restraint is aligned with the occupant's eye level.
- Do not use the head restraint while it is lowered.
- When there is no occupant in the rear seats, the rear head restraints should be kept as low as possible as since they may obscure the rear view.

Seatback reclining adjustment

You can adjust the reclining in step 1 or 2 while pulling the seatback release lever (1) at the side of the rear seat backrest.



Caution

- When locking the rear seat backrest, make sure that the backrest unlock lever (1) clicks into the locked position so that the red label ("Unlocked" indicator) is not visible.



Rear seat backrest folding

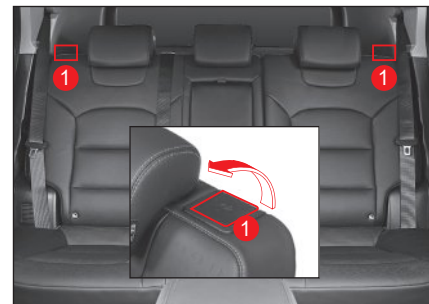
- 1 Insert the seat belt into the webbing guide to prevent the seat belt from being damaged.
- 2 Position the headrest to its lowest level.



Caution

- When folding or unfolding the seat, it may hit and damage other components. To prevent such damage, lower the headrest of the seat to be folded to its lowest position and position the backrest of the seats in front of the folded seats.

- 3 Pull the rear seat backrest release lever (1).



- 4 Fold the backrest toward the front side of vehicle.



When returning the backrest to its original position, operate it in the reverse order.

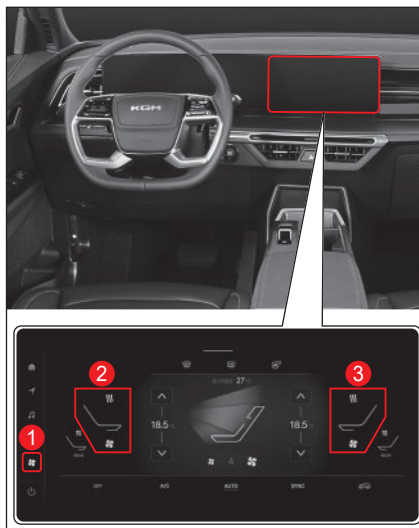


Warning

- After returning the seat to its original position, gently rock the seat to make sure it is securely locked. If the seatback is not locked completely, it can be folded down unexpectedly.
- Be careful not to get your body parts to be caught in between the seats when folding the seat.
- Do not sit on the folded seat. You cannot be protected by the seat belt and other safety units and may be seriously injured in the event of an accident.
- When placing an article on top of the folded seat, secure the article firmly so that it won't move while driving. If the article moves, the driver and other passengers may get injured by the moving article. Also, a secondary accident may occur accordingly.

Seat ventilation and heating*

Front seat ventilation and heating*



- 1 Heater and A/C controller toggle switch
- 2 Driver seat heating and ventilation switch
- 3 Passenger seat heating and ventilation switch

Front seat ventilation

- 1 Touch the heater and A/C controller toggle switch (1) with the engine started.
 - 2 Touch the ventilation switch (2) on the Heater and A/C Controller screen. When the ventilation feature is activated, its level at the corresponding seat is displayed.
- Off: Gray symbol shown
 - On: Blue symbol + corresponding levels shown



- Each time the ventilation switch is touched, ventilation operates in order of OFF → 3rd level → 2nd level → 1st level → OFF.
- If you touch the ventilation switch for a long time, it will turn OFF regardless of the number of stages.



Warning

- Do not insert your hand under the seat cushion while the seat ventilation function is operating. Doing so may cause your hand to be hit and injured by the spinning ventilation fan.

Notice

- The seat ventilation function is not the cooling seat that blows out cold air from the air conditioner.
- Since the seat ventilation function draws in air from inside the vehicle and performs the ventilation function, it is efficient to use it together with the air conditioner.
- When you turn off the engine while the seat ventilation function is operating, the ventilation function also turns off. The seat ventilation function won't turn on even if you start the engine again.
- Ventilation is turned off by touching the ventilation switch or turning the engine off and on.

Front seat heating*

- 1 Touch the heater and A/C controller toggle switch (1) with the engine started.
 - 2 Touch the heating switch (⏏) on the Heater and A/C Controller screen. When the heating feature is activated, its level at the corresponding seat is displayed.
- Off: Gray symbol shown
 - On: Red symbol + corresponding levels shown



- Each time the heating switch is touched, heating operates in order of OFF → 3rd level → 2nd level → 1st level → OFF.
- If you touch the ventilation switch for a long time, it will turn OFF regardless of the number of stages.

Smart front seat heating control

This function controls the heating operation status automatically while assisting you to drive safely in a proper temperature condition.

- If the status of level 3 is maintained for approximately 30 minutes, the status of the heating function is changed to level 2 automatically.
- After the status is changed to level 2
 - When you activate the heating function in level 3 again within 5 minutes, the status of level 3 is maintained for approximately 8 minutes and then the status is changed to level 2 automatically.
 - When you activate the heating function in level 3 again after 5 minutes later, the status of level 3 is maintained for approximately 30 minutes and then the status is changed to level 2 automatically.
- If the status of level 2 is maintained for approximately 60 minutes, the status of the heating function is changed to level 1 automatically.



Warning

- Using seat heating excessively on the driver seat may cause drowsiness and interfere with safe driving.

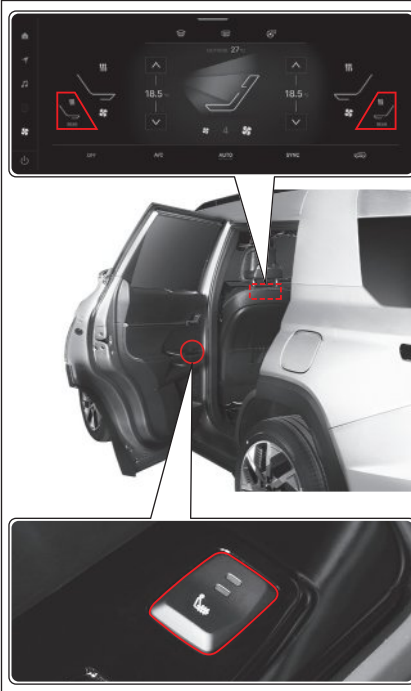
Notice

- The seat heating function is designed to stop its operation when the temperature rises to a certain level and resume its operation when the temperature falls below a certain level.
- When you turn off the engine while the seat heating function is operating, the heating function also turns off. The seat heating function won't turn on even if you start the engine again.
- Heating is turned off by touching the heating switch or turning the engine off and on.

Rear seat heating*

With the engine on, press the 1st row rear seat heating button.

The operation indicator (yellow) turns on and the heating function is activated in the relevant seat.



3

- Every time the heating button is pressed, the warmer is operated in the order of OFF → Level 2 → Level 1 → OFF.

Rear seat heating smart control

- This function automatically controls the operation status of the warmer and helps the driver to operate the vehicle safely at an appropriate temperature.
- After operating for about 30 minutes in level 2, it automatically changes to level 1.
- After being changed to level 1
 - If you operate the warmer at level 2 again within 5 minutes, it will stay the level for about 8 minutes and change to level 1 automatically.
 - If you operate the warmer at level 2 again after 5 minutes, it will stay the level for about 30 minutes and change to level 1 automatically.



Warning

- Caution should be taken that using the seat heating function excessively may cause a minor burn. Pay particular attention to an infant, a small child, an elderly, a disabled person, a person who took a drug that induces sleep, a drunk person, an over-worked person or a person with delicate skin.
- Caution should be taken that you may get a low temperature burn if your skin comes into contact with the heated seat for a long period of time.
- While using seat heating, do not place a blanket, cushion or sitting mat on the seat to prevent overheating.
- Using the seat heating excessively may cause overheating or fire. Be sure to check whether the seat heating is operating or not when getting in and out of the vehicle.
- If the seat becomes hotter continuously and out of control, turn off the seat heating function first. And, have your vehicle checked and serviced at a KGM Authorized Service Center immediately.

Notice

- The seat heating function is designed to stop its operation when the temperature rises to a certain level and resume its operation when the temperature falls below a certain level.
- When you turn off the engine while the seat heating function is operating, the heating function also turns off. The seat heating function won't turn on even if you start the engine again.

Warnings and cautions related to the seats



Warning

- Be sure to finish adjusting the seat before driving.
- Never adjust the seat while driving. If the seat moves suddenly, it may lead to a dangerous situation.
- Adjust the seat backrest to be upright as possible to maintain a comfortable position. Reclining the seat backrest excessively may cause the occupant to slip down below the seat belt in the event of a vehicle collision or sudden stopping. In such case, the occupant cannot be protected by the seat belt and the air bag, so the occupant may receive a serious injury or lose his/her life.
- Never drive the vehicle with the headrest separated. Doing so may cause head, neck or spine injury.
- If the power seat does not operate, drive the vehicle after checking and taking measures.
- Caution should be taken that using the seat heating function excessively may cause a minor burn. Pay particular attention to an infant, a small child, an elderly, a disabled person, a person who took a drug that induces sleep, a drunk person, an over-worked person or a person with delicate skin.



Caution

- The power seat operates even when the START/STOP switch is in the OFF status. However, caution should be taken that operating the power seat too frequently when the engine is turned off may cause depletion of the battery.
- Operating a number of seat adjustment switches at the same time may damage the motor. Be sure to finish using one function before using another function.
- If the power seat comes into contact with an object so that it does not move or operate, do not operate it forcibly. Operate it again after eliminating the cause. If there is abnormality, have your vehicle checked and serviced at a KGM Authorized Service Center.
- Do not place an object that can damage the seat upholstery on top of the seat.
- Do not use organic solvents such as thinner, benzene, alcohol or gasoline for cleaning the seat upholstery. Doing so may damage the surface of the upholstery.



Caution

- The leather in vehicle seats is divided into natural leather and synthetic leather.
- Since natural leather is made from animal epidermis, it's not uniform in thickness or density from area to area, and it can be affected by temperature and humidity, which can cause it to stretch and shrink, creating natural wrinkles.
Also, since the fabric is stretched to improve comfort, any wrinkles, shine, or texture changes that may occur with use are natural and should not be considered product defects.
Therefore, naturally occurring creases, wear and tear, pressure marks, or discoloration that arise during use are excluded from warranty repairs.

Window (power window)*



- ① Driver seat window button (AUTO)
- ② Front passenger seat window button (AUTO)
- ③ Rear left window button
- ④ Rear right window button
- ⑤ Rear seat window lock button

Notice

- To operate the window, the **START/STOP** switch should be in the **ON** status or the engine should be running.
- Even if the **START/STOP** switch is switched from the **ON** status to the **ACC** status or the **OFF** status, the Window button can be operated for approximately 30 seconds. However, the operation stops immediately when you open the front door.

Opening the driver seat/front passenger seat window



- Press the Driver seat/Front passenger seat window button slightly. The Window opens only while the button is being pressed.
- Press the Driver seat/Front passenger seat window button to the end and release it. The window opens to the end automatically (auto down).
- When you slightly press or pull the Driver seat/Front passenger seat window button up while the window is opening, the window stops.

Notice

- The vehicles with Auto Down have not fitted with the Auto Up and the window is closed only while the switch is being pulled.

Closing the driver seat/front passenger seat window



- Pull the Driver seat/Front passenger seat window button up slightly. The window closes only while you are pulling the button.
- Pull the Driver seat/Front passenger seat window button up to the end and release it. The window closes to the end automatically (auto up).
- When you press or slightly pull the Driver seat/Front passenger seat window button up while the window is closing, the window stops.

Driver seat window safety function

The driver seat window safety function controls the driver seat window equipped with the auto up function to move down slightly and stop without moving up from its position when it is recognized that a body part or an object is caught in it when the window is closing.



Notice

- The window safety function is activated only on the driver seat window equipped with the auto up function.
- The safety function is not activated for some section of the window that is closed lastly.
- The window may get frozen during winter so that it may be misrecognized as a body part or an object being caught in it. In such case, close the window little by little by pulling the Window button slightly.
- When you do not release the Window button after pulling it up to the end, the window is closed to the end without stopping even if there is an obstacle in its moving path.

This function is intended to protect the driver from a crime such as robbery and injury.

Opening/closing the rear seat window



The window only works while pressing or pulling the rear seat window button.

Rear seat window lock function

This function locks the window so that it cannot be opened and closed from the rear seats.

Press the Rear seat window lock button.



Warning

- If a small child is seated in the rear seat, be sure to press the Rear seat window lock button to make the Window buttons inoperative. It can prevent an accident caused by the child's mischief.

What is wind buffeting?

Wind buffeting is the phenomenon when you feel pressure upon your ears or hear some noises such as the sound of a helicopter when you drive the vehicle with a rear seat window or the sunroof opened to a certain position.

This phenomenon occurs when air flows in through the rear seat window or the sunroof, creating resonance.

If you adjust the open space of the rear seat window or the sunroof when the wind buffeting occurs, such phenomenon disappears or is reduced.



Warning

- While driving or stopping, do not hold a part of your body such as your hand or head out of the window. You may get injured by a passing vehicle or an outside obstacle.
- Be careful not to get a part of your body such as your hand or head to be caught in the window when operating the window.



Caution

- Operating a number of Window buttons at the same time may damage the fuse that is the over-current protective device or the window system.
- Operating the Window buttons on the driver seat door and a different door in the opposite direction at the same time may damage the window system.

Sunroof (Type A)*

For your safety, never operate the sunroof when the vehicle is moving.

The sunroof is a secondary window installed on the vehicle roof for supporting pleasant driving such as ventilation and lighting in the vehicle.

The sunroof window can be slide opened and closed and it also operates in a tilting way to lift the rear section of the sunroof up slightly.

The sunroof cover can be opened and closed by hand.



Warning

- While driving or stopping, do not hold a part of your body such as your hand or head out of the sunroof. You may get injured by a passing vehicle or an outside obstacle.

Caution

- The sunroof operates even when the START/STOP switch is in the ON status. However, caution should be taken that using the sunroof excessively while the engine is not running may cause depletion of the battery.
- After finishing the sunroof operation, release the Control button. Pressing the Control button continuously may cause a malfunction.
- If the sunroof is opened completely, the wind buffeting may become intensified. In such case, adjust the open space in the sunroof.
- If the sunroof operation part is frozen during winter, operate it after the frozen part melts completely.
- Remove dust and foreign materials from the rubber part around the sunroof window periodically. If dust and foreign materials are present, noise may occur when the sunroof operates and it may cause a malfunction.

Notice

- To operate the sunroof, the START/STOP switch should be in the ON status or the engine should be running.

Opening the sunroof

Opening automatically

Press the sunroof open button briefly. The sunroof opens automatically.

The rear part (6cm) of the sunroof will not open.

To open the sunroof fully, press the sunroof open button again.



Notice

- Operating the switch while the sunroof is opening stops the sunroof operation.

Opening manually

Press and hold the sunroof open button. The sunroof will only open while the open button is pressed.

To open the sunroof fully, you must keep the open button pressed.

What is wind buffeting?

Wind buffeting is the phenomenon when you feel pressure upon your ears or hear some noises such as the sound of a helicopter you when you drive the vehicle with a rear seat window or the sunroof opened to a certain position.

This phenomenon occurs when air flows in through the rear seat window or the sunroof, creating resonance.

If you adjust the open space of the rear seat window or the sunroof when the wind buffeting occurs, such phenomenon disappears or is reduced.

Closing the sunroof

Closing automatically

Press the sunroof close button briefly. The sunroof closes automatically.



Notice

- Operating the switch while the sunroof is closing stops the sunroof operation.

Closing manually

Press and hold the sunroof close button. The sunroof will be closed only while you are pressing the close button.

In order to close the sunroof fully, you have to keep pressing the close button.

Tilting the sunroof up/down



Tilting up (opening the rear section)

With the sunroof closed. Press the sunroof close button. The rear section of the sunroof will open.

Tilting down (closing the rear section)

With the rear section of the sunroof opened, press the sunroof open button. At this time, the sunroof closes only while the button is being pressed.

To close the sunroof completely, you should press and hold the button.

Sunroof open warning

When you place the START/STOP switch in the ACC or OFF position and open the driver seat door with the sunroof opened, the sunroof open warning buzzer will sound.

When you close the door, the warning buzzer will be turned off.

When the sunroof open warning buzzer sounds, leave the vehicle after closing the sunroof completely.



Caution

- When leaving the vehicle, check if the sunroof is closed completely. Leaving the vehicle with the sunroof opened may cause a robbery case through the sunroof. Also, the inside of the vehicle may get wet when it rains or snows.

Sunroof safety function

The sunroof safety function controls the sunroof to open without closing from its position for safety when it is recognized that a body part or an object is caught in it when the sunroof is closing automatically.



Caution

- The sunroof safety function is not activated for the last section of the sunroof to be closed.
- The sunroof safety function is just an auxiliary system and it is no substitute for the driver's attention. Always exercise caution since it may not operate according to an electrical device or other situations.

Resetting the sunroof

Cases requiring the resetting of the sunroof

- When the battery is depleted or the power supply is suspended with the sunroof opened
- When the sunroof does not open or close completely by operating the button once
- When the sunroof is tilted without stop after it is closed in the sliding method
- When the moving distance has decreased significantly when sliding or tilting the sunroof
- If the sunroof does not operate or operates abnormally when the sunroof button is pressed

Resetting

With the tilted up (opening the rear section), pressing the sunroof close button continuously for approximately 20 seconds.

- A clicking sound occurs once approximately 5 seconds later and once again approximately 20 seconds later after pressing the sunroof close button. The sunroof resets along with the second clicking sound.
- When you press the sunroof open button slightly after resetting, the sunroof opens and closes again automatically.



Caution

- **If the sunroof does not operate normally after resetting the sunroof, have your sunroof checked and serviced at a KGM Authorized Service Center.**

Sunroof (Type B)*

- A sunroof is an auxiliary window installed on the roof of a vehicle to aid in ventilation and lighting, contributing to a more comfortable driving experience.
- The sunroof glass can be opened and closed using an external sliding mechanism.
- The sunroof glass operates using a tilt mechanism, where the rear part is slightly raised.



Warning

- Do not put any part of your body, such as your hands or head, outside the sunroof while driving or stopped. You may be injured by passing vehicles or external obstacles.

Caution

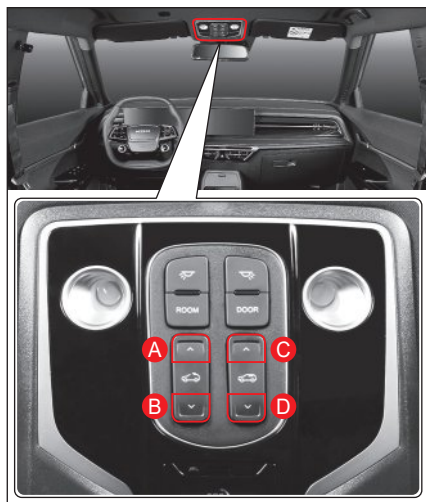
- The sunroof operates even when the ignition switch is in the ON position. However, please note that excessive use without starting the engine may discharge the battery.
- Release the operation button when the sunroof operation is complete. Continuous operation may cause a breakdown.
- Wind buffeting may become more severe if the sunroof is fully opened. In this case, be sure to adjust the sunroof position manually.
- In winter, if the sunroof mechanism is frozen, operate it only after the frozen areas have completely thawed.
- Regularly remove dust and foreign matter from the rubber parts around the perimeter of the sunroof glass. If there is dust or foreign matter, noise may occur when operating the sunroof and cause a malfunction.

- Do not use abrasive polishing products on the sunroof.
- Never use wax on the rubber molding around the sunroof.
- When washing with a high-pressure gun, do not aim the water directly at the rubber molding surrounding the sunroof glass.
- Operate the sunroof only when the vehicle is stopped. Operating the sunroof while driving may interfere with driving and cause a serious accident.
- Do not push or pull the sunroof blind by hand. This can cause the sunroof blinds to malfunction and eventually lead to a breakdown.
- Do not operate the sunroof when the roof rack is loaded with cargo or other items. This can cause damage and failure of the sunroof.

Notice

- The start button must be in the ON position or the engine must be started to operate the sunroof.

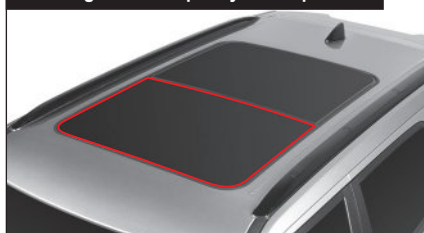
Sunroof control button



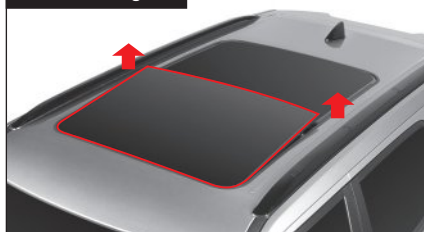
- A** Sunroof glass open button
- B** Sunroof glass close button
- C** Sunroof blind open button
- D** Sunroof blind close button

Basic operating conditions of sunroof

Sunroof glass in completely closed position



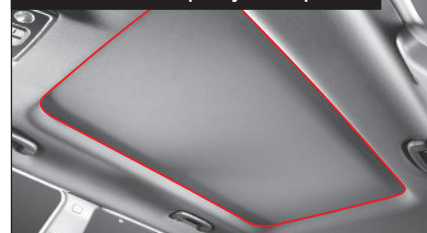
Tilted sunroof glass



Sunroof glass 1st and 2nd stage (fully) open position



Sunroof blind in completely closed position



Sunroof blind in half-open position



Sunroof blind in full open position



Opening / Closing Sunroof

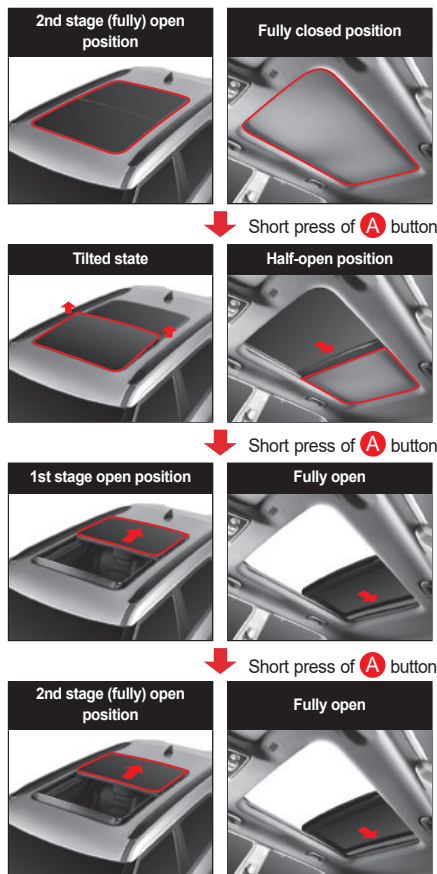
Opening sunroof automatically



Press the sunroof glass open button (A) briefly. Depending on the sunroof glass and sunroof blind status, the sunroof glass and blind will open automatically as follows:

Notice

- If you press the button while the sunroof is in operation, the operation will stop.
- The sunroof glass opening (including tilting) opens after the sunroof blind operation is complete.
- Press the sunroof blind open button (C) briefly to fully open the sunroof blind.



Opening sunroof manually

Press and hold the sunroof glass open button (A). The sunroof operates only while the button is pressed. To fully open the sunroof glass, keep pressing the corresponding button.

What is Wind Buffeting?

Wind buffeting is a phenomenon in which the ears feel pressure or hear noise, such as the sound of a helicopter, when driving with the rear window or sunroof in a specific position.

This phenomenon occurs when air enters through the rear window or sunroof, causing a resonance.

If the wind buffeting phenomenon occurs, adjusting the rear window or the open space of the sunroof will reduce or eliminate the phenomenon.

Closing sunroof automatically

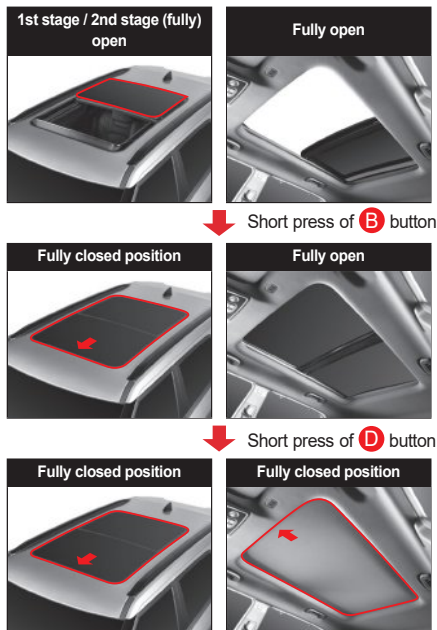


Press the sunroof glass close button (B) briefly. Only the sunroof glass will close automatically. Then, press the sunroof blind close button (D) briefly. The sunroof blinds close automatically.

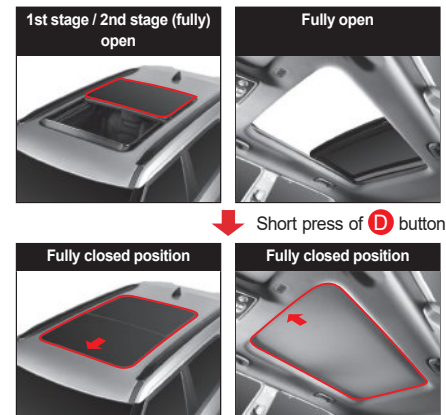
Notice

- If you press the button while the sunroof is in operation, the operation will stop.
- The sunroof blind closes after the sunroof glass operation is complete.
- Press the sunroof blind close button (D) briefly to completely close the sunroof glass and blind.

- Using switch for sunroof glass (B) and blinder (D)



- Using switch for sunroof blinder (D)



Closing sunroof manually

Press and hold the sunroof glass closing button (B) or the sunroof blind closing button (D). The sunroof operates only while the button is pressed.

Sunroof Open Warning

If the sunroof is left open, and the ignition button is set to ACC or OFF while the driver's door is opened, a sunroof open warning chime will sound.

The warning sound stops when the door is closed.

If the sunroof open warning sounds, leave the vehicle after closing the sunroof completely.

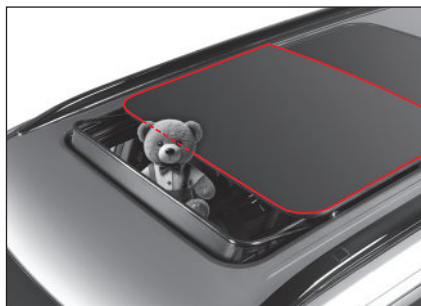


Caution

- Make sure that the sunroof is completely closed when leaving the vehicle. If you leave the vehicle with the sunroof open, you may be a victim of a theft. In addition, rain or snow can get into the vehicle through the open sunroof.

Sunroof Safety Feature

The sunroof safety feature controls the sunroof to open again instead of closing further at that position for safety purposes when it detects that a part of the body or an object is caught when the sunroof is automatically closing.



Caution

- In the final closing phase of the sunroof, the sunroof safety feature does not operate.
- The sunroof safety feature is an auxiliary device and cannot replace the driver's attention. Please be careful as it may not operate depending on the electrical device or other circumstances.
- Continuous use of the sunroof opening/closing, tilt-up/down, etc. may cause noise and malfunction. In addition, if the sunroof motor overheats due to excessive use, it may become very slow or stop working for a while.

Resetting Sunroof

Resetting is required if:

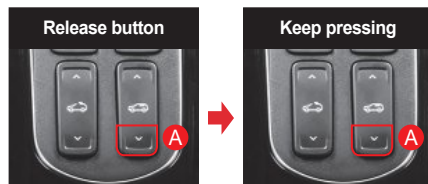
- The battery is discharged or the power supply is interrupted (replacement of the relevant fuse, etc.) while the sunroof is open.
- The sunroof cannot be fully opened/closed with a single press of the button.
- The distance moved when opening or tilting the sunroof sliding is significantly shorter.
- The sunroof does not operate at all or does not operate normally even after pressing the sunroof button.

Resetting

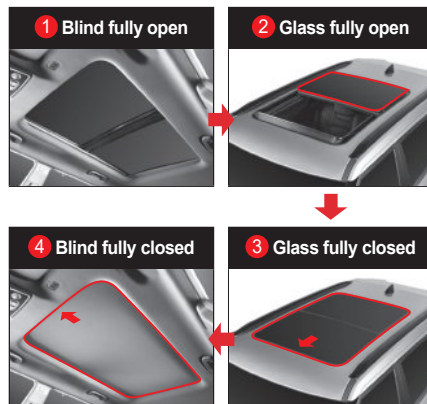
- 1 Start the engine or leave the vehicle's power switch in the "ON" position.
- 2 Press the sunroof blind close button (A) to completely close the sunroof glass and blind, then release the button.



- 3 Press and hold the sunroof blind close button (A) again (for at least 10 seconds). When the glass and blind move slightly once, release the button.



- 4 If the sunroof blind close button (A) is pressed continuously within 5 seconds, it will operate sequentially as follows:
 - 1) The sunroof blind will fully open.
 - 2) The sunroof glass will fully open.
 - 3) The sunroof glass will completely close.
 - 4) The sunroof blind will completely close.



- 5 Sunroof reset is complete when the sunroof glass and blinds are fully closed.



Caution

- If the sunroof does not operate normally even after resetting the sunroof, please have your vehicle inspected and serviced at our Authorized Service Center.

Notice

- Do not release the button until the sunroof has fully opened or closed. If you release it during the reset process, please restart the initialization from the beginning.

Tailgate

The tailgate is a unit that increases the convenience in loading or unloading an article from the vehicle.

The power tailgate allows the user to open and close the tailgate using a simple button operation.

Also, the smart tailgate opens the tailgate automatically when a user approaches to the detection area at the back of the tailgate.



Warning

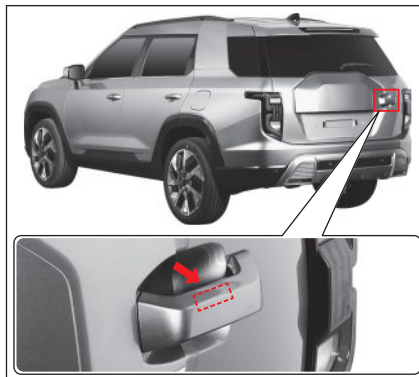
- Do not disassemble the manual and power tailgate support bars. It is composed of the high pressure devices, which may cause injuries.
- Do not apply heat to the manual and power tailgate support bars. It may be damaged by heat and cause injuries.
- Do not dismantle the tailgate's gas lifter. It is composed of the high pressure devices, which may cause injuries.
- Do not heat the tailgate's gas lifter. It may be damaged by heat and cause injuries.
- In order to replace or dispose of the gas lifter, please visit our nearest KGM Authorized Service Center.

Manual tailgate

Opening

- 1 Press the Tailgate open button on the inner side of the tailgate door handle while carrying the smart key.

The tailgate will be unlocked.



- 2 Lift the tailgate up.

Notice

- The range that the tailgate can recognize the smart key is within approximately 1 m.
- When you press the Tailgate open button, only the tailgate is unlocked. The door, engine hood and other devices remain locked.

Closing

- 1 Hold the inner handle of the tailgate and pull the tailgate down.



- 2 Close the tailgate by pushing it slightly.



Caution

- When the tailgate is opened and closed with the theft monitoring canceled, the mode is not switched to the theft monitoring mode automatically. Be sure to switch the mode to the theft monitoring mode by pressing the Door lock button on the smart key.

Notice

- When the tailgate is opened and closed in the theft monitoring mode, the mode returns to the theft monitoring mode automatically. At this time, the hazard warning lamp blinks twice and the warning buzzer sounds once.

Power tailgate*

The power tailgate is a unit that allows the user to open and close the tailgate using a simple button operation.

The power tailgate operates when the gear shift lever is in P (Parking) position with the START/STOP switch in the ON status or in all positions of the gear shift lever when the engine is turned off.

Notice

- If the vehicle speed is 3km/h or faster with the START/STOP switch in the ON status, the tailgate cannot be opened automatically.

Open/Close Tailgate With Interior Switch



- Touch and hold the tailgate switch on the hypervisor control panel side. The tailgate opens or closes with the emergency warning lights and chimes activated. If the tailgate is currently closed, it will be opened; if it is open, it will be closed.

Notice

- When you press the Tailgate button while the power tailgate is opening or closing, the tailgate stops on that position.
- The interior switch for the power tailgate remains visible even when the buttonless integrated control panel is switched off.

Opening/closing with the smart key



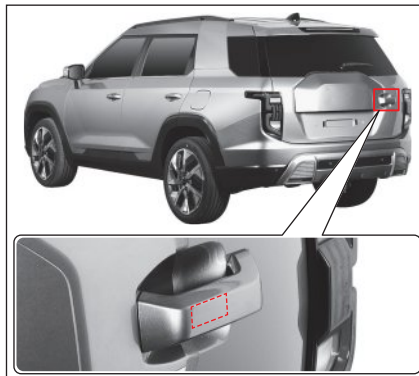
- Press and hold the Tailgate button on the smart key.
After the hazard warning lamp blinks twice and the warning buzzer sounds twice, the tailgate opens or closes.
The tailgate opens if it is closed or it closes if it is open.

Notice

- When you press the Tailgate button while the power tailgate is opening or closing, the tailgate stops on that position.

Opening/closing with the button on the tailgate

- Press the Tailgate outside button while carrying the smart key.
After the hazard warning lamp blinks twice and the warning buzzer sounds twice, the tailgate opens.



Notice

- The range that the tailgate can recognize the smart key is within approximately 1 m.
- When you press the Tailgate outside button, only the tailgate is unlocked. The door, engine hood and other devices remain locked.

Press the Tailgate inside button with the tailgate opened.

After the hazard warning lamp blinks twice and the warning buzzer sounds twice, the tailgate closes.



Open/close with the tailgate switch in luggage compartment*

- With the tailgate closed, pull the cargo area tailgate button in the direction of the arrow. The tailgate opens with the emergency warning lights and chimed activated.
- With the tailgate open, pull the cargo compartment tailgate button in the direction of the arrow. The tailgate closes with the emergency warning lights and chimed activated.



Anti-pinch protection function

The anti-pinch protection function controls the tailgate to stop at that position or open completely for safety when a strong impact is received from the outside or a certain level of force is detected while the power tailgate is opening or closing.



Warning

- **The anti-pinch protection function may not operate if the resistance detected by the power tailgate is smaller than a certain level of force or the tailgate is in the position that it is almost closed.**
- **Do not place a part of your body or an article on the moving path of the tailgate on purpose in order to check the anti-pinch protection function during the power tailgate operation. Doing so may cause serious injury or article and device damage.**



Caution

- **If the anti-pinch protection function operates repeatedly for a number of times, close the tailgate manually and operate it again. If there is an abnormality, have your vehicle checked and serviced at a KGM Authorized Service Center.**

Resetting the opening height

The maximum opening height of the power tailgate can be reset in accordance with the user's physical condition or other conditions such as the parking space.

- 1 Open the tailgate manually and adjust it to a desired height.
- 2 Press the Power tailgate inside button for 3 seconds or more.
When the resetting is completed, a beep sound occurs.
- 3 Close the tailgate completely by pressing the Power tailgate inside button.

When the opening height is reseted, press the Power tailgate outside button to see if the tailgate opens to the set position.

Resetting the power tailgate

If the power supply is reconnected after the battery is fully depleted or the power supply is disconnected or if the power tailgate does not function normally, reset the power tailgate.

1 Park the vehicle on a flat ground and shift the gear shift lever to the P (Parking) position.

2 With the Tailgate inside button pressed, press and hold the Outside button for 3 seconds or more.

When the resetting is completed, a beep sound occurs.

3 Close the tailgate completely by hand.

When the resetting is completed, check that the power tailgate opens and closes normally.



Caution

- Do not operate the power tailgate in any of the following cases since it may malfunction.
 - When one wheel of the vehicle is lifted up for vehicle check or tire replacement
 - When one wheel of the vehicle is in the air unevenly on a sloping road or paving blocks
 - When the vehicle is parked or stopped on a slope or an uneven surface
- The power tailgate operates even when the START/STOP switch is in the OFF status. However, caution should be taken that operating the power tailgate excessively with the START/STOP switch turned off may cause depletion of the battery.
- When you operate the power tailgate for 5 times or more consecutively, the warning buzzer sounds 3 times and the power tailgate stops in order to prevent the drive motor from being overheated. In such case, stop the operation of the power tailgate for 1 minute or longer and then operate the power tailgate again.

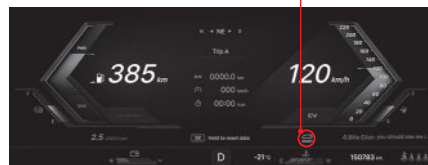
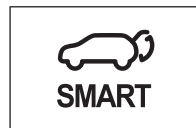
- Do not operate the power tailgate manually if possible.
- If it is necessary to operate the power tailgate manually since it does not operate normally, do not apply excessive force. Doing so may damage the power tailgate unit.
- Do not apply excessive force to the tailgate while the power tailgate is operating. Doing so may damage the power tailgate.
- If you close the tailgate immediately after opening it, the tailgate may not be closed. This is a normal operation. Close the tailgate after a short time interval.
- Do not attach a heavy object to the power tailgate. Doing so may damage the power tailgate.
- Do not modify or repair the power tailgate and relevant components arbitrarily.

Smart tailgate*

The smart tailgate is a function that opens the tailgate automatically when a user carrying the smart key approaches the detection area at the back of the vehicle. This is particularly convenient when you are carrying packages in both hands.

Activating/deactivating the smart tailgate

- From the main menu of the hypervisor control panel, select Vehicle Settings (⚙️) → Door/Tailgate → Smart Tailgate Off or On.



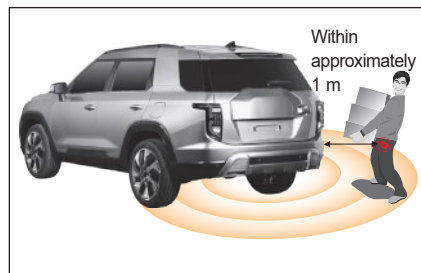
Notice

- You must enable the power tailgate to enable the smart tailgate.

Opening the smart tailgate

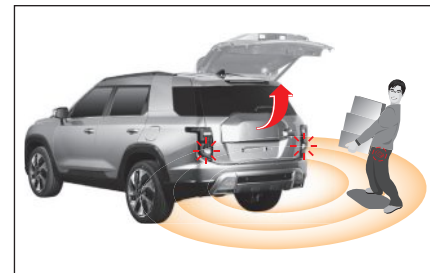
Operating condition

- The engine should be turned off and all doors and the tailgate should be in locked status (theft monitoring mode).
- You should stay in an area within approximately 1 m from the smart tailgate sensor at the back of the vehicle for approximately 3 seconds or more while carrying the smart key.



Operation step

The tailgate opens automatically in the following steps after the smart key is detected.



• Step 1

The hazard warning lamp and the warning buzzer sound three times at an interval of 1 second (beep~ beep~ beep~)

• Step 2

The hazard warning lamp and the warning buzzer sound three times (beep beep beep)

• Step 3

The hazard warning lamp and the warning buzzer sound two times (beep beep)

Next, the tailgate opens.

Stopping the smart tailgate function

- Press any button on the smart key.
- Or, get out of the detection area of the smart tailgate.



Caution

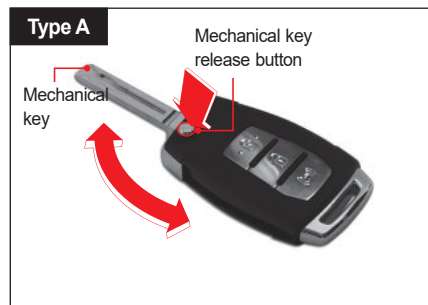
- The smart tailgate begins operating when 30 seconds have passed after entering the theft monitoring mode. This is for preventing the smart tailgate from malfunctioning.
- In any of the following cases, the smart tailgate operation may be delayed or the operating range may change due to frequency interference.
 - When you are in or near a facility where a strong radio frequency is emitted including a police station, government office, broadcasting station, military unit, transmitting tower, airport, harbor, etc.
 - When you carry the smart key along with a mobile phone or a radio set, etc.
- In any of the following cases, the detection range of the smart key may vary, affecting the operation range of the smart tailgate.
 - When one wheel of the vehicle is lifted up for checking the vehicle or replacing tires
 - When the vehicle is parked or stopped on a sloping road or an uneven surface

- Do not stay in the detection area of the smart tailgate unnecessarily while carrying the smart key.
- Familiarize yourself with how to deactivate and stop the smart tailgate function in preparation for an emergency as well as various other situations.
- Be sure to deactivate the smart tailgate function when you wash your vehicle. Failure to do so may cause the tailgate to open automatically, causing a personal injury or damage to the vehicle and other facilities.

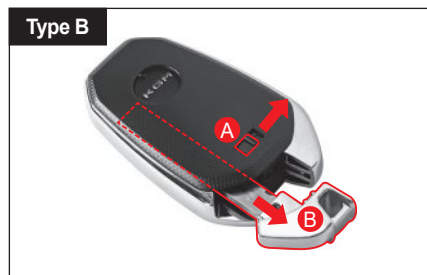
Opening the tailgate in the event of emergency

You can open the tailgate using the unlock lever in the tailgate in the event of depletion of the battery, failure of the tailgate devices or other emergency situations.

- 1 Unfold the mechanical key of the smart key or REKES key.



Remove the emergency key (B) from its body while pressing the emergency key lock (A) at the smart key in the direction of the arrow.



- 2 Insert the mechanical key into the unlock lever hole (1) at the bottom center.



- 3 Press the mechanical key in the direction of the arrow. It unlocks the tailgate.



- 4 Push open the tailgate.



Warning

- Only use the tailgate unlock lever in the event of emergency.
- Do not allow children to play in the luggage compartment. If the tailgate unlock lever operates, opening the tailgate suddenly while driving, a serious accident may occur.



Caution

- Familiarize yourself with the position of the tailgate unlock lever and how to use it in preparation for an emergency.



Warning

- Avoid driving the vehicle with the tailgate open.
 - Exhaust gas may flow into indoors, resulting in gas poisoning.
 - An article from the inside of the vehicle may fall out, causing an accident.
 - The tailgate or other vehicle parts may get damaged.
- Driving the vehicle at a speed of 4km/h or faster with the tailgate open, the tailgate open warning light turns on and the warning buzzer sounds 10 times. Move the vehicle to a safe place immediately and close the tailgate firmly.



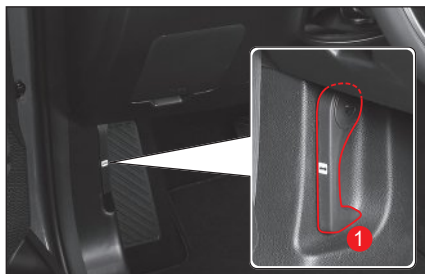
Warning

- Open or close the tailgate after confirming the safety inside and outside of the vehicle. In particular, be careful not to get a part of an indoor occupant or a near-by person's body caught.
- Be careful not to allow a child to operate the power tailgate or smart tailgate by accident while carrying the smart key. Failure to do so may cause damage to a near-by person, article or vehicle, etc.
- Do not open the tailgate after parking or stopping the vehicle on a sloping road. Doing so may cause an article loaded in the vehicle to fall out, causing injury to a user.
- When you close the tailgate, the tailgate may close suddenly due to the weight of the tailgate and other external factors. Be cautious for preventing injury when closing the tailgate.

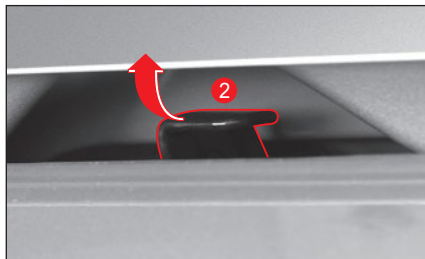
Opening the engine hood

- 1 Pull the engine hood open lever (1) located at the bottom left side of the driver seat.

The engine hood will be opened slightly.



- 2 Lift the engine hood slightly to pull the engine hood latch lever (2) up and lift up the engine hood completely.



- 3 Lift the engine hood up.
When you lift engine hood half way, it will open to the end automatically.

Closing the engine hood

Checking before closing the engine hood

- Make sure that all inlet caps in the engine room are closed properly.
- Check that no unnecessary items including gloves and tools are left in the engine room.

Closing the engine hood

Pull the engine hood down and close it by pressing it down.

! Caution

- If the engine hood is lifted slightly while it is closed, open the engine hood again and close it by pushing it with stronger force.
- The side garnish (A) mounted on the engine hood is a component for design purposes. Do not use side garnish for hanging ropes, hoops, etc. This may lead to damage to the side garnish and damage to the vehicle.



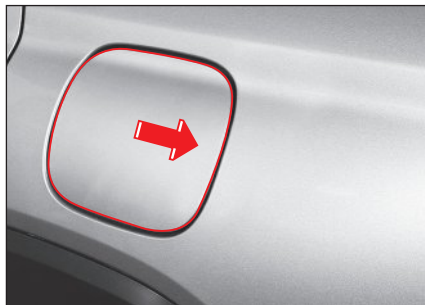
! Warning

- Open the engine hood after turning off the engine. However, if you need to check and carry out services with the engine on, pay particular attention not to be injured by the operating devices in the engine room.
- Check the engine hood in a place where no wind blows. You may get injured if the engine hood is closed by wind.
- Be careful not to get any of your body parts such as fingers caught when closing the engine hood.
- Confirm that the engine hood is closed completely before driving. If you drive the vehicle with the engine hood open, the vehicle may get damaged and it may block the driver's vision, causing a serious accident.
- Do not disassemble the hood gas lifter. It is composed of the high pressure devices, which may cause injuries.
- Do not apply heat the hood gas lifter. It may be damaged by heat and cause injuries.
- When Replacing and disposing of gas lifter, have your vehicle serviced at a KGM Authorized Service Center.

Opening the fuel inlet

The fuel inlet cover can be opened only when all doors are unlocked.

- 1 Shift the gear shift lever to the P (Parking) position.
(Place the shift lever in the N (Neutral) position for the vehicles with the manual transmission.)
- 2 Apply the parking brake.
- 3 Be sure to turn off the engine.
- 4 Push the center edge of the fuel inlet cover in the arrow direction.



Caution

- If the fuel inlet cover is frozen during winter, do not open it forcibly. Open it by gently tapping on the edge of the cover.

- 5 Open the fuel inlet cover completely by pulling it in the arrow direction.



- 6 Open the fuel inlet cap by turning it counterclockwise.



- 7 Hang the fuel inlet cap on the holder mounted inside the fuel inlet cover.



Warning

- Separate the fuel inlet cap carefully since pressure may be applied to the fuel. If you hear a sound of fuel leakage or deflation, wait until such sound stops and then separate the cap again. Failure to do so may cause fuel to emit, causing a serious injury.
- When you touch the fuel inlet cap or the gas pump, contact a metal part that is far away from the fuel inlet with bare hands first to remove static electricity. Failure to do so may cause a fire due to static electricity.

Closing the fuel inlet

- 1 Close the fuel inlet cap by turning it clockwise until a clicking sound occurs.
- 2 Close the fuel inlet cover by pushing the center edge of the fuel inlet cover.

Information - Fuel label

• PETROL TYPE OF FUEL



The shape for a petrol- type fuel is a circle ("E" stands for specific bio-components present in petrol)

Warning

- If you do not completely close the fuel cap after refueling, the Check Engine warning light may come on due to fuel leakage. This is not a vehicle malfunction, and the warning light will turn off when you re-close the fuel cap until you hear a 'click' sound. However, if the Check Engine warning light does not go off even after you re-close the fuel cap, have the vehicle checked and serviced at our nearest authorized service center.
- If you refuel with the engine started, the Check Engine warning light may come on.

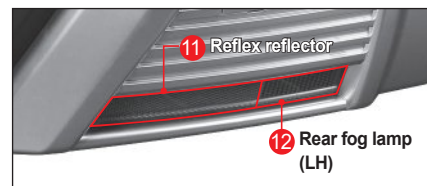
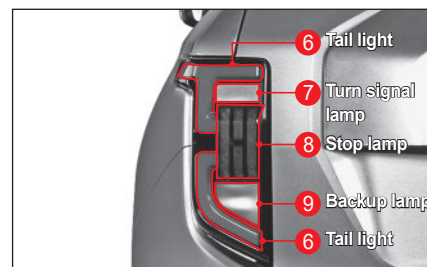
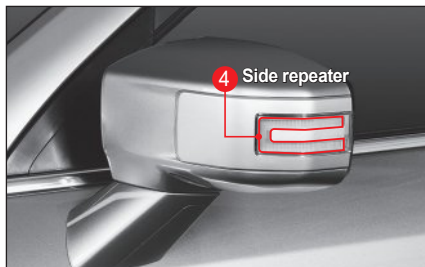
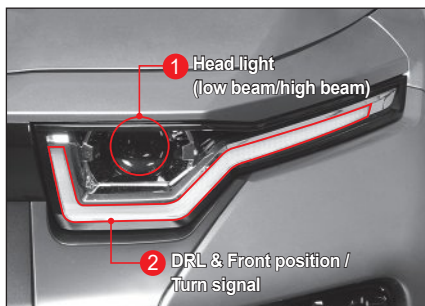
Warning

- Be sure to refuel after stopping the engine. Failure to do so may cause vaporized fuel to ignite due to a spark generated from an electrical device when starting the engine, causing a serious fire.
- Keep any Inflammables such as a lighted cigarette or a lighter away during refueling. Failure to do so may cause a serious fire.
- Do not take an action that may generate static electricity such as getting in and out of the vehicle during refueling. Doing so may cause a serious fire due to static electricity.
- If it is necessary to refuel using a portable container, refuel with the container placed on the ground. Refueling with the container placed on top of or inside the vehicle may cause a serious fire due to static electricity.
- Be sure to refuel after checking the type of the fuel used. If you misfuel a vehicle using diesel or gasoline, the fuel system and other vehicle systems may be affected, damaging the vehicle significantly.
- Do not use fuel containing a lot of moisture, improper fuel or additives. Doing so may damage the fuel system and the exhaust gas system of the vehicle significantly.

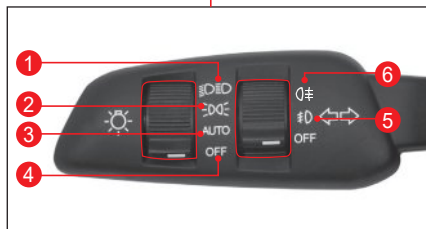
Caution

- Refuel only until the pump nozzle of the fuel supply gun stops automatically. Filling the fuel tank excessively may cause fuel to overflow, causing a fire and damaging the vehicle body.
 - Do not use a mobile phone near a gas station. Doing so may cause a fire due to an electromagnetic wave or current of the mobile phone.
 - If a fire occurs while refueling, evacuate to a place far from the vehicle immediately. Then, take measures such as the reporting the fire.
- Be careful not to allow the fuel to contact the vehicle body as it can damage the painted surface.
 - Be sure to use a genuine fuel inlet cap when it is necessary to replace it.

Outdoor lights/lamps



Light switch



- 1 Head light
- 2 Tail light
- 3 Auto light function
- 4 Turning off all lights
- 5 Front fog light
- 6 Rear fog light

Turning on the head light

The head light turns on along with the sidelight, tail light, license plate lamp, front fog light (in the ON status) and other interior lights.

Turning on the tail light

The tail light turns on along with the sidelight, license plate lamp, front fog light (in the ON status) and other interior lights.

AUTO Activating the auto light function*

The head light and the tail light turn on or off automatically according to the amount of sunshine received by the auto light sensor.

Turning on Smart High Beam Assist (SHB)

Pushing the Light switch in the direction of instrument cluster with the Light switch in the AUTO position activates the SHB.

 Refer to "Smart High Beam (SHB)" (p.3-51)

OFF Turning off all lights

All lights turn off.

Notice

- **For the vehicles without the auto light and fog lamp, the light switch has no corresponding function.**

Turning on the front fog light*

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

Turning on the rear fog light*

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

OFF Turning off the fog light*

The fog light turns off.

Turning on/off the left/right turn signal



- When you push the Light switch down (1), the left turn signal blinks. At this time, the turn signal on the instrument cluster also blinks.
- When you push the Light switch up (2), the right turn signal blinks. At this time, the turn signal on the instrument cluster also blinks.

Turning on/off the high beam



- When you push the Light switch in the direction of instrument cluster and release it with the low beam on, the high beam turns on. At this time, the high beam indicator on the instrument cluster also turns on.
- When you pull the Light switch in the driver's direction and release it with the high beam on, the high beam turns off.



Warning

- **Do not turn on the high beam if there is an oncoming vehicle or a vehicle at the front. The high beam may block the other drivers' vision, causing an accident.**

Turning on the high beam and low beam at the same time (passing light)



The high beam and the low beam turn on at the same time while pulling the Light switch in the driver's direction.

Notice

- **This function operates regardless of the position of the Light switch.**

Hazard warning lamp

The hazard warning lamp is used to give warning to other vehicles in the event of emergency for preventing an accident.

- When you press the Hazard warning lamp switch, all turn signals blink.
- When you press the Hazard warning lamp switch again, the hazard warning lamp turns off.

☞ Refer to "Emergency Stop Signal (ESS)" (p.4-133)



Caution

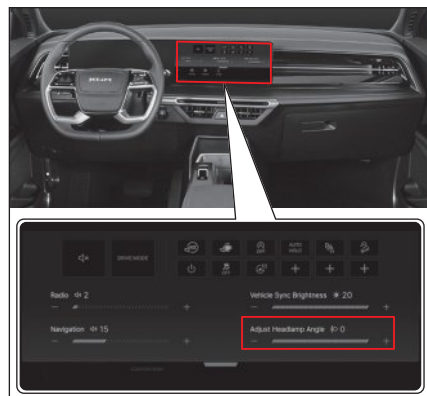
- **Do not operate the hazard warning lamp for a long period of time with the engine off. Doing so may cause confusion to other vehicle drivers as well as depletion of the battery.**

Notice

- The hazard warning lamp operates regardless of the status of the START/STOP switch
- While the hazard warning lamp is operating, the turn signal does not operate independently.



Adjusting the angle of the head light



The front and rear slope of the vehicle may vary depending on the number of occupants, weight and center of gravity of luggage.

In such case, you can adjust the angle of the head light to secure proper vision at night and not to obstruct an oncoming vehicle or a vehicle at the front with a strong light from the head light.

Headlight Angle Adjustment Levels

The headlight angle can be adjusted in 4 levels (from 0 to 3) depending on the front/rear inclination of the vehicle. However, for 2-seater (VAN) vehicles, the adjustment is available in 3 levels (from 0 to 2).

- If the vehicle is leaning forward: Lightly touch the headlight angle adjustment switch (+) to set it to level 0. The headlights are adjusted to point upward.
- If the vehicle is leaning backward: Lightly touch the headlight angle adjustment switch (–) to set it to level 2. The headlights are adjusted to point downward.



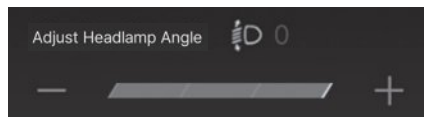
Warning

- Before starting the vehicle, adjust the headlight angle according to the standard, based on the number of passengers, the weight of the load, and the center of gravity. Otherwise, it may cause an accident.
 - Never drive the vehicle when the headlight angle is significantly misaligned with the adjustment standard, as in the following cases.
 - Driving with the headlight angle incorrectly set to level 2 instead of level 0 (headlights angled downward): In the event of an emergency on the road ahead, your reaction time may be delayed.
 - Driving with the headlight angle incorrectly set to level 0 instead of level 2 (headlights angled upward): This can obstruct the vision of oncoming drivers or those in vehicles ahead.
- In such cases, it can interfere with safe driving and lead to serious accidents.

Headlight angle adjustment standard (5-seater)

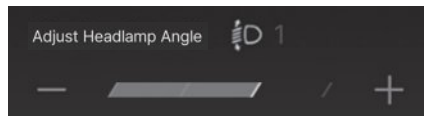
Level 0

- 1-2 passengers (normal driving)



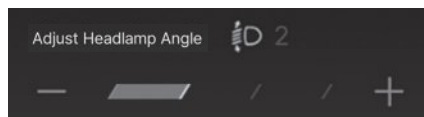
Level 1

- 5 passengers



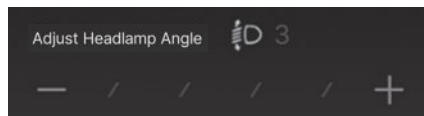
Level 2

- 5 passenger / G15D: 185kg load
G15D HEV: 220kg load



Level 3

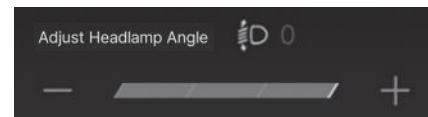
- 1 passenger / G15D: 470kg load
G15D HEV: 480kg load



Headlight angle adjustment standard (2-seater VAN)

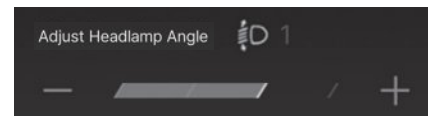
Level 0

- 1-2 passengers (normal driving)



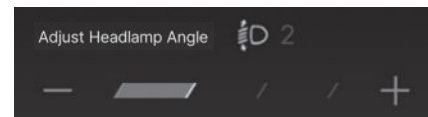
Level 1

- 1 passenger / 150kg load



Level 2

- 1 passenger / 450kg load





Warning

- Drive the vehicle after adjusting the angle of the head light according to the number of occupants, weight and center of gravity of luggage. Failure to do so may cause an accident.
- Never drive the vehicle in any of the following cases that go beyond the angle adjustment standard for the head light.
 - Driving the vehicle with level 3 under the condition of level 0 (the angle of the head light is lowered): It takes longer for the driver to recognize an emergency situation on the road ahead if it occurs.
 - Driving the vehicle with level 0 under the condition of level 3 (the angle of the head light is raised): It obstructs the vision of the driver in an oncoming vehicle or a vehicle at the front.

In such case, it may obstruct safe driving, causing a serious accident.

Daytime Running Light (DRL)*

The DRL also turns on automatically during daytime, allowing you to recognize a vehicle easily.



In case the DRL turns on

- If the switch of the tail light, front fog light and head light is not operated with the START/STOP switch in the ON (irrelevant to whether the engine is started or not) status

Notice

- When the DRL turns on, the tail light also turns on at the same time.
- The same lamp is used for the DRL and the tail light, but the DRL is more bright.

In case the DRL turns off

- When the START/STOP switch is in ACC or OFF status
- When you turn on the head light or the head light is turned on by the auto light function
- When you turn on the front fog light
- When parking brake (EPB) applied at the vehicle speed of 3 km/h or less (AUTO HOLD switch turned off)
- When the hazard warning indicator is activated
- When the left / right turn signal indicator is activated

Smart High Beam (SHB)*

The SHB is the function to control the high beam not to obstruct the vision of a driver in an oncoming vehicle or a vehicle at the front with a strong light from the high beam.

The SHB detects the situation through the sensor at the top of the vehicle windshield (front camera module) and turns on or off the high beam automatically.

Setting the SHB

- 1 Place the Light switch in the AUTO position.



- 2 Push the Light switch in the direction of instrument cluster and release it.



- When the SHB function is activated, the SHB indicator turns on.



SHB indicator

In case the high beam turns on

All the following conditions are set with the SHB activated, the high beam turns on.

- When the vehicle speed is 35 km/h or faster
- When the surrounding area is dark that it is detected as night
- When an oncoming vehicle and a vehicle at the front are not detected

When the light beam turns on automatically, the SHB indicator turns on along with the high beam indicator.



SHB indicator



High beam indicator

In case the high beam turns off

The high beam turns off in any of the following cases.

- When the head light of an oncoming vehicle (including a bicycle and a motor cycle) is detected
- When the tail light of a vehicle (including a bicycle and a motor cycle) at the front is detected
- When it is bright in the surrounding area due to streetlights or other lighting sources in the surrounding roadside.
- When the light source of a tunnel is detected
- When the Light switch is not in the AUTO position
- When the SHB function is deactivated
- When the vehicle speed is less than 25 km/h

Notice

- **When the high beam turns off and then turns on again automatically, there may be a delay time for few seconds.**

Operating the Light switch

The detailed operation of the Light switch with the SHB set and activated is as follows.

- When you push the Light switch in the direction of the instrument cluster with the SHB set and operating, the high beam turns on and the SHB setting is canceled.
- When you pull the Light switch in the driver's direction with the SHB set, the high beam turns on and the SHB setting is maintained only while pulling the Light switch.
- When you pull the Light switch in the driver's direction while the SHB is operating, the high beam turns off and the SHB setting is canceled.
- When you place the Light switch in positions other than the AUTO position, the SHB setting is canceled.

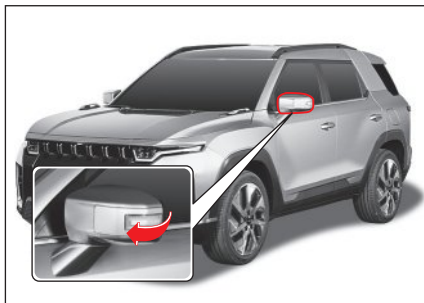


Caution

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

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

AUTO Approach



AUTO approach (outside rearview mirror unfolded) is activated when you are approaching within 1 m of the vehicle while carrying the smart key in theft deterrent mode.

Notice

- From the main menu of the hypervisor control panel, select Vehicle Settings (⚙️) → Convenience Features → (Auto) Approach Welcome → OFF or ON.

In case the auto approach lamp turns off

In any of the following cases, the auto approach lamp turns off.

- When approximately 30 seconds have passed after the auto approach lamp turns on
- When the START/STOP switch is in the ON position
- When the vehicle enters the theft monitoring mode
- When the smart door auto lock is activated

Notice

- The auto approach lamp operates up to 2 times within 10 minutes.**
- You may enable this function from the main menu of the hypervisor control panel, select Vehicle Settings (⚙️) → Convenience Features → (Auto) Approach Welcome → OFF or ON.

Coming home/living home light

The coming home/living home light is the function that turns on the head light automatically when the vehicle arrives or leaves in dark environments, increasing the safety and convenience.

Setting the coming home/living home light

- From the main menu of the hypervisor control panel, select Vehicle Settings (⚙️) → light → Leaving home headlamp/Coming home headlamp (OFF, 10 sec, 20 sec and 30 sec)

Operating the coming home light

- When you turn off the engine with the head light (low beam) on, the head light (low beam) stays on for the set duration.
- When a certain amount of time has passed with all doors and the tailgate closed, the head light (low beam) turns off.

Notice

- If you maintain the door or the tailgate opened within the set time after turning off the engine, the head light (low beam) turns off after 3 minutes.
- When you open and close the door or the tailgate within the set time after turning off the engine, the head light (low beam) stays on for the set time and then it turns off.
- When you place the Auto light and Head light (low beam) switches in the OFF position, the head light (low beam) turns off immediately.

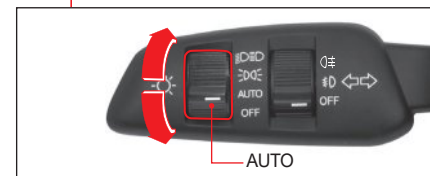
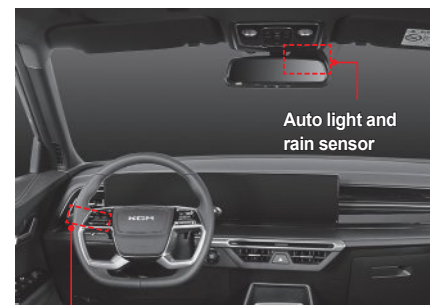
Operating the living home light

- When you cancel the theft monitoring mode by pressing the Door unlock button on the smart key or the Door handle switch, the head light (low beam) stays on for the set time.
- When the set time has passed, the head light (low beam) turns off.

Notice

- When you press the Door lock button on the smart key with the living home light on, the head light (low beam) turns off and the vehicle enters the theft monitoring mode.
- When you place the START/STOP switch in the ON position with the living home light on, the head light (low beam) turns off immediately.

Auto light function*



The auto light is the function that detects the amount of sunshine through the sensor and turns on or off the head light and the tail light automatically.

- The auto light function is activated when the Light switch is positioned in the AUTO position.

Auto light sensor



The auto light sensor is integrated with the rain sensor.

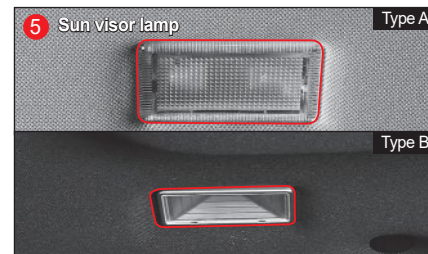
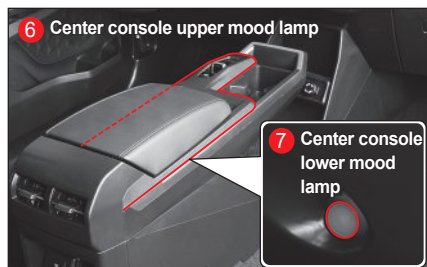


Caution

- When you shake or apply an impact to the auto light sensor, the auto light may malfunction.
- Do not wipe the auto light sensor installation part with cleaning agents or wax, etc. The auto light function may malfunction.
- Attaching commercially available window coating or tinting products to the windshield may cause the auto light function to malfunction.
- If the vehicle vibrates significantly just as driving on a road with an uneven surface, the auto light function may malfunction.

- The time to turn on and off the light may vary depending on a change in the climate condition such as fog, snow and rain and surrounding environment.
- When you change the Light switch to the AUTO position or from the AUTO position to another position, the lights inside the vehicle, tail light and head light may blink momentarily. This is a normal phenomenon for recognizing the status of the auto light.
- When passing through a dark place such as a tunnel, do not depend on the auto light function and turn on the head light manually.
- Use the auto light function for the head light and the tail light limitedly only at the time of sunrise and sunset. In general, operate the head light and the tail light manually.
- Do not use the auto light function for the head light and the tail light on a gloomy day. Operate such lights manually.

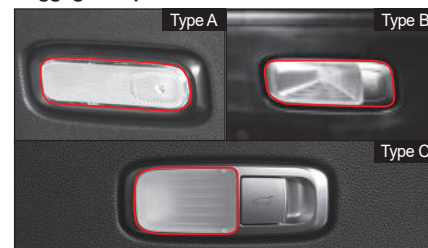
Interior lamp



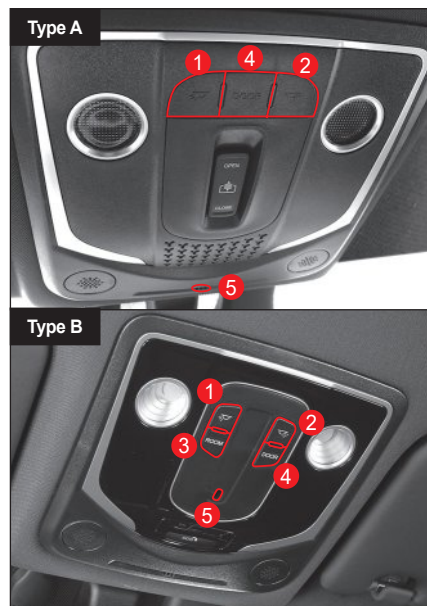
Rear room lamp



Luggage lamp



Front room lamp (overhead console)



- ① Driver seat spot switch
- ② Front passenger seat spot switch
- ③ Driver/passenger/rear room lamp/spot switch
- ④ Door linkage switch
- ⑤ Front spot lamp

Warning

- Avoid using the interior room lamp when driving at night or in a dark place. The light of the interior room lamp may obstruct the front vision of a driver, causing an accident.

Notice

- When the interior room lamp is turned on after the engine is turned off, the room lamp turns off automatically after approximately 10 minutes in order to prevent depletion of the battery.

Driver seat spot switch

When you press the switch (①), the driver seat front room lamp turns on.

Front passenger seat spot switch

When you press the switch (②), the front passenger seat front room lamp turns on.

Driver / passenger / rear room lamp spot switch

When you press the switch (③), the driver / passenger / rear room lamp turns on.

Door linkage switch

When you open the door with the switch (④) pressed, the front room lamp and the rear room lamp turn on, and when you close the door, those lamps turn off.

Front spot lamp (⑤)

It illuminates when the tail lamp is turned on.
It illuminates the front center area dimly.
(Overhead console type B)

Linkage function between the smart/rekes key and the front room lamp

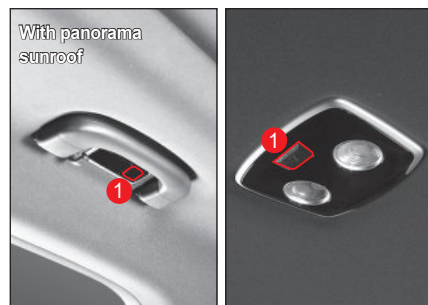
When you unlock the door using the smart/rekes key with the door linkage switch of the overhead console pressed, the driver seat and front passenger seat room lamps turn on for 30 seconds.

At this time, when you lock the door by pressing the Door lock button on the smart/rekes key, the driver seat and front passenger seat room lamps turn off immediately.

Caution

- Do not leave the door open for a long time with the room lamp linked to the door or leave the vehicle when the room lamp is turned on. If the room lamp stays on for a long period of time, the battery may be depleted.

Rear room lamp

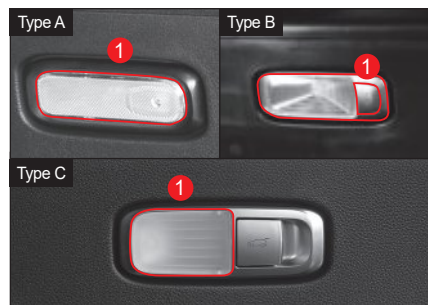


Pressing the rear room lamp switch turns on the rear room lamp. Pressing the switch again turns off the rear room lamp. The rear room lamp comes on when the door is opened regardless of the rear room lamp switch operation if the door coupled switch is pressed in.

Caution

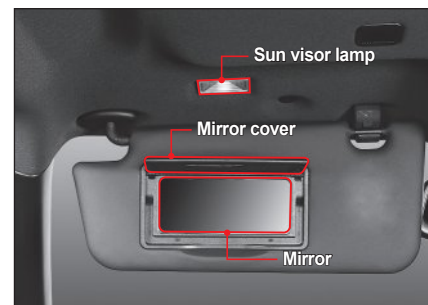
- Do not open the door for a long period of time with the Door linkage switch pressed. If the rear room/luggage room lamp stays on for a long period of time, the battery may be depleted.
- Do not leave the tailgate not closed completely for long period of time. If the rear room/luggage room lamp stays on for a long period of time, the battery may be depleted.

Luggage room lamp



- Pressing the switch (1) turns on the lamp and pressing it again turns it off with the tailgate open. (self-return type)
- When you close the tailgate with the luggage compartment lamp on, the luggage compartment lamp goes off.

Sun visor/mirror lamp



When you pull the sun visor down and open the mirror cover, the lamp turns on.

When you close the mirror cover, the lamp turns off.

Caution

- Be sure to close the mirror cover after using the sun visor mirror. Failure to do so may cause the sun visor lamp to stay on and the battery may be depleted. Also, an open mirror cover may cause injury.

Notice

- When you pull the sun visor down and use it as a sunshade, you can adjust the position of the sun visor.

Mood lamp*

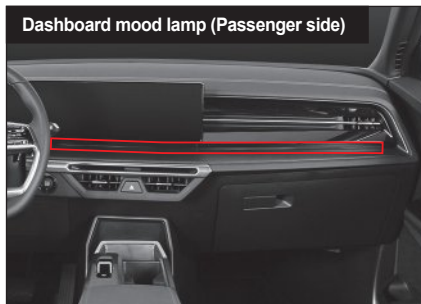
Dashboard mood lamp (Driver side)



Front door trim mood lamp



Dashboard mood lamp (Passenger side)



Center console upper / lower mood lamps*



- When the mood lamp is set to enabled, the mood lamp is always lit if the engine is started or the ignition switch is turned on.
- When the tail lamp is turned on, the mood lamp gets dim and gives out a soft light.

Mood lamp setting

- 1 On the hypervisor control panel screen, touch Vehicle Settings.
- 2 In Vehicle Settings, touch Interior Lighting.
 - From the default colors, you can choose manual (6) and automatic colors. (including mood lamp brightness settings)
 - Custom colors give you the freedom to choose more colors from the default colors. (including setting the brightness of the mood lamp)
 - In your customization settings, you can choose to turn your interior mood lamps off and on, daytime OFF (mood lamps off during daylight hours), and more.

Glove box lamp



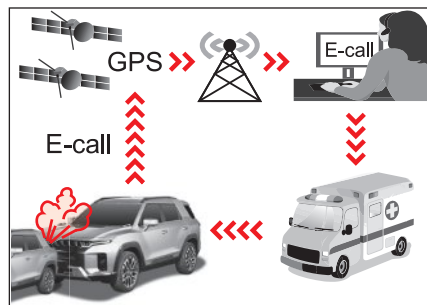
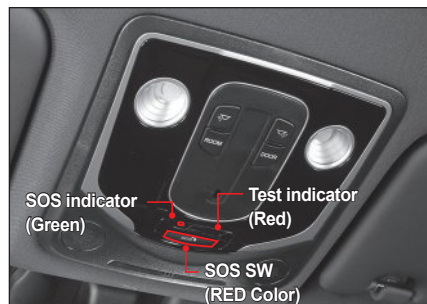
When you open the glove box, the lamp turns on, and when you close the glove box, the lamp turns off.



Caution

- Leaving the glove box opened may cause injury to an occupant in the event of an accident or sudden braking. Be sure to drive the vehicle with the glove box closed.

e-call (Emergency call)*



1. Accident occurs
2. Wireless network
3. Call center (PSAP)
4. Emergency center

The e-call is a system to minimize casualties by enabling the relevant information to be passed on to the nearest control center automatically or manually so that immediate action can be taken in case of traffic accidents and emergencies.

- SOS button: When the driver or passenger press this button, e-call is made to the service associate at the PSAP center.

Notice

- The Test button is the button to enable the test mode, which is used only by experts for the KGM Authorized Service Center to check system performance.

- LED indicator: When turning the ignition on, the red and green LEDs light up. After 3 seconds, the red LED will go off during normal operation.

In the event of an issue with the system, the red LED lights up or blinks.



Caution

- If the red LED is still lit under normal driving conditions, it may indicate a malfunction of the E-CALL system.
- Contact the nearest authorized KGM Dealer immediately to determine whether the E-CALL system is faulty or not.
- Otherwise, normal operation of the E-CALL system is not guaranteed. The vehicle owner is responsible for the consequences of not observing the instruction above.

How to use E-CALL system

AutoCall Mode



The ERA-GLONASS (eCall) device automatically makes an emergency call to a single duty dispatcher service for the timely implementation of rescue operations in the event of a car accident.

For the timely provision of assistance and support, the ERA-GLONASS (eCall) system automatically transmits data on a traffic accident to a single duty dispatcher service.

In this case, the emergency call cannot be terminated by pressing the SOS button, and the ERA-GLONASS (eCall) system remains in the connected state until the Unified Duty Control Service operator receiving the call disconnects the emergency call.

Notice

- In cases of insignificant cost of accidents, the ERA-GLONASS (eCall) system may not make an automatic emergency call. In this case, it is possible to make an emergency call in manual mode by pressing the SOS button.

Notice

- The operation of the system will be impossible if there is no coverage of mobile communication networks and no GPS and GLONASS signal. (In Case of EU : Galileo Added)

Manual Mode



The driver / passenger can make an emergency call in single dispatch service manually by pressing the SOS button to call emergency services.

Call to the emergency service using the eCall system can be canceled by re-pressing the SOS button within 3 second. (EU)

After activating an emergency call in manual mode for timely assistance and support system ERA-GLONASS (eCall) transmits data on a traffic accident / other incident to the operator of the single duty dispatcher service during a call for help by pressing the SOS button.

- Stop your vehicle at a safe place.
- Lower the e-call button cover.
- Press the SOS button. (Minimal data set for the vehicle and its location is registered to the mobile network)

- The call is connected to the operator at the e-call center.
- EU: MSD (Minimum Set of Data) sent before the emergency call is made, not after it does
- EU: For the manual emergency call, you can cancel within 3 seconds after pressing the button.

Test mode

- EU: When you have replaced and checked the e-call system, you can use the scan tool to activate the SOS test mode.

e-call can't be canceled when:

- e-call is made automatically by crash signal from the air bag unit (terminated when an operator at e-call center ends the call)
- 3 seconds is elapsed since manual emergency call made by pressing the SOS button was connected (for EU)
- Operator at e-call center answers the call, for manual emergency call made by pressing the SOS button

Notice

- The battery of the ERA-GLONASS (eCall) system provides power for one hour in case the main power supply of the vehicle is turned off as a result of a collision in an emergency situation.



Warning

I can be dangerous to remain in the vehicle, even if you have pressed the SOS button in an emergency if:

- you see smoke inside or outside of the vehicle, e.g. if there is a fire after an accident
- the vehicle is on a dangerous section of road
- the vehicle is not visible or cannot easily be seen by other road users, particularly when dark or in poor visibility conditions

There is a risk of an accident and injury. Leave the vehicle immediately in this or similar situations as soon as it is safe to do so. Move to a safe location along with other vehicle occupants. In such situations, secure the vehicle in accordance with national regulations, e.g. with a warning triangle.

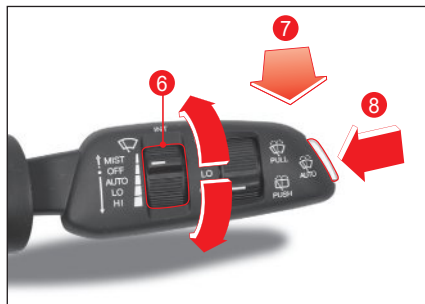
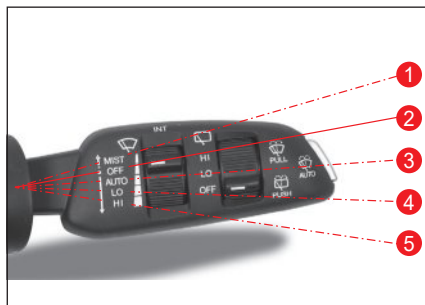
Notice

1. Our eCall system provides 112-based eCall service only and conforms to the General Data Protection Regulation specified in EU laws.
2. Processing of such data is strictly limited to the purpose of handling the emergency eCall to the single European emergency number 112
3. Type of data and its recipients
 - MSD Data Items
 - 1) Call Type : Auto Call / Manual Call
 - 2) Test Call : Test Call / Emergency Call
 - 3) Position Can Be Trusted : Yes/No
 - 4) Vehicle Type : M1/M2/M3/N1/N2/N3
 - 5) Vehicle identification number
 - 6) Propulsion Storage Type : Gasoline, Diesel
 - 7) RTA event timestamp : Road Traffic Accident event timestamp
 - 8) Vehicle Location : Latitude, Longitude
 - 9) Vehicle Direction : Vehicle orientation at the time of event
 - Call Log Data Items
 - 1) Trigger time : Time of call initiation event (crash detected or button press).
 - 2) DTC : Diagnostic Trouble Code
 - 3) Tigger type : Manual Call / Auto Call / Retry Call
 - 4) RSSI : GSM(2G) or UMTS(3G) signal strength
 - 5) Ec/No : Energy Carrier/ noise power density
 - 6) Call type : GSM(2G) / UMTS(3G) / Reserved
 - 7) Call end status : Reason for call end

4. The 112-based eCall in vehicle system is designed in such a was as to :
 - Ensure that the data contained in the system memory is not available outside the system before an eCall is triggered
 - Ensure that it is not traceable and not subject to any constant tracking in its normal operation status
 - Ensure that data in the system internal memory is automatically and continuously removed
5. The vehicle's owner has a right of access to data and as appropriate to request the rectification, erasure or blocking of data, concerning him or her, the processing of which does not comply with the provisions of Directive 95/46/EC.
6. The data subject has a right to complain to the competent data protection authority if he or she considers that his or her rights have been infringed as a result of the processing of his or her personal data.

Wiper and washer fluid

Windshield wiper



1 MIST

The wiper operates while lifting the wiper operation lever up.

When you release the lever, the level returns to the OFF position and stops.

2 OFF

The wiper stops operating.

3 AUTO

The wiper operation speed is adjusted automatically according to the vehicle speed or the amount of rain (rain sensing wiper).

4 LO

The wiper operates in low speed.

5 HI

The wiper operates in high speed.

Adjusting the operation speed of the windshield wiper

When the wiper operation lever is placed in the AUTO position, the operation speed of the wiper is adjusted.

When you lift the wiper operation speed control lever (6) up, the operation speed of the wiper becomes faster and when you pull the lever down, the operation speed of the wiper becomes slower.

Notice

- When you place the wiper operation lever in the AUTO position with the START/STOP switch in the ON status, the wiper operates once.
- When it becomes dark so that the auto light operates, the wiper speed becomes faster.

Front windshield and washer fluid linkage



This function sprays washer fluid automatically when the windshield wiper is operated.

It operates as follows according to the time to pull the wiper operation lever (7).

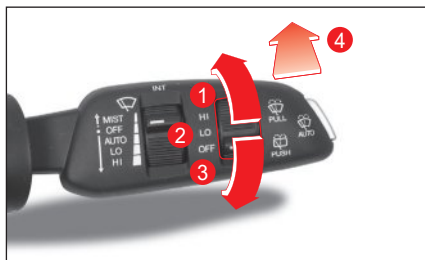
- Pull the lever for less than 0.6 second
The washer fluid is sprayed and the wiper operates once.
- Pull the lever for 0.6 second or more
The washer fluid is sprayed and the wiper operates for three times.
- Pull the lever continuously
The washer fluid is sprayed and the wiper operates continuously.

Front auto washer

With the wiper lever placed in the OFF position, press the Front auto washer switch (8).

The washer fluid is sprayed and the wiper operates for four times, and the washer fluid is sprayed again and the wiper operates for three times.

Rear window wiper



1 HI

The rear window wiper operates in high speed.

2 LO

The rear window wiper operates in low speed.

3 OFF

The rear window wiper stops operating.

Rear window wiper washer fluid linkage function



This function sprays washer fluid automatically when the rear window wiper is operated.

The washer fluid is sprayed and the wiper operates while pushing the wiper operation lever (4).

When you release the lever, the level returns to the OFF position and stops.

Rain sensing wiper*

The rain sensing wiper detects the amount of rain and controls whether or not to operate the windshield wiper and its operation speed automatically.

The rain sensing wiper is activated when the wiper operation lever is placed in the AUTO position.

Rain sensor



The rain sensor is integrated with the auto light sensor.

Warning

- When you place the wiper operation lever in the AUTO position with the START/STOP switch in the ON status, do not touch the windshield where the rain sensor is located or wipe it with damp cloth. Doing so may activate the rain sensing wiper, causing injury to your hand or other body parts.

Caution

- If the windshield is dry, do not only operate the wiper. Doing so may damage the windshield or the wiper blade. Be sure to activate the wiper after spraying the washer fluid.
- Before washing your vehicle, be sure to place the wiper operation lever in the OFF position. Failure to do so may activate the wiper by accident, causing body injury or damage to the vehicle.
- If it is not raining, place the wiper operation lever in the OFF position. It prevents the devices such as the rain sensor from operating unnecessarily.
- Activate the wiper in winter after verifying that the wiper blade is not frozen. Failure to do so may damage the windshield or the wiper blade.

Outside rearview mirror

Folding/unfolding the outside rearview mirror



- When you press the left side of the button (), the outside rearview mirror is unfolded.
- When you press the right side of the button (), the outside rearview mirror is folded.

Auto folding/unfolding function

The following is the function to fold or unfold the outside rearview mirror automatically.

- When the door Lock/Unlock button on the smart key is pressed
- When the door handle Lock/Unlock button is pressed
- When the smart auto door lock function is activated
- When the auto approach function is activated

Activating/deactivating auto folding/unfolding function

- Activating the function
Place the Outside rearview mirror folding/unfolding button in the neutral () position.
- Deactivating the function
Press the left side () or right side () of the outside rearview mirror.



Caution

- The outside rearview mirror auto folding/unfolding function is activated only when the vehicle has entered the theft monitoring mode.

Adjusting the outside rearview mirror



- ① Outside rearview mirror selection dial (L  R)
- ② Outside rearview mirror control switch ()

Selecting the outside rearview mirror

Turn the selection dial (①) to the left or the right and select a mirror you wish to adjust.

- Turning to the left: The outside rearview mirror on the driver seat side is selected.
- Turning to the right: The outside rearview mirror on the front passenger seat side is selected.

Adjusting the angle of the outside rearview mirror

Adjust the angle of the mirror according to the driver's view by moving the Control button (2) up, down, left, or right.



Warning

- Do not tint the driver seat and the front passenger seat windows. Doing so may make the outside rearview mirror less visible while driving at night, causing an accident.



Caution

- The outside rearview mirror can be folded or unfolded for a certain period of time after the engine is turned off.
- Do not operate the mirror excessively after the engine is turned off. Doing so may cause depletion of the battery.
- Do not operate the mirror more than needed. When the mirror reaches its maximum adjustment angle, its movement stops, but the motor operates continuously while the switch is being pressed, causing the motor to malfunction.

- Do not operate the outside rearview mirror using hands instead of the motor switch. Doing so may cause the mirror and relevant devices to malfunction.
- Do not spray high pressure water directly onto the mirror while washing the vehicle. The outside rearview mirror operates electrically, so it may not operate normally due to an electrical device failure.
- If the mirror is frozen and does not move during winter, do not adjust it forcibly. Adjust the mirror carefully after removing ice by using deicing spray or soaking a soft cloth or sponge in warm water and wiping the frozen part with it.
- Do not scrape ice off even if the surface of the mirror is frozen during winter. Doing so may damage the surface of the mirror.

Interior mirror

The inside rearview mirror can be adjusted up, down or side ways to obtain the best rear view.

ECM room mirror*

The ECM (Electronic Chromic Mirror) room mirror detects a light from a following vehicle automatically through the light sensor and lowers the reflection rate of the mirror to prevent glare for the driver.

- To adjust the angle of the interior mirror, hold and move the body of the mirror with your hand up, down, left and right to obtain the best rear view.



! Warning

- Be sure to finish adjusting the mirror before driving.
- Never adjust the mirror while driving. Doing so may distract the driver, causing an accident.
- If the interior mirror is broken, the electrolyte inside the mirror may flow out. Be careful not to allow this electrolyte come into contact with your skin or eyes. If the electrolyte comes into contact with your eyes, wash it with water immediately and consult a doctor.

! Caution

In any of the following cases, the automatic anti-glare function of the ECM room mirror may not operate.

- If the head light of a following vehicle is not beamed directly to the light detection sensor
- When the rear window is tinted darker
- If the gear shift lever is in the R(Reverse) position

At this time, the automatic anti-glare function is suspended to enable easy identification of an object.

Manual type inside rearview mirror



The inside rearview mirror can be adjusted up, down or side ways to obtain the best view by holding the body of the mirror with your hand.

Manual Day/Night Adjustment (A)

You can manually adjust the rearview mirror by pushing or pulling its adjusting lever to avoid blindness at night due to other vehicles behind you.

! Warning

- For your safety, adjust the mirror before driving off the vehicle.

! Caution

- When you are not able to see the back of your vehicle at night, adjust the rearview mirror by holding the mirror body and pushing or pulling it to a desired angle so that you can secure a clear rear view.

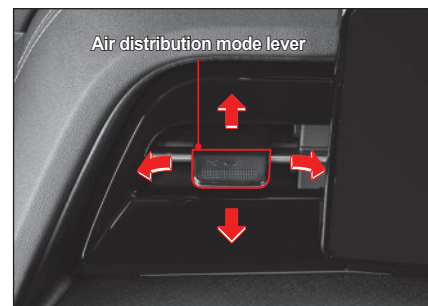
Heater and air conditioner



- 1 Heater and A/C controls (Hypervisor control panel)
- 2 Vents (front seat center)
- 3 Vents (both front seat sides)
- 4 Solar radiation sensor
- 5 Windshield fog detection sensor

- 6 Front foot air outlet
- 7 Rear foot air outlet (Bottom of front seat)
- 8 Rear air outlet
- 9 Center defroster vents
- 10 Side defroster vents
- 11 Interior temperature sensor

Adjusting the direction of air distribution and blocking the air distribution



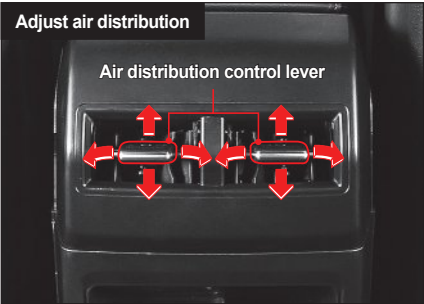
- Adjust air distribution
You can adjust the direction of air distribution by moving the air distribution mode lever up, down, left and right.
- Open and close air vents
If you push the air distribution mode lever all the way to the closing (⊗) direction, the air vent closes and the air does not come out. If you put it in the opening (≡) direction, air comes out.



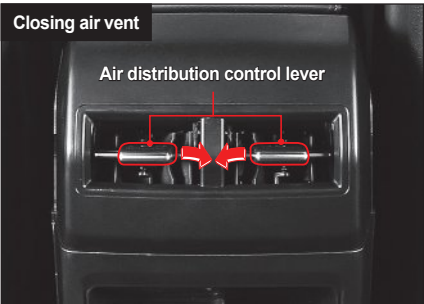
Caution

- Do not attach a cup holder or other devices to the air guide pin of the air outlet. Doing so may damage the air guide pin or other relevant devices.

Rear air distribution and fan speed control



- You can adjust air distribution by moving the air distribution control lever at the vent up and down and left and right.



- You can close the air vent by pushing the air distribution control lever all the way in the direction of the arrow.

Cautions for using the heater and air conditioner

Replacing A/C refrigerant/oil

Be sure to replace the A/C refrigerant and oil with the products that meets the specified standard and capacity Failure to do so may damage the air conditioner system.

Classification	Specifications			
	Type A	Type B	Type C	Type D
Standard	R-1234yf	R-134a	R-1234yf	R-134a
Refrigerant capacity	530 ± 30g	570 ± 30g	430 ± 30g	500 ± 30g
Oil capacity	120cc ± 10cc	120cc ± 10cc	180cc ± 5cc	180cc ± 5cc



Warning

- While driving, select the fresh air mode if possible or open the window and ventilate frequently to allow fresh air to flow in. Failure to do so may make the air inside the vehicle to be stuffy, causing headache or dizziness.
- Caution should be taken that if exhaust gas flows in, it may cause carbon monoxide poisoning.
- When you drive in an area where dust and smoke may flow in, pass the area using the recirculation mode and switch it to fresh air mode for ventilation.
- Do not sleep or stay inside the vehicle for a long period of time while operating the air conditioner or the heater with the doors and the windows closed during midsummer or midwinter. Doing so may cause suffocation due to lack of oxygen inside the vehicle.
- Never leave an infant, a small child or an elderly alone in the vehicle even for a short period of time during midsummer. The temperature inside the vehicle may increase, causing risks such as suffocation.
- Refrigerant is flammable which can cause the fire by the gas leakage or static, so be very careful when handling Refrigerant (R-1234yf).

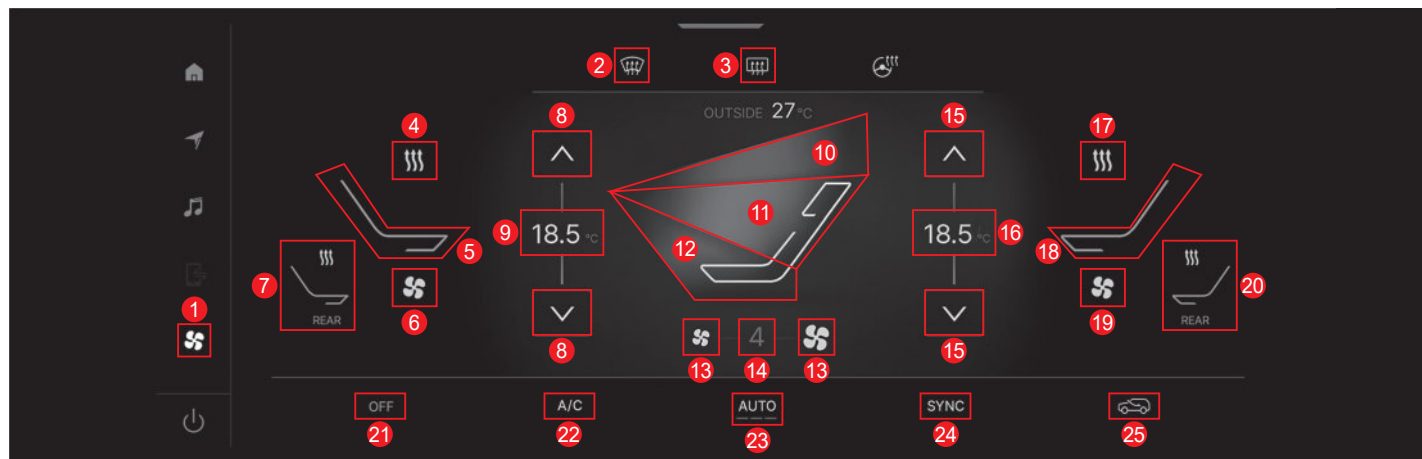


Caution

- Before driving the vehicle, open all windows to ventilate the air inside the vehicle properly for the health of occupants and a pleasant indoor environment. Especially, if the vehicle has been parked on a place exposed to direct sunlight for a long period of time, the temperature inside the vehicle may have increased, causing volatile organic compounds that are harmful to human body to be emitted.
- Do not start the engine while electrical devices with high electrical load such as the air conditioner and fan are running. In such case, it may be difficult to start the engine and the engine idle speed becomes unstable after the engine is started so that you may feel vibration greater than usual.
- When you drive up on a long sloping road continuously, turn on and off the air conditioner every 3 to 5 minutes. Failure to do so may overheat the engine, causing a failure.
- When you apply a sudden acceleration while the air conditioner is operating, the magnetic clutch in the compressor is detached and may create a clicking sound. This is a normal operation that lowers excessive pressure of the refrigerant to protect the air conditioner system.

- Be sure to operate the air conditioner at a low speed if you use the air conditioner again after it is not used for a while. If the air conditioner is not used for a long period of time, the oil in the compressor is not circulated, causing a failure.
- When you use the air conditioner after it is not used for a long period of time, there may be a smell from the air outlet. In such case, open the window and operate the air conditioner for 20 to 30 minutes to eliminate the smell.
- Do not turn off the engine suddenly while operating the air conditioner. The fan motor stops suddenly and cold or warm air in the duct is condensed in the pipe without being emitted to the outside, creating a bad smell. Before turning off the engine, turn off the air conditioner and emit air in the duct for 2 to 3 minutes in the fresh air mode.
- Do not operate the air conditioner for a long period of time while stopping the vehicle. Doing so may overheat the engine, causing a failure.
- If the engine is not running, do not operate the fan for a long period of time. Doing so may cause depletion of the battery.
- Operate the air conditioner once a week in seasons other than winter to circulate the oil in the air conditioner compressor and relevant parts smoothly. This helps you to maintain the air conditioner in its best condition.

Heater & A/C Controls



- 1 Heater and A/C controls and buttonless switch
- 2 Defroster and defogger switch
- 3 Glass heater switch
- 4 Driver heating switch
- 5 Driver seat heating / ventilation ON indicator
- 6 Driver ventilation switch
- 7 Rear LH seat heating switch
- 8 Driver side temperature control switch
- 9 Driver side temperature display
- 10 Air distribution mode switch (DEF mode)
- 11 Air distribution mode switch (VENT mode)
- 12 Air distribution mode switch (FOOT mode)
- 13 Air volume control switch
- 14 Fan speed display
- 15 Passenger's temperature control switch
- 16 Passenger side temperature display
- 17 Passenger seat warmer switch
- 18 Passenger seat heating / ventilation ON indicator
- 19 Passenger seat ventilation switch
- 20 Rear RH seat heating switch
- 21 Heater and A/C ON/OFF switch
- 22 Short touch: A/C switch
Long touch: A/C MAX switch
- 23 AUTO mode switch
- 24 SYNC switch (to sync with driver side set temperature)
- 25 Recirculation switch

Turning Heater & A/C ON/OFF

Lightly touch the OFF switch (1) to turn the heater and air conditioner.

- Heater & A/C OFF: White symbol shown
- Heater & A/C ON: Gray symbol shown



Notice

- The heater and air conditioner will operate as previous operation condition when they are turned on.
- When the heater and air conditioner are off, touch the relevant operation switch to turn them on.

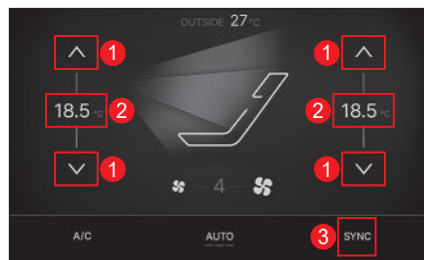
Notice

- If the vehicle is stored or parked for a long period, operate the air conditioning system for at least 15 minutes once a month.
- Running the air conditioner helps lubricate its components and maintain the overall performance of the climate control system.

Driver/Passenger Side Temperature Control

To adjust the temperature, lightly touch the driver/passenger side temperature control switch (1).

- The set temperature is indicated in the center of the temperature control switch (2).
- When the driver's seat set temperature synchronization (SYNC) indicator (3) is lit (white symbol shown), the driver's seat and the passenger seat's set temperature are changed equally.
- When the temperature control switch is operated, the increment values are:
 - 0.5°C on touch.



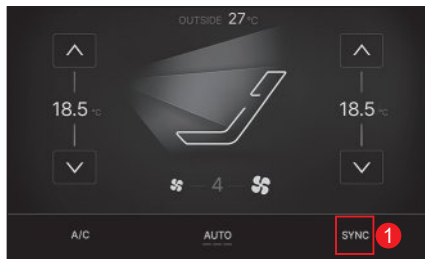
Notice

- Touching the AUTO switch in manual mode changes the climate control system to AUTO mode and the climate functions are controlled automatically based on the set temperature.

Independent Temperature Control (SYNC Off)

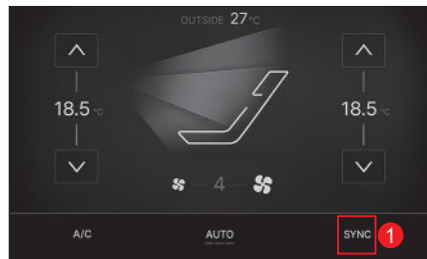
To independently adjust the set temperature for the driver's seat and front passenger's seat, operate as follows.

- Turn off the synchronization indicator (1) (gray symbol shown) by lightly touching the driver's seat temperature synchronization (SYNC) switch and the front passenger temperature control switch.
 - Synchronization indicator (SYNC) on: White symbol shown
 - Synchronization indicator (SYNC) off: Gray symbol shown



Synchronization Temperature Control (SYNC On)

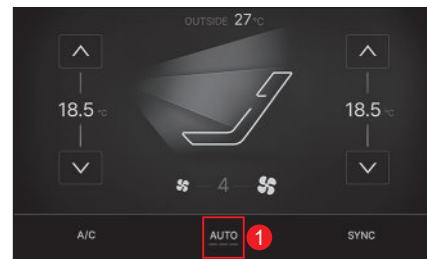
Lightly touch the driver's seat set temperature synchronization (SYNC) switch to turn on the synchronization light (white symbol shown) (1). Then the set temperature of the passenger seat will follow the one of the driver's seat.



AUTO Mode

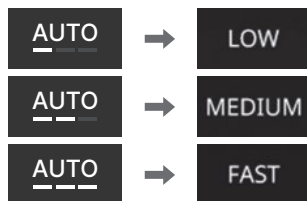
To enter AUTO mode, operate as follows with the engine started.

- Briefly touch the AUTO switch (1).
 - AUTO mode on: White symbol shown
 - AUTO mode off: Gray symbol shown
- Set the desired temperature by lightly touching the temperature control switch.



Notice

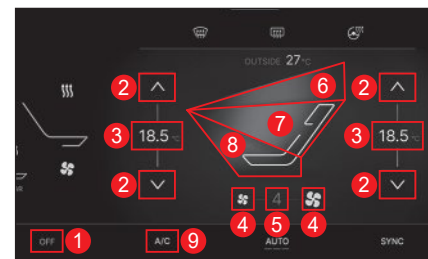
- In AUTO mode, the fan speed, air distribution and etc. are automatically adjusted according to the set temperature, room temperature, and outside temperature.
- Pressing the air source selection switch, fan speed switch, air distribution mode switch, A/C switch, or defroster switch in auto mode deactivates the auto mode and the system enters the manual mode.
- AUTO mode can be set in 3 steps.
- How to set AUTO mode
 - When you touch the switch briefly:
The setting is changed in order of FAST → MEDIUM → LOW → FAST.
 - When you touch and hold the switch:
A settings screen is displayed where you can select one of 3 levels (FAST / MEDIUM / LOW).
- The setting status is indicated by the bar(s) under the AUTO switch.



Manual Mode

Operate as follows with the engine started.

- Touch the ON/OFF switch (1).
- Set the room temperature by lightly touching the temperature control switch (2).
 - The currently set temperature is displayed (3).
- Lightly touch the fan speed switch - (decrease fan speed) / + (increase fan speed) (4) to set the fan speed one step at a time.
 - The current fan speed is displayed (5).
- Lightly touch the air distribution mode switch to select the desired air distribution mode. ((You can select more than one air distribution mode.)
 - DEF mode (6) switch
 - VENT mode (7) switch
 - FOOT mode (8) switch
- Press the air source selection switch to switch between the fresh air and recirculation modes.
 - Recirculation mode:
 - Fresh air mode:
- To use the air conditioner, lightly touch the air conditioner switch (9).



Warning

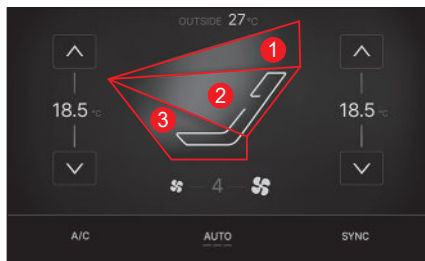
- Avoid using the recirculation mode for longer than necessary. Prolonged use of recirculation mode can cause headaches and drowsiness due to lack of oxygen in the cabin. It can also cause windows to fog up, making it impossible to see your surroundings, which can lead to accidents.
- Be careful not to allow exhaust gas to enter the cabin area. There is a risk of carbon monoxide poisoning.
- Switch to recirculation mode when driving through areas where dust, soot, etc. are likely to enter the cabin. Then switch to fresh air mode for ventilation.

Notice

- Touching the AUTO switch lightly in manual mode changes the climate control system to AUTO mode and the climate functions are controlled automatically based on the set temperature.

Air Distribution

Lightly touch the air distribution mode switch to select the desired air distribution mode. (You can select more than one air distribution mode and selected mode is indicated by a white symbol.)



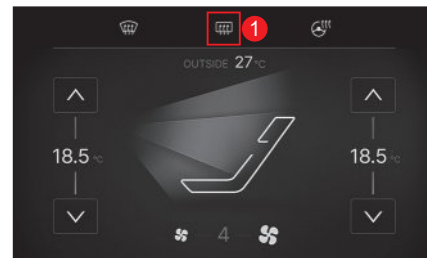
- DEF mode (1)
Blowing air in the direction of the windshield and door glasses (typical settings for defrosting and defogging)
- VENT mode (2)
Air directed toward face (typical settings for cooling)
- FOOT mode (3)
Blowing air in the direction of driver's and/or passenger's feet (typical settings for heating)

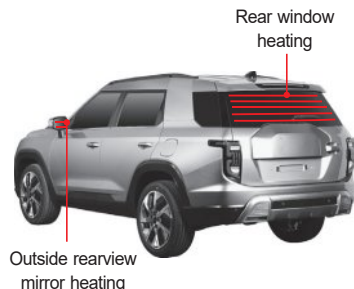
Notice

- **When the air distribution is set to FOOT mode, some air is blown in the direction of the windshield and door glasses to prevent moisture buildup on the windshield.**

Activating glass heater

- When frost or fogging occurs in the window, the glass heater can be activated to remove it.
- To activate the glass heater, lightly touch the glass heater switch (1). (The glass heater operates for about 12 minutes and the symbol changes to orange.)
- To deactivate the glass heater, lightly touch the glass heater switch (1) again. (The glass heater stops working and the symbol changes to white.)





Notice

- The glass heater only works when the engine is on.
- When the glass heater is activated, the rear window heater and the outside rearview mirror heater are operated simultaneously.
- If the glass heater is operated again within 10 minutes after completing operation for 12 minutes, it will only operate for approximately 6 minutes.

How to Dehumidify Window Glass

- Lightly touch the defroster and defogger switch (1).
(The symbol changes to orange.)
- Lightly touch the fan speed switch - (decrease fan speed) / + (increase fan speed) (2).
(The current fan speed is displayed (3).)
 - To quickly remove moisture from the windows, set the fan to high speed.
 - To defrost the outdoor side window, set the temperature to high.



Warning

- If it is raining or humid, switch the air source selection switch to the fresh air mode and set the air distribution to the windshield. With rainy or highly humid condition, fog may appear on the windows as well as the windshield even the A/C is ON. If this happens, it is dangerous to drive because of poor frontal and side visibilities.

Cautions

- Avoid excessive use of A/C with the defroster and defogger turned on and the air distribution set to footwell or to footwell and the windshield. Otherwise, a temperature difference between indoor and outdoor may cause the fogging on the outside of the windshield. If this is the case, use the wiper blades to immediately clear fog on the windshield and change the air distribution mode to vent mode (toward face) to minimize the temperature difference.
- Make sure to remove any foreign materials such as snow and leaves on the air inlets to avoid window fogging, especially in winter and summer.

Notice

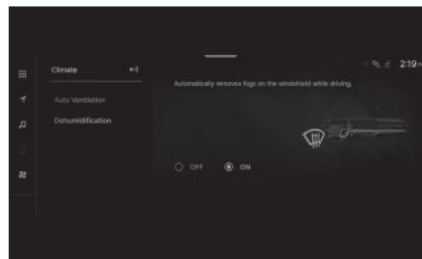
- Touching the defroster and defogger switch (1) activates the air conditioner automatically and sets it to fresh air mode and fan speed of 6th level. Touching the switch again returns the system to previous condition.
- To prevent the windshield from fogging up normally, it is recommended to set the air source selection switch to the fresh air mode.

Auto Defogger System (ADS)

ADS (Auto Defogger System) is an auxiliary device that enables safe driving by automatically removing fog when fog is detected on the indoor windshield while the heater and A/C are in operation.

Enabling/disabling AUTO defogger

- From the main menu of the hypervisor control panel, select **Vehicle Settings** (🔧) → **Climate** → **Dehumidification** → **ON** or **OFF**.



Steps to activate AUTO defogger

The higher the humidity, the higher the AUTO defogger operation level. For example, if operation level 1 does not help operation level is switched from level 2 to level 4 in sequence until the humidity is controlled properly.

- Step 1 - Switch to fresh air mode
- Step 2 - Turn A/C on
- Step 3 - Distribute air toward windshield
- Step 4 - Increase airflow toward windshield



Warning

- Do not switch to recirculation mode when the AUTO defogger is operating. The effectiveness of moisture removal is reduced, making it harder to see safely, which can lead to accidents.
- Do not forcefully remove the sensor cover on the upper side of the windshield. The AUTO fog detection sensor can be damaged while removing the cover.

Wash fluid interlock automatic internal circulation mode

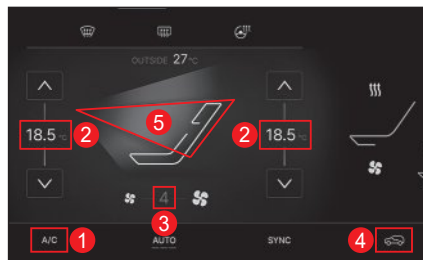
This feature prevents the external washer fluid odor from entering the vehicle by automatically switching to circulation mode for a certain period of time when washer fluid function is operated.

- Vehicle status during operation
 - Air source selection: fresh air mode
 - Operating time: 40 sec
 - It does not work in ambient temperatures less than -10°C.

Maximum A/C operation

If you touch and hold the air conditioner switch (1) while the heater and air conditioner are running, the air conditioner MAX will operate as follows.

- Operating temperature: 18°C (2)
- Airflow: 8-speed (3)
- Recirculation (4)
- Air distribution: VENT (5)



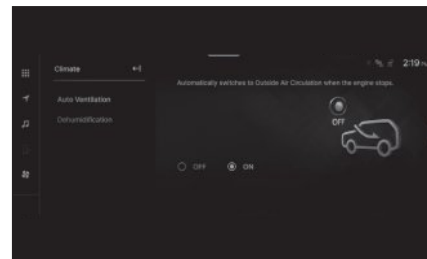
Touch the air conditioner switch (1) briefly to turn off the air conditioner MAX.

Auto ventilation

This is a function that automatically switches to outside air circulation mode when the engine off. If this function is in off state, recirculation / outside air circulation mode is maintained when the engine on.

Enabling/disabling Auto ventilation

- From the main menu of the hypervisor control panel, select **Vehicle Settings** (F6) → **Climate** → **Auto ventilation** → **ON or OFF**



Eco Mode

This is a function that maintains the air source selection mode to recirculation mode for 20 minutes when the vehicle is started, in order to quickly lower the vehicle's cabin temperature during hot weather.

Conditions for activation

- Air source selection: fresh air mode
- Ambient temperature: 24°C or higher
- A/C status: ON

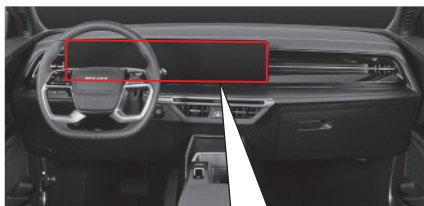


Caution

- The vehicle enters eco mode only once upon starting, with the above operating conditions met.
- When the A/C is changed to the fresh air mode with the eco mode activated, the eco mode is deactivated.
- After 20 minutes of eco mode (recirculation mode) operation, the air source selection changes to the state before eco mode is activated.

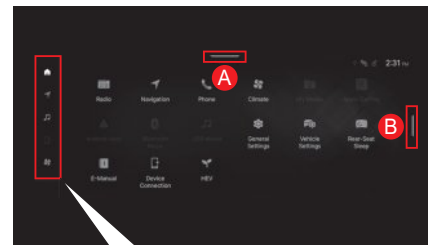
Hypervisor panel

- The hypervisor control panel is a panoramic display that combines a 12.3" instrument cluster with a 12.3" navigation.
- The navigation screen allows you to operate navigation and media, vehicle settings, heater and air conditioner, buttonless, and more.



- A** 12.3" instrument cluster
- B** 12.3" navigation (including control panel)

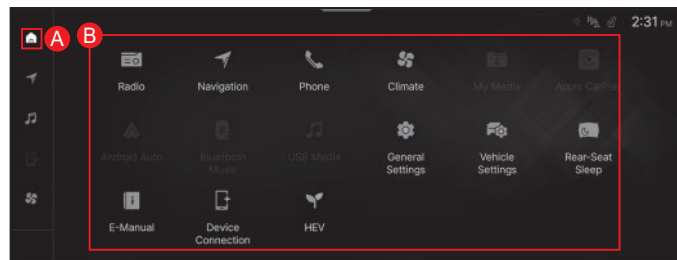
Names of parts of hypervisor control panel



- A** Main menu control switch
- B** Navigation operation switch
- C** Media operation switch
- D** Heater and A/C control switch

- A** Upper scroll
- B** Heater and A/C control pop-up scroll

Main Menu Controls



Lightly touch the Main Menu Controls switch (A) to display the switches (B) that allow you to set up your vehicle, which are detailed below.

- Radio
- Navigation
- Phone
- Climate
- My Media
- Apple CarPlay
- Android Auto
- Bluetooth music
- USB Media
- General settings
- Vehicle settings
- Rear-seat sleep
- E-Manual
- Connecting BT devices
- HEV

Navigation

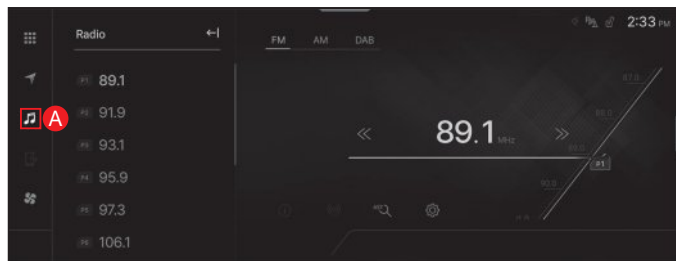


Lightly touch the navigation operation switch (A) to activate navigation.



Touching the heater and air conditioner controls pop-up scroll (A) during navigation displays the heater and air conditioner controls panel (B).

Media



Lightly touch the media operation switch (A) to operate items related to the media.

The items are as follows:

- Radio
- USB Media
- USB Video
- USB Photo
- Bluetooth Music
- My Media
- My Video
- My Photo
- Phone

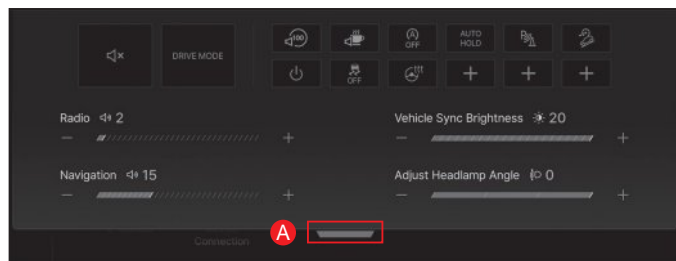
Heater and A/C control



You can operate the heater and air conditioner by lightly touching the heater and air conditioner control switch (A) and then touching "Climate" (B).

3

Top scroll panel (buttonless quick panel)



Touch the upper scroll actuation switch (A) and gently pull it down to reveal the buttonless quick panel.

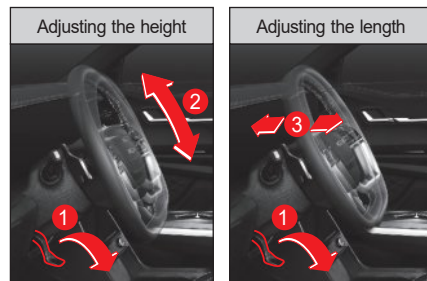
- Mute
- Drive mode switch
- ISG OFF switch
- Front obstacle detection ON/OFF switch
- Radio volume
- ESC OFF switch
- ISA alert sound OFF switch
- DAW alert sound OFF switch
- Quick menu switch
- HDC switch
- Navigation volume
- Vehicle sync brightness
- Panel OFF switch

Notice

- To add a quick menu, touch and hold the corresponding button (+) to set it up.

Steering wheel

Adjusting the height/length of the steering wheel



- 1 Push down the steering wheel telescoping/tilt control lever (1).
- 2 Adjust the position of the steering wheel upwards and downwards (2) and forwards and backwards (3) properly.
- 3 Lift the steering wheel telescoping/tilt control lever (1) up.

After adjusting the steering wheel, check that the steering wheel is secured firmly.

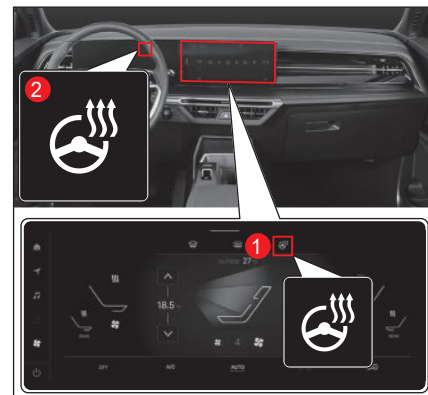
Warning

- Check that the steering wheel is secured firmly before driving.
- Do not adjust the steering wheel while driving. Doing so may cause a serious accident.

Caution

- Do not turn the steering wheel left or right to the end and maintain such position for 10 seconds or more with the vehicle started. Doing so may damage the power steering system due to overload.

Steering wheel heater*



- To activate the steering wheel heater, touch the steering wheel heater switch (1) while the engine is running. The operation indicator on the instrument cluster turns on.
- To deactivate the Steering wheel heater, touch the Steering wheel heater switch again. The operation indicator on the instrument cluster turns off.



Caution

- Do not attach an assist knob to the steering wheel. Doing so may damage the heater in the steering wheel and impede safe steering.

Notice

- The status of the Steering wheel heater switch is maintained even if the vehicle is turned off and on again.

Horn

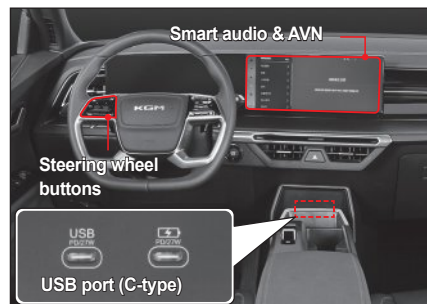
Warning horn is sounded while the horn is being pressed.



Caution

- Using the horn may startle pedestrians. Use it carefully only when it is necessary.

Smart audio*



Caution

- The Android auto and Car Play in the vehicle may not be supported or some functions may not be compatible according to the specification or characteristics of the relevant device.
- The connection of the relevant devices to the vehicle may not be supported or some functions may not be compatible according to the specification or characteristics of the relevant video player, MP3 player.
- The method of use may be different or the connection to the vehicle may not be supported according to the specification or characteristics of the relevant Bluetooth device.



Caution

- Some USB storage devices and SD cards may not be compatible with the relevant device in the vehicle. Using a non-compatible memory card may damage the relevant device in the vehicle, memory card or data saved in the memory card.

Notice

- For detailed explanation regarding the infotainment system in the vehicle including smart audio, AV/Navigation and slots for multimedia, refer to the owner's manual provided separately.
- If you wish to connect an external device to the infotainment system in the vehicle including smart audio, AV/Navigation and slots for multimedia, refer to the owner's manual of the relevant device for how to connect and use such device.



Warning

- The rear camera screen does not work during software update. Always stop the vehicle to update the software and do not drive the vehicle until the update is completed.
 - Be careful when reversing since the rear obstacle may be hidden by the warning messages and parking guide lines if the rear camera system is activated.
- The smart audio has an 12.3-inch touchscreen and four buttons, and can be operated with the buttons on the steering wheel.
 - The USB port allows you to connect external devices to the multimedia socket.
 - Including Bluetooth and rear view camera, the following apps are supported: Android Auto (for Android device) and CarPlay (for iOS device). (iOS devices can be charged through the USB port.)
 - The operation information of the smart audio is displayed on the instrument cluster.



Caution

- During driving, video is not supported and only audio is supported for safety. When the vehicle stops, video is supported again.
- Do not use the audio system for a long period of time with the vehicle not started. Doing so may cause depletion of the battery in the vehicle.

AV/Navigation*

- The AV / navigation can be operated with the 12.3-inch electrostatic touch panel and the buttons on the steering wheel (voice recognition supported).
- The USB port (iPod, iPhone, iPad) allows you to connect external devices to the multimedia socket.
- It shows the control status according to the operation of the heater and the air conditioner to improve the visual comfort of the driver.
 - The heater and the air conditioner can not be controlled by screen touch.
- Supported features include: Bluetooth, micro SD card (navigation), rear view camera as well as Android Auto (for Android device) and CarPlay (for iOS device). (iOS devices can be charged through the USB port.)
- Some operation information of AV / navigation is displayed on the instrument cluster.



Warning

- Be sure to use the navigation and video-related functions after stopping or parking the vehicle at a safe place for safe driving.



Caution

- Do not use the AV/navigation system for a long period of time with the vehicle not started. Doing so may cause depletion of the battery in the vehicle.



Warning

- The rear camera screen does not work during software update. Always stop the vehicle to update the software and do not drive the vehicle until the update is completed.
- Be careful when reversing since the rear obstacle may be hidden by the warning messages and parking guide lines if the rear camera system is activated.

Slots for multimedia



With the USB port, you can connect the external music / video playback devices such as USB storage and iPod to the vehicle.



Caution

- Some USB storage and external music / video playback devices may not be played through the USB port.

Operating from the steering wheel



- 1 Bluetooth hands-free button
- 2 Voice recognition button
- 3 Mute button / Volume control lever
- 4 Media search (SEEK) lever
- 5 Mode selection button
- 6 LDW/LKA, CLKA ON/OFF button

Bluetooth hands-free

You can connect and use your mobile phone in the vehicle through Bluetooth.

Notice

- For detailed explanation regarding the Bluetooth hands-free, refer to the owner's manual provided separately.

Voice recognition function

This convenient function allows you to use various functions of the infotainment system through voice recognition.

In Apple CarPlay mode

- operates Siri

In Android Auto mode

- operates Google Voice

Notice

- When you connect a USB cable to your phone, you can use voice recognition through Android Auto or Apple CarPlay.

MUTE Mute

- Tapping the Mute button with the audio system turned on turns off the voice output. Tapping it again turns on the voice output.
- Pressing and holding down the Mute button with the audio system turned on turns off the audio system.

± Controlling the volume

Raises or lowers the volume.

◊ Searching for media (SEEK)

Classification	Tap up/down the SEEK lever
When playing on the media screen	Plays the previous/next track
When playing on a screen other than the media screen	Plays the next/previous track
When listening in the radio screen	Moves to the previous/next saved channel
When listening in screens other than the radio screen	Moves to the next/previous saved channel

MODE Selecting the mode

- The AV mode changes each time you press the Mode button.
- Tapping the Mode button with the AV system turned off, turns on the AV system.

Antenna



When the audio system is turned on, the antenna receives the following radio waves.

- Smart audio: GPS, radio, DAB (EU, GCC), GSM (e-call)
- AV/Navigation: GPS, radio, DAB, GSM (e-call)

USB charging port

USB charging port (front side of front seat cup holder)



USB charging port (rear side of center console)



- You can use the USB Type-C charging port to charge devices such as smart phones and tablets.
- Connect the charging cable for the device you want to charge to the USB Type-C charge port (27W) located on the lower front of the center console, with the vehicle started.
- Connect the charging cable for the device you want to charge to the USB Type-C charge port (27W) on the rear of the center console, with the vehicle started.
- See the display screen of the device you're charging for whether charging is complete and for charging progress.



Caution

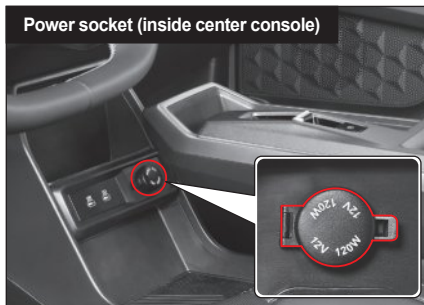
- Connect a device you wish to charge to the USB charging port after starting the engine and separate the device before turning off the engine. Failure to do so may damage the device being charged by sudden voltage variation when starting or turning off the engine.
- Caution should be taken that using the USB charging port with the engine turned off may cause depletion of the battery.
- Do not charge a device whose current consumption exceeds 3.6 A with the USB charging port. Doing so may disable charging, making the charging time longer or damage the USB charging port and the connected device.
- Caution should be taken that connecting the USB charging cable incorrectly may damage the fuses in the vehicle or the connected device due to a short circuit.
- Caution should be taken that if a foreign material or liquid such as water enters into the USB charging port, the charging port and the device may get damaged.

Notice

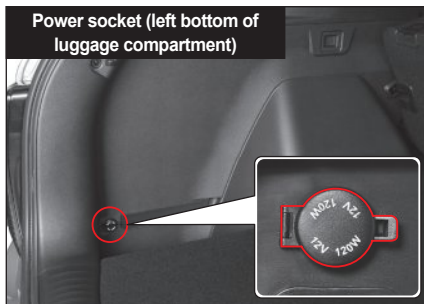
- The charging speed of the USB charging port may vary depending on the type of and compatibility with the connected device, charging cable and other vehicle conditions.

Power socket

Power socket (inside center console)



Power socket (left bottom of luggage compartment)



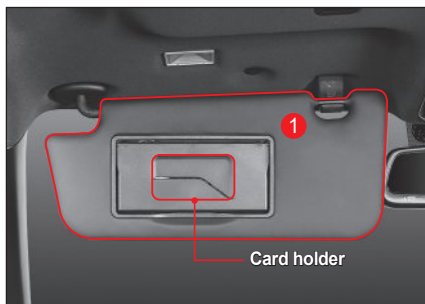
The power socket (12 V, 120 W) is provided in the vehicle to enable the use of a separate electrical device.



Warning

- Caution should be taken that inserting a finger into the power socket may cause injury such as an electric shock.
- Be sure to use a separate electrical device after connecting it to the power socket. Modifying the wires in the vehicle arbitrarily and using an electrical device may cause an accident such as a fire.
- Observe the rated capacity of the power socket (12 V, 120 W). Failure to do so may cause the power socket and the connected device to malfunction or fail.
- Caution should be taken that using the power socket with the engine turned off may cause depletion of the battery.
- If the power socket is not used, be sure to close the power socket cover. Failure to do so may let foreign material or liquid such as water enter into the power socket, causing damage to the device as well as an electric shock.

Sun visor and card holder (driver seat)



Sun visor

You can block out the sun from the front or the sides by lowering the sun visor (1).

- You can adjust the position of the sun visor (2) for blocking out the sun from the sides.

Card holder

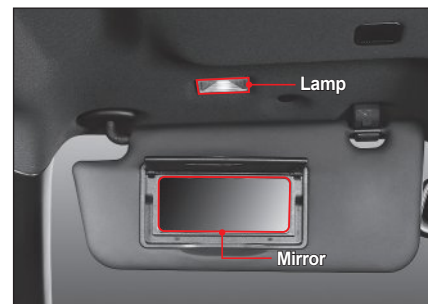
The card holder is provided in the inside cover of the sun visor. It is convenient to store a motorway toll ticket or a card.



Caution

- **Adjusting the sun visor or using the card holder or mirror while driving may lead to careless driving or block the driver's vision, resulting in an accident.**
- **Adjust or use the sun visor and card holder after stopping or parking the vehicle.**

Mirror and lamp



- You can use the mirror by lowering the sun visor and lifting up the cover.
- When you lift up the mirror cover, the lighting lamp turns on.



Caution

- **Be sure to close the mirror cover after using the sun visor mirror. Failure to do so may cause the sun visor lamp to stay on and the battery may be depleted. Also, an open mirror cover may cause injury.**

Grip handle/coat hanger



- The grip handle is installed on the side ceiling of the front passenger seat and rear seats (head lining).
- The coat hanger is included in the grip handle on the ceiling of the rear seats.

Warning

- Do not hang articles other than cloth on the coat hanger. Doing so may cause the side air bag to operate at the time of an impact of an accident, resulting in damage to the vehicle as well as the injury or death of an indoor occupant.

Caution

- Do not hang a heavy cloth on the coat hanger. Doing so may damage the coat hanger and the ceiling (head lining).

Headrest hangers (coat hooks)*



The front seat headrests have hangers for hanging coats.

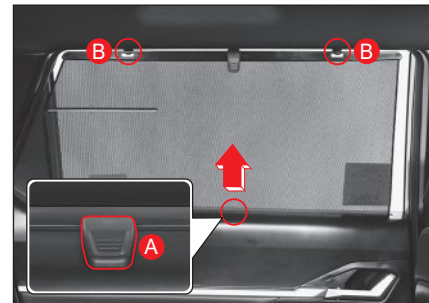
Warning

- Never hang anything other than clothing on the headrest hangers (sharp, fragile, heavy objects, including hangers). If the airbags deploy in a collision, the object could cause damage to the vehicle as well as injury or death to the occupants.

Caution

- Do not hang heavy clothing from the hanger-type headrest. Doing so can damage hanger-type hooks.

Rear seat door roller blind*



To block external light coming through the rear seat glass, operate the roller blind as follows:

- 1 Hold the roller blind ring (A) and lift it in the direction of the arrow.
- 2 Hang the roller blind on the hooks (B) mounted on both sides.



Caution

- Hanging the roller blind on only one hook may cause the roller blind to get deformed. Therefore, make sure to hang the roller blind on the both hooks.
- If any foreign material, such as coin, get inside the roller blind, it may cause a jam during its operation. Be careful not to do so.
- When lowering the roller blind, always grasp the handle in that status and slowly move it downward to rest it in place and then release the handle.
- Do not hang the objects other than the roller blind on the hooks.
- Pulling the roller blind forcibly or applying an excessive force to it may cause it to get crushed or deformed.
- Be careful when using the roller blind with the rear glass lowered as it may come off the hook.

Storage unit

Front seat/rear seat cup holder*



The cup holder is provided in front of the central console section.



There is a cup holder when you lower the rear seat armrest.



Caution

- Caution should be taken that hot liquid in the cup may overflow or spill, causing a burn.
- Pay particular attention while driving since the cup may fall down or the liquid in the cup may spill over.
- Caution should be taken that if liquid in the cup spills over into the switches or operation buttons, it may cause trouble to the system functions.

Cell phone cradle



The cell phone cradle is located in front of the center console. The bottom part of the cell phone cradle has a charging cable passage.

Front storage bin



There are storage bins in the front and bottom of the center console. This is suitable for storing small items.



Caution

- Be careful to store items placed in the front storage bin so they don't fall out.

Rear storage box



There is a pocket type storage box at the back side of the center console. This is suitable for storing small items.

Glove box



The glove box can be used for storing documents related to the vehicle registration or articles used in the vehicle conveniently.

- Pull on the glove box lever to open the glove box.



Caution

- Leaving the glove box opened may cause injury to an occupant in the event of an accident or sudden braking. Close the glove box while driving.
- Do not store any flammable materials or a cigarette lighter, etc. in the glove box, console or inside the vehicle. Doing so may cause an explosion during midsummer or the air inside the vehicle is heated.

Console



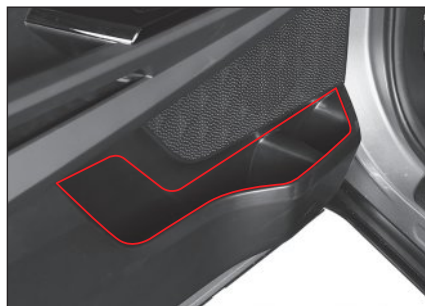
- The front seat console can conveniently store things for passengers in the front seats.



Caution

- Do not store any valuable article on the console for preventing theft.
- Do not store an article that can be damaged easily or creates noise on the console as it may move while driving.
- Do not store any flammable materials or a cigarette lighter, etc. in the console, the glove box, or indoor. Doing so may cause an explosion during midsummer or when the air inside the vehicle is heated.

Door map pocket



The pocket (bottle tray) where books, magazines, water bottles or beverages can be stored is provided.

Seat backrest pocket



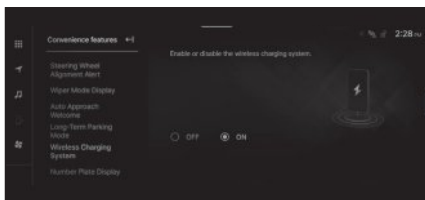
It can be used conveniently for storing magazines or newspapers.



Caution

- Do not store scissors, knives, or other objects with an improper size in the seat backrest pocket. Doing so may cause personal injury in the event of sudden braking or a vehicle collision.

Wireless Phone Charger System*



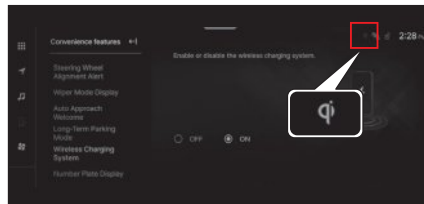
The wireless phone charger system is a device that wirelessly charges the electronic devices (such as mobile phone) that conforms to Qi standard, which is located in front of the transmission selector lever.

The wireless phone charging is available only when the driver sets (ticks) the wireless charging system under Vehicle Settings menu in the hypervisor control panel.

To Charge Phone

- 1 Close all the vehicle doors and start the vehicle.
- 2 Set up the wireless charging feature. From the main menu of the hypervisor control panel, select Vehicle Settings (⚙️) → Convenience Features → Wireless Charging System → ON or OFF.
- 3 Remove everything including the smart key on the wireless charging pad. If there is anything other than the phone on the charging pad, it may not charge.
- 4 Place the wireless charging enabled phone in the center of the charging pad.
- 5 Once the phone charge starts, you can check the phone charge status in the top sidebar of the hypervisor with the color of the wireless charge symbol.

- white : wireless charging OFF
- green : phone charging completed
- orange (ON) : phone charging in progress
- orange (blinks) : phone charging fault



Caution

- If any phone is on the wireless charging pad after the ignition is off while the wireless phone charger is operating, a reminder message “The phone is on the wireless phone charger.” is displayed on the instrument cluster. After turning off the ignition, be sure to leave the vehicle with your phone.
- The reminder function is turned on when the ignition switch is changed from the ON position to the ACC or OFF position. However, it does not work when changing the ignition switch from the OFF position to ACC position.

☞ Refer to “Reminder from wireless phone charger” (p.4-77)

Notice

- The wireless phone charger system can be used to charge the mobile phones only that conform to the Qi standard. Whether your phone meets the Qi standard can be checked with a separate accessory cover or phone manufacturer.
- The charging function can be turned on or off under the User Settings menu in the hypervisor control panel.



Caution

- If the temperature or voltage inside the wireless phone charger system exceeds a certain value, the charging function is temporarily stopped to protect the phone and the system.
- The farther your phone is from the center of the charging pad, the less charging efficiency the phone may have.
- Be sure to position your phone in the center of the wireless charging pad.
- Depending on the type of mobile phone cover, charging may not work or a lot of heat may be generated. (e.g., LED cover, thick cover)
- Charging may stop if the mobile phone is not securely pressed against the wireless charging pad.
- If there are magnetic products (credit card, check card, bankbook, ticket and etc.) around the wireless phone charger, its information may be damaged.
- If a metal object is on the wireless charging pad, charging does not work or may stop and a metal object may become hot during charging.
- The mobile phone which is not Qi standard certified may not be charged.



Caution

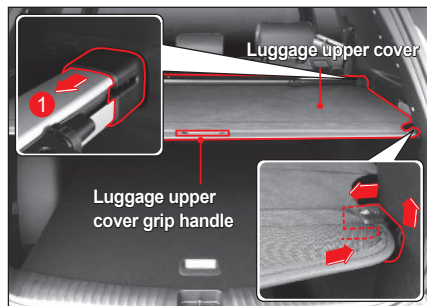
- Charging stops temporarily when the smart key detection function is activated. (e.g., when starting the vehicle, immediately after the door is open / closed)
- If the terminal that complies with the Qi standard does not provide a full charge information, charging may continue to generate heat.
- If more than one terminal is placed, charging does not work.
- On some manufacturers' phones, the relevant information may not appear on the instrument cluster.
- For the mobile phones that do not have a built-in wireless charging feature, you have to equip with separate accessories individually.
- If you place a phone or metallic object that does not have wireless charging on the charging pad, you may hear some noise. (The noise is a normal operation sound generated in the process of determining whether the mobile phone can be charged wirelessly, which does not affect the mobile phone and the vehicle.)

Additional equipment in the luggage compartment*

Luggage upper cover

The luggage upper cover is used for covering luggage so that it cannot be seen.

Installing the luggage upper cover



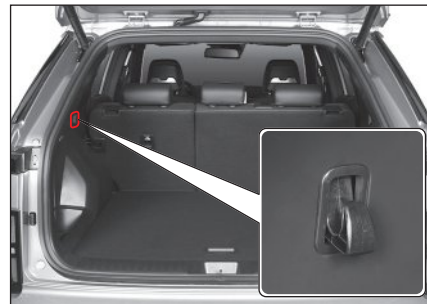
- 1 Fit both ends of the luggage upper cover into the groove on the vehicle body by pressing them in the arrow direction (1).
- 2 Pull the luggage upper cover grip handle and fit it into the groove on the vehicle body.



Caution

- Do not place any article on top of the luggage upper cover. Doing so may cause the article to bounce forward, injuring an occupant or damaging the luggage upper cover.
- Do not press the top of the luggage upper cover forcibly. Doing so may damage the luggage upper cover.
- Do not relocate the luggage upper cover when it is pulled out. Doing so may damage the luggage upper cover.

Luggage compartment hook



The hook places at left side of luggage compartment.



Caution

- Do not hang heavy load at the hook. Doing so can damage hook. (Max. 3kg)

Luggage compartment side storage box



There are storage boxes in the lower left and right parts of the luggage compartment. This is suitable for storing small items.

How to store luggage upper cover



- 1 Lift out the luggage compartment board in the direction of the arrow.

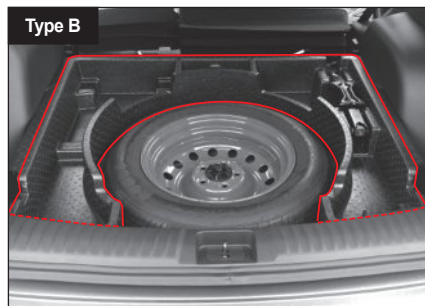
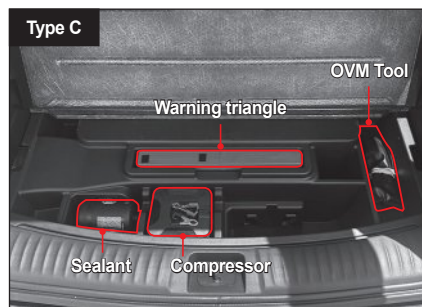
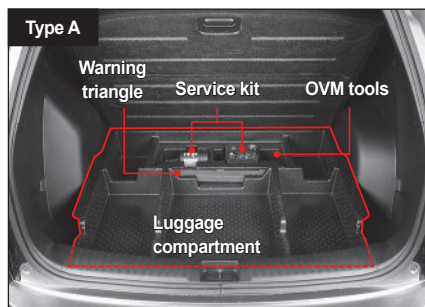


- 2 Pull the left / right end (1) of the luggage compartment upper cover inward and fix it in the groove. The other side is also performed in the same way.



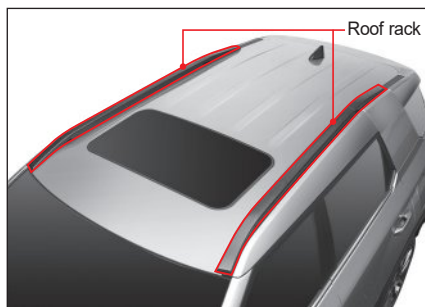
- 3 Make sure that the luggage upper cover is secured firmly.

Luggage compartment



Below the luggage compartment board is a luggage compartment storage box for storing a warning triangle and OVM tools, including a service kit.

Roof rack*



The luggage can be loaded onto the top of the vehicle roof using the roof rack.

Also, leisure sporting goods such as a bicycle, snowboard and skis by installing a separate carrier on the roof rack.

- The maximum loading capacity of the roof rack is 100 kg (220 lbs).



Warning

- The luggage loaded onto the roof rack should not exceed the maximum loading capacity. The luggage loaded onto the roof rack should not stick out of the roof. If the maximum loading capacity is exceeded or the luggage sticks out of the roof rack, the relevant vehicle or other vehicles may be damaged. In addition, it adversely affects the driving stability of the vehicle and may cause an accident while driving.
- Fix the luggage to the roof rack safely, and in case of driving for a long period of time, check the fixing status of the luggage frequently. If the luggage loaded onto the roof rack falls off from the vehicle, other vehicles may be damaged or a pedestrian may get injured. Also, it may cause a bigger accident.
- When luggage is loaded onto the roof rack, the center of gravity of the vehicle becomes higher. If you control the steering wheel suddenly while applying sudden braking, making sharp turn or driving at a high speed, the vehicle may become unstable, causing an accident or overturning of the vehicle.
- If the luggage is loaded onto the roof rack, check the tightening status of roof rack fixing bolts and nuts frequently.
- Drive the vehicle at a low speed if possible when luggage is loaded onto the roof rack.



Caution

- Caution should be taken that if you load luggage onto the roof rack of a vehicle where a sunroof is installed, the luggage should not interrupt the operation of the sunroof.

Notice

- A protective gear such as a cushion or a cloth can be inserted between the luggage and the roof rack in order to prevent the vehicle from being damaged by contact between the luggage loaded onto the roof rack and the vehicle roof.

4. Starting and driving

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

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

START/STOP switch (Smart key)*

OFF status

The power is turned off.



The indicator is turned off.

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

Caution

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

Notice

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

ACC status

Some electric accessories can be used.



Orange ACC indicator turns on.

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

Caution

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

ON status

Most electric accessories can be used.



Red ON indicator turns on.

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

Caution

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

READY status

Possible to start the engine



Green READY indicator turns on.

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

Warning

- The engine can also be started after the gear shift lever is placed in the N (MT) position.
- Start the engine in the P (AT/HEV) position with the electronic shift lever.

Notice

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



Warning

- Do not press the **START** switch while driving. When the engine is turned off, the brake performance deteriorates and the electric power steering (EPS) system does not operate, making brake and steering wheel operation much heavier.



Caution

- Pressing the **START** switch without depressing the brake pedal only causes the start switch to switch repeatedly between “OFF → ACC → ON → ACC → OFF” and the vehicle does not start.

Notice

- Once vehicle started, the following indicators and warning lamps will illuminate depending on the driving readiness. (HEV)



- Green indicator illuminated: normal driving possible
- White indicator illuminated: normal driving impossible
- Red warning lamp flashing: Not drivable due to system failure

Starting the engine

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

Starting the engine

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

- Depress the brake pedal until the vehicle starts.



Warning

- The engine can also be started also after the gear shift lever is placed in the N (MT) position.
- Start the engine in the P (AT/HEV) position with the electronic shift lever. (AT/HEV)
-  Repeated depression of the brake pedal without the Ready indicator lamp illuminated may result in a 12 V auxiliary battery discharge. (HEV)
- When the smart key is inside the vehicle, pressing the **START** button starts the vehicle. Always be careful, especially if you have a smart key in your vehicle with someone who doesn't know these features (including adults and children), as they may cause unexpected situations.

Getting your vehicle started

- 1 When starting off the vehicle with the ignition turned on, keep the brake pedal depressed and check that the gear has changed to P → D, release the parking brake.

* When starting the vehicle with the engine started, keep the brake pedal pressed down and check the  (Ready) indicator before operating the electronic shift lever to shift gears. (HEV)
- 2 After releasing the parking brake, slowly release the foot from the brake pedal to ensure that the vehicle is moving slowly.
- 3 Depress the accelerator pedal slowly to start off the vehicle.

Restarting the engine when it cannot be started

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



Caution

- **Do not press and hold down the START/STOP switch or press it repeatedly because the engine cannot be started.**
- **The communication with the smart key system is not smooth on top of the seat where the heater function is activated or the floor of the vehicle and the area near the pedal, so the smart key recognition performance may be lowered.**
- **If the engine cannot be started by pressing the START/STOP switch, press the START/STOP switch directly using the smart key or have your vehicle checked and serviced at a KGM Authorized Service Center.**
 - ☞ Refer to “Starting the engine with the dead smart key or interference, etc. (in the event of emergency)” (p.4-19)
- **Maintaining the START/STOP switch ACC or ON status and using the audio system with the engine turned off may deplete the battery.**

Stopping the engine

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

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

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

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

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

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



Warning

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

Notice

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

System safety mode

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

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



Caution

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

Cautions for using the START/STOP switch



Warning

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



Caution

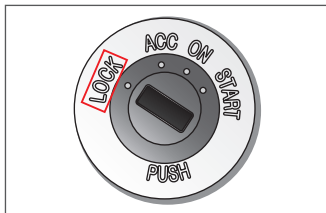
- Be sure to start the engine with the brake pedal depressed.
- Do not depress the accelerator pedal when starting the engine.
- If the engine cannot be started, wait for 10 seconds or more to prevent the starting motor from being damaged and restart the engine.
- After starting the engine, idle the engine for 1 to 2 minutes and then drive off in the vehicle. In particular, drive the vehicle slowly for approximately 300 m after driving off for smooth rotation of the engine and other driving systems during winter.
- If you open the door and leave the vehicle with the smart key with the START/STOP switch in the ON status or while the engine is running, a warning message is displayed on the instrument cluster with a warning buzzer.
- Pay particular attention not to start the engine when checking the vehicle from the outside, especially the engine room.
- Do not use a non genuine smart key or a replicated key.

- The communication with the smart key system is not smooth on top of the seat where the heater function is activated or the floor of the vehicle and the area near the pedal, so the smart key recognition performance may be lowered.
- The vehicle is controlled by various electronic control units. If you attach and use a device that creates radio waves or electromagnetic waves near the smart key or the vehicle, various vehicle control systems may malfunction.
- When you operate the START/STOP switch while a smartphone is placed near the smart key or charging the smartphone battery through the power socket in the vehicle, the engine may not start occasionally.

Key cylinder (ignition key)

OFF position (LOCK)

The power is turned off.



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

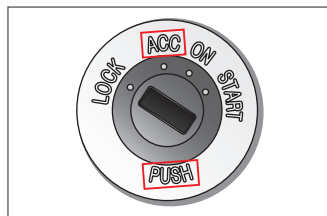
Notice

Key hole illumination

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

ACC position

Some electric accessories can be used.



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

Notice

Key reminder

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

ON position

Most electric accessories can be used.



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

START position

Starting engine



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



Warning

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

Starting the engine

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

Starting the engine

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



Warning

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

Getting your vehicle started

- 1 When starting off the vehicle with the ignition turned on, keep the brake pedal depressed and check that the gear has changed to P → D, release the parking brake.
- 2 After releasing the parking brake, slowly release the foot from the brake pedal to ensure that the vehicle is moving slowly.
- 3 Depress the accelerator pedal slowly to start off the vehicle.

Restarting the engine when it cannot be started

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



Caution

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

Stopping the engine

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

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

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

Notice

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

System safety mode

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

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



Caution

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



Warning

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



Caution

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

Smart key* & REKES key

Function of each button



Button	Short press	Long press	
		Front doors with safety window	All doors with safety window
1 Door lock	Door lock	Front door windows close control	All door windows close control
2 Unlocking door	Unlocking door (Only driver door unlocked when safety unlock set)	Front door windows open control	All door windows open control
3 Panic	-	Panic (on/off)	
4 Headlamp	-	Low beam in vehicle power off	
5 Tailgate	Deactivated	Power tailgate operation (open/close)	
	-	Tailgate (lock/unlock)	

Locking the door

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

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

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

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

☞ Refer to "Folding/unfolding the outside rearview mirror" (p.3-66)

Notice

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



Caution

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

Unlocking the door (when the safety unlock is enabled)

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



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



4

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

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

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

☞ Refer to "Folding/unfolding the outside rearview mirror" (p.3-66)

What is safety unlock?

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

To set safety unlock

- From the main menu of the hypervisor control panel, select Vehicle Settings (🚗) → Door/Tailgate → Double Click Unlocking → Off or On.

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

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

Notice

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

Unlocking the door (when the safety unlock is disabled)

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



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

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

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

☞ Refer to "Folding/unfolding the outside rearview mirror" (p.3-66)

Activating/deactivating the panic mode

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

- When you press and hold down the Panic button (3), the hazard warning lamp blinks and the warning buzzer sounds for approximately 30 seconds.
- Pressing and holding down the Panic button (3) again stops the panic mode.

Headlamp (low beam) on

When the vehicle is turned off, pressing and holding the headlight button turns on the headlights (low beam) for a certain period of time.

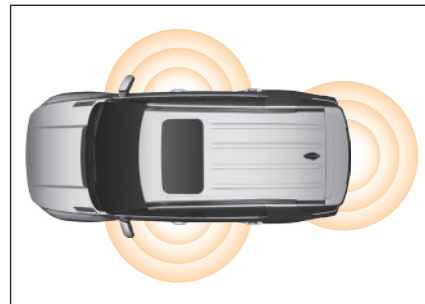
- If you press and hold the headlight button (4) while the vehicle is in theft deterrent mode, the headlights (low beam) will turn on for approximately 20 seconds.
- Press and hold the headlamp button (4) again to stop operation.

Opening/closing the tailgate (Type A)

- You can open or close the tailgate by pressing and holding down the Tailgate button (5).
- Pressing the Tailgate button (5) briefly stops the operation of the power tailgate.
- When you approach within approximately 1 m from the center of the tailgate with the smart key, the smart tailgate operates.
 Refer to "Tailgate" (p.3-33)
- For vehicles without the power tailgate, press and hold the tailgate button (5) to lock/unlock the tailgate.

Additional functions

Smart door auto lock (auto close)



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

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

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

 Refer to "Folding/unfolding the outside rearview mirror" (p.3-66)

Activating the smart door auto lock function (Activating from the hypervisor control panel)

- From the main menu of the hypervisor control panel, select Vehicle Settings  → Door/Tailgate → Smart Door Auto Locking → Off or On.

Notice

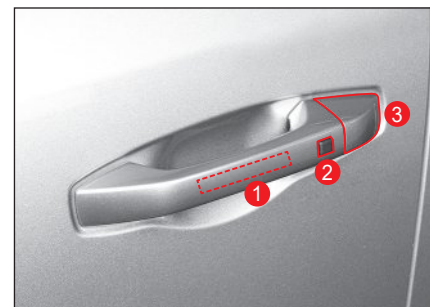
- The smart door auto lock is carried out only if the smart key is detected near the vehicle (in the outside antenna area) when you close the door.
- The detection of the smart key varies depending on the walking speed and surrounding environment.
- If the smart key is present inside the vehicle, the smart door auto lock function is not activated.
- If the smart key battery is depleted, the smart door auto lock function is canceled automatically. Replace the smart key battery and activate it again from  (Vehicle Settings) on the hypervisor control panel.
- Smart door auto lock is automatically disabled when you set it to long-term parking mode.



Caution

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

Locking/unlocking the door with the door handle switch



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

To lock with door handle switch

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

☞ Refer to "Folding/unfolding the outside rearview mirror" (p.3-66)

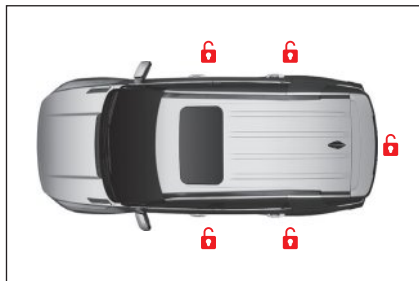
Notice

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

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

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

☞ Refer to "Folding/unfolding the outside rearview mirror" (p.3-66)



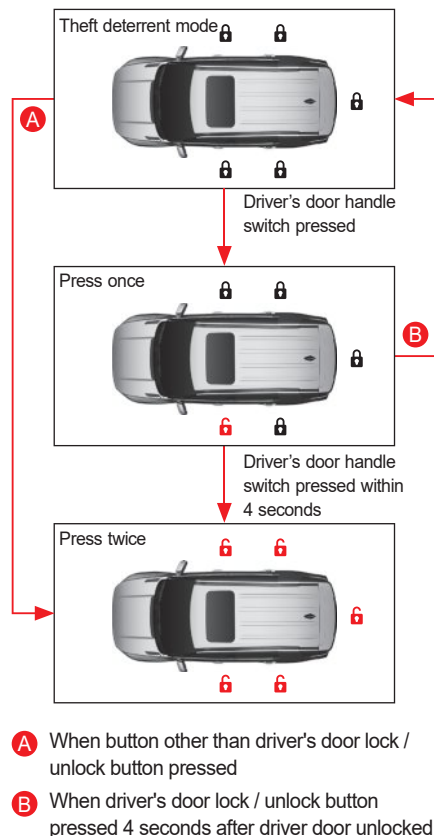
- 3 Open the driver seat door by pulling the door handle slowly.

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

- 1 Stay around the driver's door outside antenna area (within approx. 1m) with a smart key.
- 2 Press the door lock / unlock button (2).
 - Once the smart key authentication is completed, only the driver's door is unlocked.
 - The hazard warning lamp flashes once and buzzer sounds twice indicating that the theft deterrent mode is deactivated.
- 3 Open the door by pulling the door handle slowly.
 - Press the door lock / unlock button (2) one more time within 4 seconds with the driver's door unlocked if you want to unlock all the doors and tailgate.
 - All the doors and tailgate are unlocked.
 - The hazard warning lamp flashes once and buzzer sounds twice when all the doors are unlocked.

Notice

- When you press the passenger's door handle lock / unlock button with the safety unlock set, all the doors are unlocked.
- When you press the driver door lock / unlock button 4 seconds after the driver door is unlocked, all doors will be locked and the system enters the theft deterrent mode.
- From the main menu of the hypervisor control panel, select Vehicle Settings (🔧) → Door/Tailgate → Double click unlocking → Off or On.



Cautions for using smart key / REKES key

Warning

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

Caution

If the smart key does not operate or is not recognized

- When you lock the door with the door handle lock / unlock button or another smart key outside the vehicle with the smart key inside the vehicle, the smart key in the vehicle will be disabled temporarily (buzzer sounds).
To restore to the original function, deactivate the theft deterrent mode by using the smart key outside the vehicle or door handle lock / unlock button.

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

Using the smart key

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

Managing the smart key

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

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

Cautions for using door handle lock / unlock button

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

Using the emergency key

Unfolding/folding the emergency key

REKES key



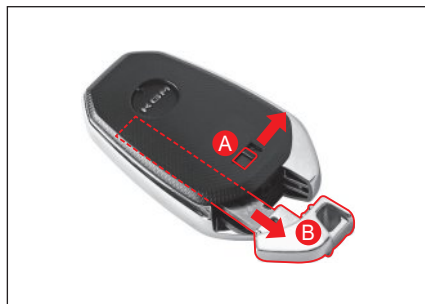
- Pull out the emergency key from the key body by pressing the Emergency key button on the smart key/rekes key.
- To fold the emergency key, fold the emergency key with the Emergency key button pressed.



Caution

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

Smart key

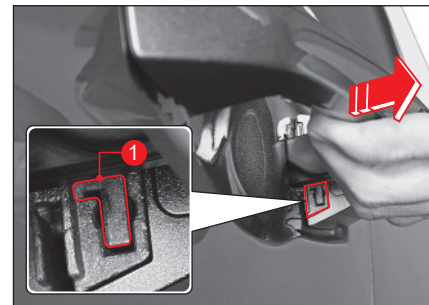


- Remove the emergency key (B) from its body while pressing the emergency key lock (A) at the smart key in the direction of the arrow.

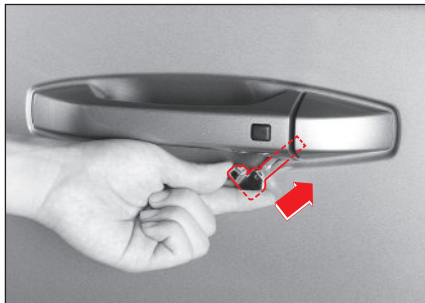
Locking/unlocking the door using the emergency key

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

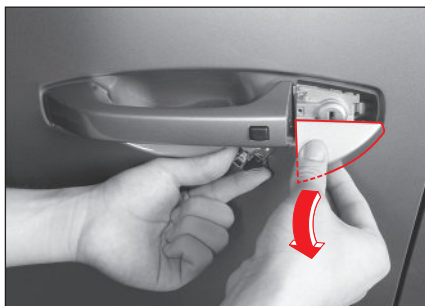
- 1 Pull the driver seat door handle in the arrow direction in a way that the Emergency key hole cover open button (1) is visible.



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



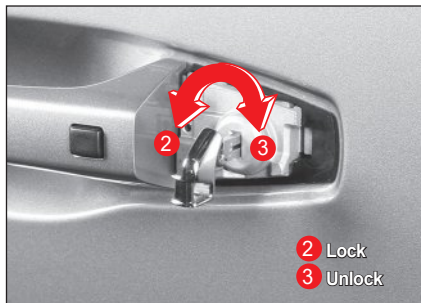
- 3 With the Emergency key hole cover open button (1) pressed, push down the top side of the emergency key hole cover to remove it.



! Caution

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

- 4 Insert the emergency key into the key hole and do as follows.
- To lock the door, turn it in the lock direction (2).
 - To unlock the door, turn it in the unlock direction (3).



Notice

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

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

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

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

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



Notice

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

Replacing the smart key/rekes key battery

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

Battery standard

One CR2032 battery

Rekes key

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



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

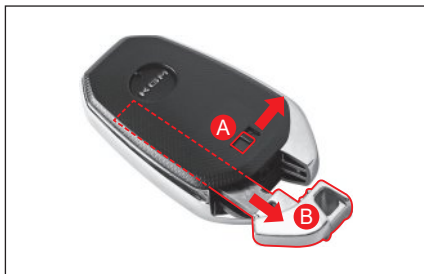


- 3 Return the cover from the back of the smart key back to its original position.

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

Smart key

- 1 Remove the emergency key (B) from its body while pressing the emergency key lock (A) at the smart key in the direction of the arrow.



- 2 When removing it, be careful not to scratch the cover of the smart key using a smallest flat-bladed screwdriver.



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



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



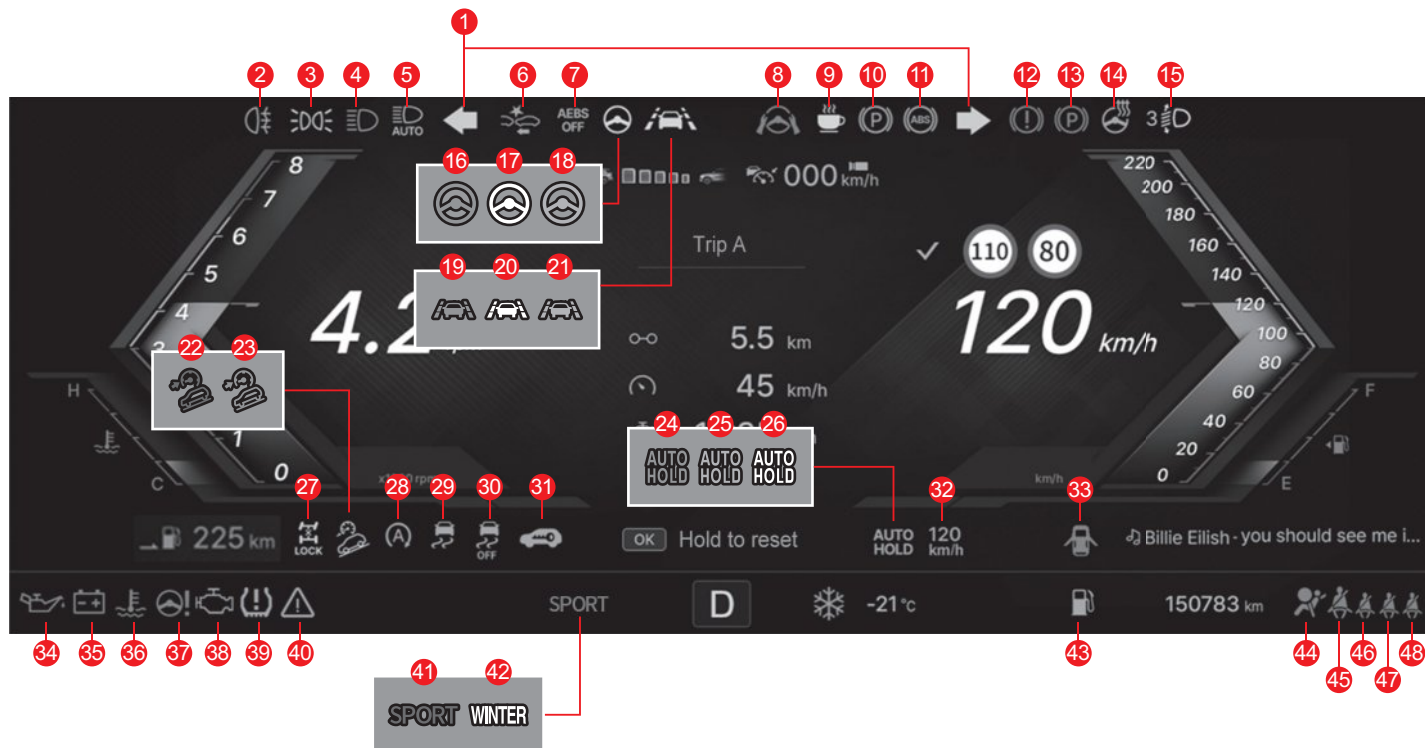
Caution

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

Instrument cluster

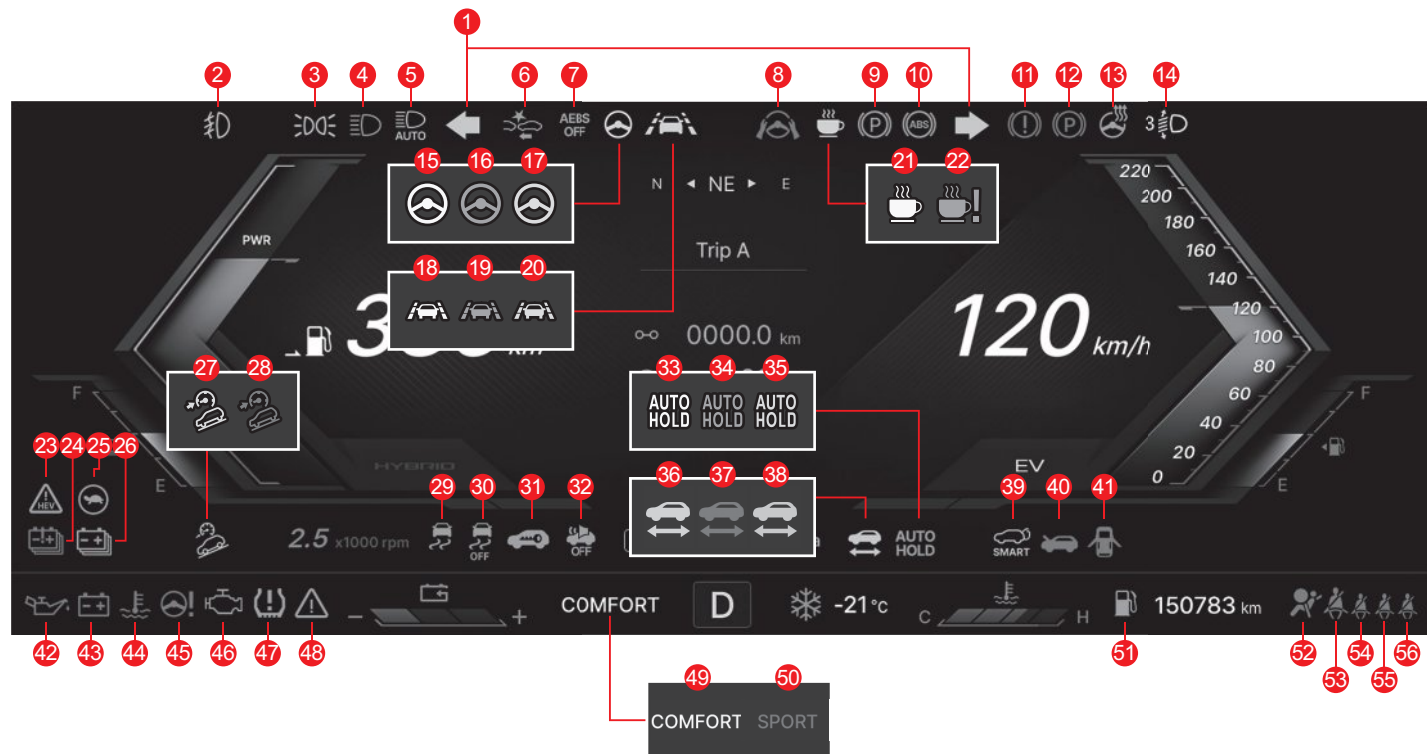
* This figure is provided by way of example only. Some details of the image may not correspond to the actual arrangement of your vehicle.

Type A



- 1 Turn signal lamp/hazard warning light
- 2 Rear fog lamp
- 3 Illumination ON indicator
- 4 High beam indicator
- 5 Smart High Beam (SHB) indicator
- 6 Autonomous emergency braking (AEB) warning lamp
- 7 Autonomous emergency braking (AEB) OFF indicator lamp
- 8 Hands-off warning lamp
- 9 Amber: Driver Attention Warning (DAW) indicator /failure warning lamp
- 10 Electronic parking brake (EPB) warning lamp
- 11 Anti-Lock brake system (ABS) warning lamp
- 12 Brake system warning lamp (EBD, regenerative braking, BBC)
- 13 Red: Brake warning lamp
- 14 Steering wheel heating ON indicator
- 15 Headlamp leveling indicator lamp
- 16 Green: Centering lane keeping assist (CLKA) ON indicator lamp
- 17 White: Centering lane keeping assist (CLKA) standby indicator lamp
- 18 Yellow: Centering lane keeping assist (CLKA) malfunction warning lamp
- 19 Green: Lane keeping assist ON indicator lamp
- 20 White : Lane keeping assist standby indicator lamp
- 21 Yellow: Lane keeping assist malfunction warning lamp
- 22 Green: Hill descent control (HDC) ON indicator lamp
- 23 Red: Hill descent control (HDC) warning lamp
- 24 Green: AUTO HOLD indicator lamp
- 25 White: AUTO HOLD standby indicator lamp
- 26 Yellow: AUTO HOLD warning lamp
- 27 4WD LOCK indicator and 4WD CHECK
- 28 ISG indicator/warning lamp and ISG OFF indicator lamp
- 29 Electronic stability control (ESC) ON indicator/warning lamp
- 30 Electronic stability control (ESC) OFF indicator lamp
- 31 Immobilizer/Smart key warning lamp
- 32 Over speed warning lamp
- 33 Door ajar warning lamp
- 34 Engine oil pressure warning light
- 35 Charge warning lamp
- 36 Engine overheat warning lamp
- 37 Electric power steering (EPS) warning light
- 38 Engine CHECK warning lamp
- 39 TPMS warning lamp
- 40 Master symbol
- 41 SPORT mode indicator
- 42 WINTER mode indicator
- 43 Low fuel level warning lamp
- 44 Air bag warning lamp
- 45 Seat belt reminder warning lamp (driver/passenger)
- 46 Seat belt reminder warning lamp (rear left)
- 47 Seat belt reminder warning lamp (rear center)
- 48 Seat belt reminder warning lamp (rear right)

Type B



- 1 Turn signal lamp/hazard warning light
- 2 Front fog lamp
- 3 Illumination ON indicator
- 4 High beam indicator
- 5 Smart High Beam (SHB) indicator
- 6 Autonomous emergency braking (AEB) warning lamp
- 7 Autonomous emergency braking (AEB) OFF indicator lamp
- 8 Hands OFF warning lamp
- 9 Yellow: Electronic parking brake (EPB) warning lamp
- 10 Anti-Lock Brake System (ABS) warning lamp
- 11 Brake system warning lamp (EBD, regenerative braking, BBC)
- 12 Parking brake ON indicator (Red)
- 13 Steering wheel heating ON indicator lamp
- 14 Headlamp angle indicator
- 15 White: Centering lane keeping assist (CLKA) standby
- 16 Yellow: Centering lane keeping assist (CLKA) malfunction warning lamp
- 17 Green: Centering lane keeping assist (CLKA) ON
- 18 White : Lane keeping assist standby indicator lamp
- 19 Yellow: Lane keeping assist malfunction warning lamp
- 20 Green: Lane keeping assist ON indicator lamp
- 21 Driver attention alert (DAW) indicator lamp
- 22 Driver Attention Warning failure warning lamp
- 23 HEV warning lamp
- 24 High voltage battery failure warning lamp
- 25 Power Down
- 26 High voltage battery level warning lamp
- 27 Green: Hill descent control (HDC) ON indicator lamp
- 28 Red: Hill descent control (HDC) warning lamp
- 29 Electronic Stability Control (ESC) ON indicator/warning lamp
- 30 Electronic Stability Control (ESC) OFF indicator lamp
- 31 Immobilizer/Smart key warning lamp
- 32 Virtual Engine Sound System (VESS) warning lamp
- 33 White: AUTO HOLD standby indicator lamp
- 34 Yellow: AUTO HOLD warning lamp
- 35 Green: AUTO HOLD indicator lamp
- 36 Red: Unable to drive
- 37 Green: driving possible
- 38 White : driving standby
- 39 Smart tailgate enabled indicator
- 40 Hood open warning lamp
- 41 Door ajar warning lamp
- 42 Engine oil pressure warning light
- 43 Low voltage battery warning lamp
- 44 Engine overheat warning lamp
- 45 Electric Power Steering (EPS) warning light
- 46 Engine CHECK warning lamp
- 47 TPMS warning lamp
- 48 High voltage warning lamp
- 49 COMFORT mode indicator
- 50 SPORT mode indicator
- 51 Low fuel level warning lamp
- 52 Air bag warning lamp
- 53 Seat belt reminder warning lamp (driver/passenger)
- 54 Seat belt reminder warning lamp (rear left)
- 55 Seat belt reminder warning lamp (rear center)
- 56 Seat belt reminder warning lamp (rear right)

Driving Information Display

Engine RPM



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

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

Notice

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

Driving Speed



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

Caution

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

Over speed warning light (GCC only)

120
km/h

Sounds warning chime 5 times initially

Engine Coolant Temperature



This gauge indicates the engine coolant temperature.



Caution

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

Fuel gauge



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

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

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

Warning

- Be sure to stop the engine when refueling.

Caution

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

Total mileage

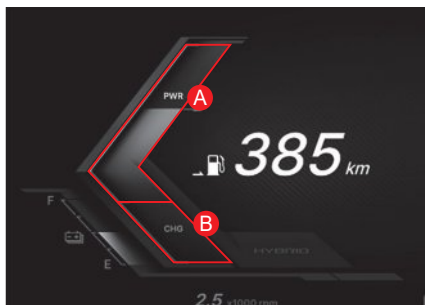


The total mileage of the vehicle is displayed in kilometers. The maximum mileage to be displayed is 999999 km.

Notice

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

PWR/CHG gauge



Displays the motor power consumption and the charge/discharge status of the regenerative braking brake's electric energy.

- PWR (A)

It displays the power used by the motor when accelerating, and the gauge moves up as the power consumption increases.

- CHG (B)

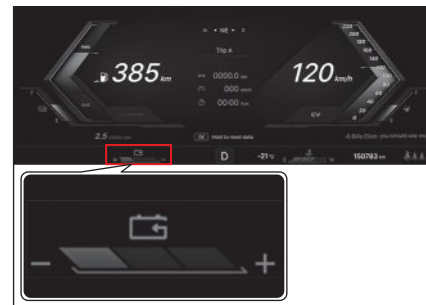
When decelerating, it displays the power being charged through regenerative braking, and the gauge moves down as the amount of charge increases.

High voltage battery charge gauge



Indicates the state of charge of the high-voltage battery (drive battery).

Display of the regenerative brake stage



When using regenerative braking, the current regenerative braking setting level is displayed here.

You can use the paddle shift lever to set it to 0-3, SMART levels.

The regenerative braking system can be adjusted to 0, 1, 2, 3, and SMART levels.

☞ Refer to "What is a regenerative braking system?" (p.1-6)

Position of gear shift lever



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

Gear shift point indicator in manual mode



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

^M3 This indicates the most appropriate timing for shifting to the 4th gear when the vehicle travels in 3rd gear.

Notice

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

Manual transmission display



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

^M3 This indicates the most appropriate timing for shifting to the 4th gear when the vehicle travels in 3rd gear.

Notice

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

Driving range



It calculates the remaining fuel and the remaining capacity of the high-voltage battery and displays the distance the vehicle can travel.

The display range is 0 to 1,500 km, and if the remaining range is 50 km or less, it turns orange, and if it is 0 km, the “—” indicator appears.



Caution

- The driving range may vary depending on the vehicle's system load, the driver's patterns, and road conditions such as uphill and downhill slopes.
- The driving range is a value displayed after the calculation process and varies depending on the situation, such as the use of the air conditioner and heater.
- Use the driving range as a reference only, and check the charge gauge and fuel gauge of the drive battery to charge the fuel in advance.

Ambient temperature



Displays the current ambient temperature.

The display range is -40°C to 87.5°C, and the ICE warning symbol (A) is displayed when the temperature is below 3°C.

Warning lights and indicators

Seat belt warning lamp



- ❶ Warning lamp for driver and front passenger
- ❷ Rear (left) seat warning lamp
- ❸ Rear (center) seat warning lamp
- ❹ Rear (right) seat warning lamp

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

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

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

Air bag warning lamp



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

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

☞ Refer to "Air bag**" (p.2-20)

Engine oil pressure warning light



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

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

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

☞ Refer to "Replenishment" (p.6-16)

Caution

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

Charge warning light



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



Caution

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

Notice

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

Immobilizer/smart key warning light



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



Caution

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

Engine overheat warning lamp



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

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

☞ Refer to "When the engine is overheated so that the warning light turns on" (p.5-9)



Caution

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

Electric power steering warning light



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

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



Caution

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

Notice

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

Parking brake ON indicator (Red)



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

ABS (Anti-Lock Brake System) warning light



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

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



Warning

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

Notice

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

Brake system warning lamp



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

This warning light comes on when the EBD system, regenerative braking system, or BBC system is faulty or when the brake fluid level is low.

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



Warning

- If the EBD warning light turns on, have your vehicle checked and serviced at a KGM Authorized Service Center immediately.
- If the EBD warning light turns on, the EBD function as well as the ABS function do not operate.
- Driving the vehicle continuously with insufficient brake fluid lowers the brake performance since the pressure of brake fluid cannot be transferred normally.
- Brake pedal effort may be more than normal.
- Braking distances may be longer than normal.
- The vehicle may become unstable during hard braking.

Notice

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

- Turn on: When driving the vehicle at a speed of approximately 10 km/h or less
- Blink: When driving the vehicle at a speed of approximately 10km/h or higher for 2 seconds or more
- EBD (Electronic Brake-force Distribution)
- BBC (Base Brake Control)

Electronic Parking Brake (EPB) warning light (Orange)



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

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



Warning

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

AUTO HOLD indicator/warning light

AUTO HOLD

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

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

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

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



Warning

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

Engine check indicator



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

This warning light comes on when there is an abnormality in various engine sensors and devices, including engine electronic control (including automatic transmission), emission control, and fuel supply devices (fuel cap, fuel tank, fuel leakage, and oil leakage). If the corresponding warning light comes on while driving, immediately have the vehicle inspected and serviced at the nearest authorized service center.

If there is an abnormality in some of the engine's electronic control units, the engine may not start.

If the Check Engine warning light comes on while driving or intermittently, have the vehicle inspected and serviced at our nearest authorized service center.



Warning

- If the engine check indicator turns on when you stop the engine, refuel and drive the vehicle again due to an empty fuel tank, the power output may decrease while driving for a certain distance (approximately 30 km).
- If the engine check indicator turns on while driving or occasionally, have your vehicle checked and serviced at a KGM Authorized Service Center.
- If the engine check indicator turns on, the driving performance of the engine may decrease or the engine may stall. This symptom indicates that the vehicle enters the system safety mode in order to protect the vehicle systems. In such case, have your vehicle checked and serviced at a KGM Authorized Service Center.
- If you continue to drive with the Check Engine warning light on, the exhaust gas will increase due to reduced engine power, engine shutdown, and increased fuel consumption, which can cause serious damage to the exhaust gas reduction device and result in sanctions related to exhaust gas regulations. If the corresponding warning lamp is turned on, have the vehicle checked and serviced at our nearest authorized service center.

- If you do not completely close the fuel cap after refueling, the Check Engine warning light may come on due to fuel leakage. This is not a vehicle malfunction, and the warning light will turn off when you re-close the fuel cap until you hear a 'click' sound. However, if the Check Engine warning light does not go off even after you re-close the fuel cap, have the vehicle checked and serviced at our nearest authorized service center.
- If you refuel with the engine started, the Check Engine warning light may come on.

Steering wheel heater indicator*



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

Notice

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

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



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

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



Caution

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

Electronic stability control system (ESC) OFF indicator



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

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

☞ Refer to "When it is necessary to deactivate the ESC function" (p.4-135)

Low fuel level warning light



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

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

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

☞ Refer to "Fuel inlet" (p.3-43)

Notice

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

TPMS warning light



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

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

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



Warning

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

Autonomous Emergency Braking (AEB) warning light



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

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

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

☞ Refer to "Autonomous Emergency Braking (AEB)*" (p.4-152)

Autonomous Emergency Braking (AEB) OFF indicator

AEBS OFF

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

When the AEBS is set deactivated, the AEBS indicator turns on, stopping the AEBS operation.

Hill Descent Control (HDC) ON indicator/warning light



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

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

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

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

☞ Refer to "Hill Descent Control (HDC)" (p.4-136)



Caution

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

LKA (LDW) indicator / warning lamp*



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

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

☞ Refer to "LDW (Lane Departure Warning)*" (p.4-160)

☞ Refer to "LKA (Lane Keeping Assistance)*" (p.4-164)



Warning

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

Centering lane keeping assist (CLKA) indicator / warning lamp



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

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

☞ Refer to "Centering Lane Keeping Assist (CLKA)" (p.4-169)



Warning

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

Illumination ON indicator



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

Front fog lamp ON indicator*



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

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

Rear fog lamp ON indicator*



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

SHB indicator*



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

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

 Refer to "Smart High Beam (SHB)*" (p.3-51)



Caution

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

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

High beam indicator



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



Warning

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

Turn signal/hazard warning lamp



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

COMFORT mode indicator (HEV)

COMFORT

Lightly touch the Driving Mode button to select COMFORT (everyday driving) mode, and its indicator lights up.

- Touching the Driving Mode button briefly or long enough changes the mode as follows:



ECO mode indicator (HEV)

ECO

Lightly touch the Driving Mode button to select ECO (economic driving) mode, and its indicator lights up.

- Touching the Driving Mode button briefly or long enough changes the mode as follows:



SPORT mode indicator (HEV)

SPORT

Lightly touch the Driving Mode button to select SPORT (sporty driving) mode, and its indicator lights up.

- Touching the Driving Mode button briefly or long enough changes the mode as follows:



WINTER / SPORT indicator lamp

WINTER SPORT

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

- NORMAL → SPORT → WINTER → NORMAL

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



Caution

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

Notice

- There is no indicator lamp for NORMAL driving.

Hands OFF warning lamp*



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

Notice

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

ISG indicator/warning lamp*



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

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



Caution

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

ISG OFF indicator*



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

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

4WD CHECK warning lamp*



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

- **ON**

- Turns on when there is a temporary error in the 4WD system or an error in the related system.
- A temporary error is resolved after a period of time or when the engine is restarted. In this case, the 4WD system is normal.

- **Blinks**

- The 4WD CHECK warning lamp blinks to prevent damage to the 4WD system due to overheating. If the warning lamp blinks, immediately stop using the accelerator pedal and allow the 4WD system to cool down sufficiently.
- If the 4WD system is sufficiently cool and the warning lamp no longer flashes, the 4WD system will operate normally.

4WD LOCK ON indicator*



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

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

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

Over speed warning light (GCC only)

120
km/h

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

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

Engine compartment hood open warning light



The engine compartment hood open warning light comes on when the engine compartment hood is open or not fully closed.



Warning

- Before driving, make sure that the engine compartment hood is completely closed. Driving with the engine compartment hood open can not only damage the vehicle, but also obstruct the driver's view, causing a serious accident.

Door open warning light



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



Warning

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

Master symbol



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

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

Notice

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

Smart tailgate indicator



This indicator comes on for about 4 seconds and then goes off when the START/STOP switch is turned ON.

The smart tailgate indicator can be turned on by selecting the item Smart Tailgate under Vehicle Settings menu of the hypervisor control panel.

- Hypervisor control panel setting (Indicator ON)

To use this indicator function, select the item Smart Tailgate under **Vehicle Settings**  → **Door / Tailgate from the hypervisor control panel**.

Driver Attention Alert (DAW) Warning Lamp



If inattentive driving by the driver is detected, the corresponding warning lamp comes on.

Distracted driving detection is based on driver patterns (zigzagging, sharp steering, reduced steering wheel torque, rapid deceleration, continuous driving).

- Orange warning lamp flashing: Driver Attention Alert activated



Warning

- The warning level resets when you turn off the ignition or open the driver's seat belt and driver's door.

Driver Attention Alert (DAW) Failure Warning Lamp



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

This warning lamp comes on when there is a fault in a unit, sensor, etc. related to the Driver Attention Alert system.

Virtual Engine Sound System (VESS) warning light (HEV)



This warning light is turned on when the VESS is malfunctioning.



Warning

- If the VESS warning light is illuminated, have the vehicle checked and serviced at a KG Mobility Dealer or KG Mobility Authorized Service Center.

Power down warning light (HEV)



This warning light comes on for about 4 seconds and then goes off when the START/STOP switch is turned ON.

For safety reasons, this warning light comes on and the motor power is limited when:

- the SoC of the drive battery is below a specified level or there is a sudden drop of the battery voltage.
- the temperature of the drive motor or HV battery is too high or too low.
- there is a fault in the cooling system.
- there is a problem which makes it impossible to drive normally.



Warning

- Do not abruptly drive off or sharply accelerate vehicle when the power down warning light is ON.
- If the SoC of the drive battery is low, the power down warning light comes on and the motor power is limited. Charge the battery immediately when this warning light is illuminated. Otherwise, the vehicle could descend backward or driving forward will be difficult on a steep hill.

HV battery level warning light (HEV)



This warning light comes on when the SoC of the HV battery is low.



Warning

- If the HV battery level warning light is illuminated, charge the battery immediately at a charging station.
- Charging the battery immediately is necessary, because when the HV battery level warning light is turned on, the DTE is around 20 km. Please keep in mind that the DTE value may vary depending on the driving conditions.

HV battery fault warning light (HEV)



This warning light comes on when there is a fault in the units or sensors related to the HV battery control system.



Warning

- If the HV battery warning light is turned on, have the vehicle checked and serviced immediately at a KG Mobility Dealer or KG Mobility Authorized Service Center.

HEV high voltage warning lamp (HEV)



If there is an abnormality in the hybrid high-voltage system, control system, or related sensors, this warning light will turn on.



Warning

- If the corresponding warning light comes on while driving, or if the warning light does not turn off after starting the engine, immediately have the vehicle inspected and serviced at the nearest authorized service center.

Ready indicator lamp (HEV)



The Ready indicator turns green when the engine is started.

It indicates that the vehicle is in a drivable condition and shows the driving status according to the color of the indicator light after starting the engine.

- Green light on: normal driving possible
- White light on: IGN ON status (unable to drive)
- Red flashing: system failure (unable to drive)



Warning

- If the green indicator light does not turn on or the red warning light flashes, please have the product inspected and serviced at the nearest authorized service center.

EV operation mode indicator lamp (HEV)

EV

This indicator light turns on when the vehicle is capable of driving solely with the drive motor.

HYBRID operation mode indicator lamp

HYBRID

The green indicator light turns on when the engine is running in driving mode.

Headlamp angle indicator



The headlamp angle can be adjusted based on the front/rear tilt of the vehicle. The current headlamp angle is always displayed on the instrument panel.

Indicator panel on instrument cluster

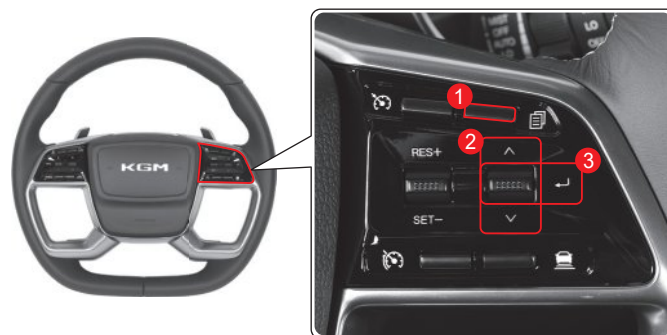
Main menu

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

- 1 Press the  (menu) button on the right side of the steering wheel.
 - The display moves to the main menu list.
- 2 Move to the desired submenu by raising or lowering the  (moving) lever.
- 3 Pressing and holding down the  (selection) button resets the driving information of the vehicle.

Notice

- Press the  (menu button) for 10 seconds to reboot hypervisor.



Button and lever	Operation	Function
 Menu button	Press briefly	• Move to the main menu
 Moving lever	Raise/lower briefly	• Move to the submenu (mode)
 Selection button	Press briefly Press and hold down	• Select menu • Reset the driving information of the vehicle

Main menu list

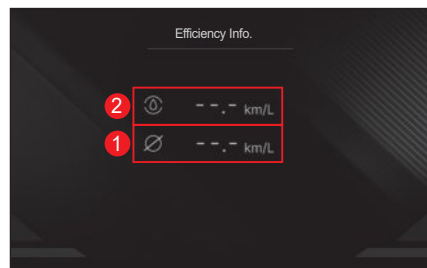
Main menu	Description
 TRIP computer info	• Trip A (Mileage/average speed/driving time) • Trip B (Mileage/average speed/driving time) • After departure (After departure/driving time/fuel consumption) • Efficiency info. (average / instant) • ISG cumulative time display (AUTO STOP) • Tire pressure (TPMS) display
 Driving assistance info	• Displays operation status of driving assist system • Displays driver attention warning
 Navigation info	• Display linked to navigation
 AV info	• Display linked to AV

HEV

Main menu	Description
 TRIP computer info	• Fuel economy info (average / instantaneous) • Trip A (distance driven/average speed/driving time/average fuel efficiency) • Trip B (distance driven/average speed/driving time/average fuel efficiency) • After departure (distance driven/driving time/average fuel efficiency) • Energy flow chart • Tire pressure (TPMS) display • Vehicle alerts (current vehicle alert status)
 Driving assistance info	• Displays operation status of driving assist system
 Navigation information	• Display linked to navigation
 AV info	• Display linked to AV

Trip computer information

Distance to empty/average fuel economy/ Instantaneous fuel economy



1 Average fuel economy

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

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

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

2 Instantaneous fuel economy

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

The display range is between 0 and 30 km/l. (0.0 ~ 50.0 MPG)

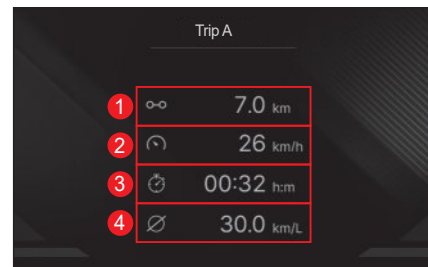
Resetting the average fuel economy

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

The average fuel economy is reset and “--.--” is displayed, and when the vehicle is driven for a certain distance, the average fuel economy is displayed.

Notice
You can set the fuel economy to reset according to the vehicle condition (when starting the engine, when refueling). To change the settings for average fuel economy auto reset move to  (Vehicle Settings) → Dashboard Settings & Info → Auto Reset of Average Fuel Economy → OFF/Resetting when refueling/Resetting when starting the engine

Mileage/average speed/driving time



1 Mileage (A/B)

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

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

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

2 Average speed (A/B)

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

3 Driving time (A/B)

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

4 Average fuel consumption

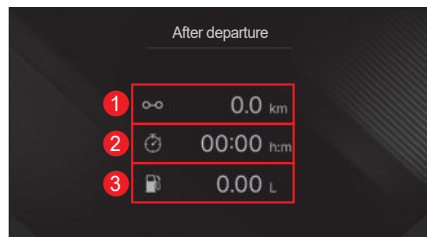
It displays the average fuel efficiency corresponding to Trip A and Trip B.

Resetting the mileage/average speed/driving time

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

The driven distance is reset to "0.0", the average speed is reset to "—", and the driving time is reset to "0:00".

Driving information after departure



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

1 After departure

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

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

2 Driving time

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

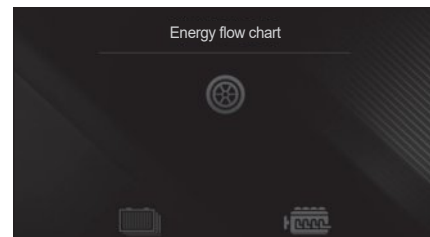
3 Fuel consumption

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

Resetting the driving information after departure

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

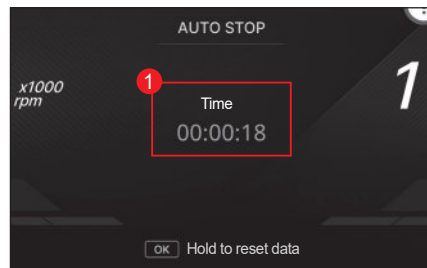
Energy flow chart (HEV)



The energy flow diagram shows the status of vehicle operation (drive motor and engine) and charging (regenerative braking and engine operation).

- When the drive motor is operating
Energy flow from high-voltage battery to wheel
- When engine is in operation (running)
Energy flow from engine to wheel
- When engine is in operation (charging)
Energy flow from engine to high-voltage battery
- Regenerative braking (drive motor)
Energy flow from wheel to high-voltage battery
- Regenerative braking (drive motor + engine)
Energy flow from engine & engine to high-voltage battery

ISG cumulative time



1 ISG cumulative time

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

Reset of ISG cumulative time

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

The ISG cumulative time is reset as "00:00:00".

TPMS status



A message indicating the status of tire pressure is displayed.

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

 Refer to "Tire pressure monitoring system (TPMS)*" (p.2-29)

Notice

- **Approximately 15 seconds after entering the tire pressure mode, it will automatically switch to "Mileage/average speed/driving time" mode.**

Driving assist Menu

Driving assist



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

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

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

- Lane Departure Warning (LDW)
- Lane Keeping Assist (LKA)
- Centering Lane Keeping Assist (CLKA)
- Hands-off display
- Auto cruise
- Adaptive cruise control (ACC)
- Autonomous Emergency Braking
- Intelligent Speed Assistance

AV screen



- Bluetooth hands-free mode
- Bluetooth music
- Car player
- USB music
- FM
- AM / AM2
- Smart Mirroring
- DAB / DAB1 / DAB2
- DAB Radio

TBT (Turn By Turn)



The navigation screen information is displayed partially in linkage with the navigation system.

If the system is not interlocked with the navigation system.

General Settings

- General settings may have different menu configuration rankings depending on the specification (all settings are reset to factory default).
- To view the General settings, enter General Settings in the hypervisor.

General Settings Menu	Level 1	Level 2	Level 3
Display	Illumination	● Auto ○ Daylight ○ Night ○ Vehicle Sync □ Navigation Sync	-
	Background image settings	● Background image 1 ○ Background image 2 ○ Background image 3	-
	Split Screen Setting	● Auto ○ Fixed	-
	Top Menu Screen Setting	● Fixed ○ 5 seconds ○ 7 seconds ○ 10 seconds	
	Power OFF Screen Setting	○ Clock not displayed ● Digital (12 hours) ○ Digital (24 hours)	
Sound	Fadar/Balance	Sets sound position	-
	EQ	Sets EQ(Treble/Midrange/Bass)	-
	Other Settings	■ Beep Sound □ Reverse Sync Volume □ Maintaining the current volume	-

General Settings Menu	Level 1	Level 2	Level 3
Clock	Time	Sets the time	-
Language	Language	Sets H/U Languages (English and other 16 languages) ☐ Reset	-
System	Version	-	-
	Storage Space	-	-
	AV Reset	☐ Confirm ☐ Cancel	-
	System Update	☐ Confirm ☐ Cancel	-
	Navigation Map Update	☐ Confirm ☐ Cancel	-
	Navigation	☐ Manual Start ☒ Auto Start ☐ Reset	-

Vehicle Settings

- Vehicle settings may have different menu configuration rankings depending on the specification (all settings are reset to factory default).
- To view the vehicle settings, enter Vehicle Settings in the hypervisor.

Vehicle settings menu	Level 1	Level 2	Level 3
Driving Assistance	Forward Safety Settings	Forward Collision Warning	○ SLOW ● NORMAL ○ FAST
		Autonomous Emergency Braking (AEB)	○ OFF ● ON
		Warning Sounds	○ OFF ● ON
	LDW & LKA Setting	Warning Sounds	○ OFF ● ON
	Intelligent Cruise Control	Adaptive Cruise Level	○ COMFORT ● NORMAL ○ DYNAMIC
	Road speed limit warning	Road speed limit warning	○ OFF ● ON
		Warning Sounds	○ OFF ● ON

Vehicle settings menu	Level 1	Level 2	Level 3
Driving Assistance	Driver Attention Warning	Front Vehicle Departure Warning	○ OFF ● ON
		Safety Distance Warning	○ OFF ● ON
		Warning Sounds	○ OFF ● ON
	Rear Side Warning and Collision Assist	○ OFF ○ Collision Warning ● Collision Assist	-
	Rear Cross Traffic Warning & Collision Assist	○ OFF ○ Collision Warning ● Collision Assist	-
	Safe Exit Warning	○ OFF ● ON	-
	Speed Limit Warning	○ OFF ● ON	-
Dashboard Settings & Info	Welcome \ Good-bye sound	● OFF ○ ON	-
	Auto reset of average fuel economy	● OFF ○ Resetting when refueling ○ Resetting when starting the engine	-

Vehicle settings menu	Level 1		Level 2	Level 3
Dashboard Settings & Info	Fuel economy unit	Kilometers	● km/L ○ L/100km	-
		Miles	● MPG (US) ○ MPG (UK)	-
	Temperature unit		● °C ○ °F	-
	Tire Air pressure units		● Psi ○ kPa ○ bar ○ kgf/cm²	-
	Display Settings		● Auto change ○ NORMAL ○ SPORT	
	Warning Sound Type		● Basic Sound ○ Nature Sound ○ Classic ○ Trendy ○ Korean Style ○ Luxury	
	Warning Sound Volume		○ Step 1 (80) ○ Step 2 (90) ● Step 3 (100)	
Climate	Auto Ventilation		○ OFF ● ON	-
	Dehumidification		○ OFF ● ON	-

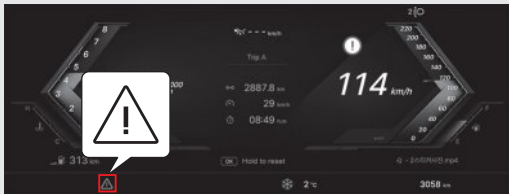
Vehicle settings menu	Level 1	Level 2	Level 3
Door/Tailgate	Auto Locking	○ OFF ● While driving ○ When shifting to R, N or D gear	-
	Auto Unlocking	○ OFF ○ When the engine turns off ● When shifting to P gear	-
	Auto Locking Speed Settings	● 10km/h (6.2MPH) ○ 20km/h (12.4MPH) ○ 30km/h (18.6MPH) ○ 40km/h (24.9MPH) ○ 50km/h (31.1MPH)	-
	Locking/Unlocking Alert Sounds	○ OFF ● ON	-
	Double click unlocking	○ OFF ● ON	-
	Smart door Auto locking	○ OFF ● ON	-
	Power tailgate	○ OFF ● ON	-
	Smart Tailgate	○ OFF ● ON	-

Vehicle settings menu	Level 1	Level 2	Level 3
Light	Leaving home headlamp	● OFF ○ 10 seconds ○ 20 seconds ○ 30 seconds	-
	Coming home headlamp		-
	Interior Lighting	Default color	Setting mood lamp color Setting mood lamp brightness [+] [-]
		User color	Setting mood lamp color Setting mood lamp brightness [+] [-] 2 colors recently selected by user
		Usage settings	○ OFF ● ON □ Daylight OFF

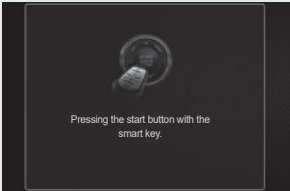
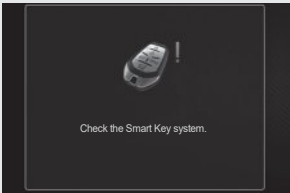
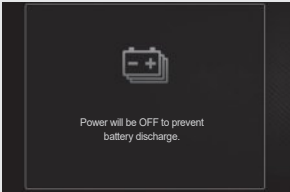
Vehicle settings menu	Level 1	Level 2	Level 3
Convenience features	Steering Wheel Alignment Alert	○ OFF ● ON	-
	Wiper Mode Display	○ OFF ● ON	-
	Auto Approach Welcome	○ OFF ● ON	-
	Long-Term Parking Mode	○ OFF ● ON	-
	Wireless Charging System	○ OFF ● ON	
	Number Plate Display	Steering wheel Alignment Alert	-
Virtual Engine Sound Type	Using Locking/unlocking Sounds	○ OFF ● ON	-
	Virtual Engine Sound Type	○ Virtual Engine Sound 1 ● Virtual Engine Sound 2	-
Reset settings	Confirm / cancel	-	-

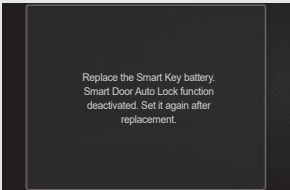
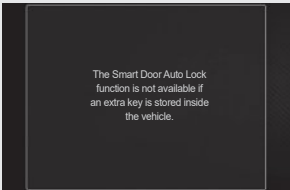
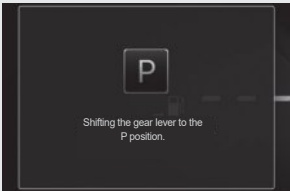
Message on the display of the instrument cluster

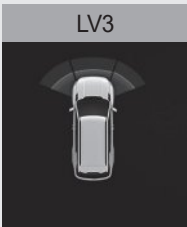
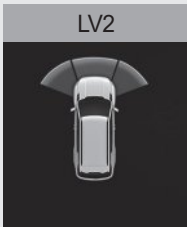
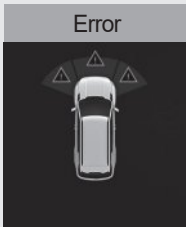
The images in the below messages are based on the standard instrument cluster for visibility and depend on the instrument panel specifications.

Item	Message	Activation conditions
Welcome message and sound	-	- If you tick the box at Dashboard Settings & Info → Welcome & Goodbye Sound display under  (Vehicle Settings) in the hypervisor panel, this message is displayed for 4 seconds when the theft deterrent mode is deactivated and the driver door is open and closed. - When you change the START/STOP switch to the ON status while the message is being displayed, the message disappears but the sound is played to the end.
ICE warning light		- The ICE warning symbol is displayed when the ambient temperature is 3°C or less. - ICE warning symbol is turned off when the ambient temperature is 5°C or higher.
Vehicle warning log		- You can see the vehicle warning messages from the instrument cluster. - When the warning message is available at the vehicle, the custom symbol is changed to the master symbol. - When the warning message is not available, the corresponding item is not displayed.

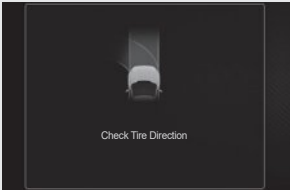
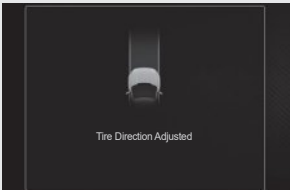
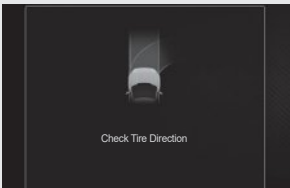
Item	Message	Activation conditions
Smart key warning	 The smart key is inside the vehicle.	When you about to close the door with another authenticated smart key or door handle switch while all the doors are closed and the authenticated smart key is inside the vehicle, this message will be displayed for 5 seconds.
	 The smart key is not inside the vehicle.	If no smart key is in the vehicle with the START/STOP switch in the ON status or when the vehicle is running, this message is displayed.
	 Replace the Smart Key battery.	If the battery level of the smart key is low with the auto lock function disabled, this message is displayed for approximately 5 seconds.
	 Depressing the brake pedal and starting the engine.	- For the vehicles with A/T, when the ignition switch is turned to ACC position a second time by pressing the ignition switch continuously without depressing the brake pedal, this message is displayed for about 5 seconds. - This message informs the driver that the vehicle can be started only if the START/STOP switch is pressed with the brake depressed.

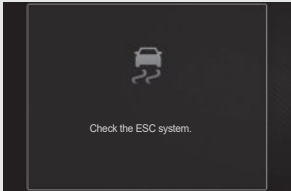
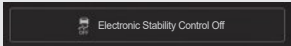
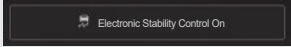
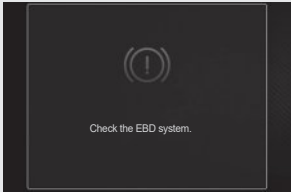
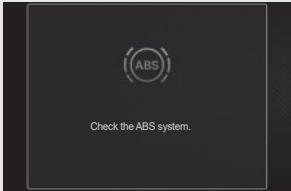
Item	Message	Activation conditions
Smart key warning		If no authenticated smart key is detected when the START/STOP switch is pressed, this message is displayed for approximately 5 seconds.
		- If the vehicle power control from the smart key module or the START/STOP switch is abnormal or an incorrect signal or no signal is received after the smart key is authenticated, this message is displayed for approximately 5 seconds. - If the message persists, visit a nearby KGM Authorized Service Center.
		- This message is displayed for approximately 5 seconds when starting the vehicle with the electronic gear selector lever in any position other than P (park). - This message informs the driver that the electronic gear selector lever should be in P position before pressing the START/STOP switch.
		This message is displayed for approximately 5 seconds in order to prevent the vehicle battery from being depleted when the START/STOP switch in the ACC status is maintained for 12 minutes or more or the driver seat door is opened with the START/STOP switch in the ACC status.

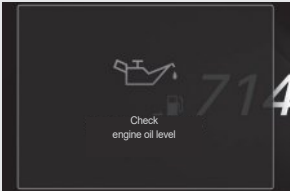
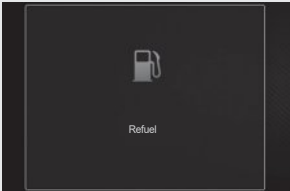
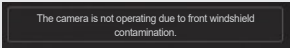
Item	Message	Activation conditions
Smart key warning	 Replace the Smart Key battery. Smart Door Auto Lock function deactivated. Set it again after replacement.	• If the battery level of the smart key is low with the auto lock function enabled, this message is displayed for approximately 5 seconds. • If you attempt to set the auto lock function using the smart key when the battery level of the smart key is low, this message is displayed for approximately 5 seconds. • If the message is displayed, the auto lock is disabled. After replacing the smart key battery, tick the box at Door / Tailgate → Smart door auto locking under  (Vehicle settings) in the hypervisor control panel.
	 The Smart Door Auto Lock function is not available if an extra key is stored inside the vehicle.	• If two or more authenticated smart keys are in the vehicle when a door is opened (excluding the hood and tailgate) after the vehicle is turned off, this message is displayed for approximately 5 seconds.
	 Shifting the gear lever to the P position.	• This message is displayed for about 5 seconds when the engine is started with the electronic gearshift lever not in the P (Parking) position. • This is a message to inform the driver that he or she must put the electronic shift lever in the P (parking) position and press the ignition switch.

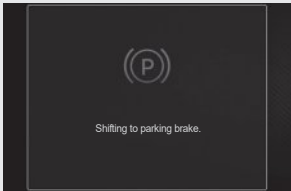
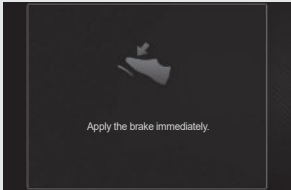
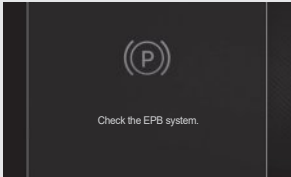
Item	Message	Activation conditions
Front/rear obstacle detection	If it is in the R (reverse) position LV3  LV2  LV1  LV0  Error  If it is in the D (driving) position LV3  LV2  Error 	• Rear PAS (Parking Assist System) (When the SBW (shift by wire) is placed in the R (reverse) position with the START/STOP switch in the ON status) – When you move the SBW (shift by wire) to the R (reverse) position, the warning buzzer sounds briefly once, and when an obstacle near the vehicle is detected, the position and distance from the obstacle are displayed in 4 levels (0~3). – In Level 1 of the rear PAS, the detection result of the front PAS is not displayed, and only the vehicle shape is displayed in Level 0 of the rear PAS. – When the obstacle detection sensor is abnormal, “▲” is displayed for the relevant sensor. • Front PAS (Parking Assist System) (When the SBW (shift by wire) is placed in the D (drive) position with the START/STOP switch in the ON status) – When an obstacle is detected in front of the vehicle, the position and distance from the obstacle are displayed in level 3 and level 2, and such position and distance are not displayed in Level 1 and level 0. – The front parking assist system is not activated when the vehicle speed is higher than 15 km/h. ☞ Refer to “Parking assist system*” (p.4-143) – When the obstacle detection sensor is abnormal, “▲” is displayed for the relevant sensor.

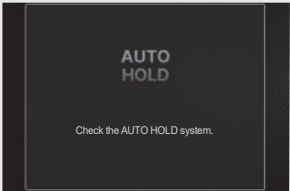
Item	Message		Activation conditions
Display of door/ hood/tailgate opening	Passenger door open 	Driver door open 	Displays which door is open.
	Rear left door open 	Rear right door open 	
	Hood open (flashing) 	Tailgate open (flashing) 	

Item	Message	Activation conditions
Display of tire alignment status	5 levels on the left 	• This message is displayed in level 1 to 5 according to the tire alignment status when the START/STOP switch is switched from the OFF status to the ON status. • This message is not displayed when the tire alignment status is level 0. • The message is displayed for 5 seconds up to level 2 and the message is displayed continuously until the condition is met for level 3 to 5. • This message is displayed only when the SBW (shift by wire) is in the P (parking) or the N (neutral) position.
	0 level 	
	5 levels on the right 	

Item	Message	Activation conditions
Electronic stability control (ESC) system warning		- If the ESC system is abnormal, the warning light turns on and this message is displayed 3 seconds after the vehicle is started. - If the message persists, visit a nearby KGM Authorized Service Center and have your vehicle checked and serviced.
Electronic Stability Control (ESC) ON/OFF	 	This message is displayed for approximately 5 seconds depending on the status of the ESC OFF switch.
EBD system warning		- If the EBD system is abnormal, the warning light turns on and the message is displayed 3 seconds later after the vehicle is started. - If the message persists, visit a nearby KGM Authorized Service Center and have your vehicle checked and serviced.
ABS system warning		- If the ABS system is abnormal, the warning light turns on and the message is displayed 3 seconds later after the vehicle is started. - If the message persists, visit a nearby KGM Authorized Service Center and have your vehicle checked and serviced.

Item	Message	Activation conditions
Engine oil level check		If the level of engine oil is insufficient or the engine oil pressure is abnormal, the warning light turns on and this message is displayed 3 seconds later after the engine is started.
Exterior lamp ON alert		This message is displayed if the exterior lamp is on when the vehicle is turned off and the driver seat door is opened.
Refuel warning		If the remaining level of fuel is insufficient, the warning light turns on and this message is displayed 3 seconds later after the engine is started.
Low fuel warning (possible to drive up to 30 km)		This message is displayed when the distance that can be traveled with current fuel level is approximately 30 km or less.
Autonomous Emergency Braking (AEB)		If the part of the windshield where the Front Camera Module (FCM) is installed is contaminated with dust so that the lanes, preceding vehicles or people cannot be recognized, this toast pop-up message is displayed for 5 seconds.

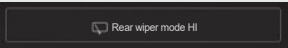
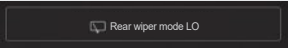
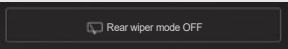
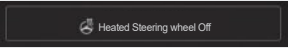
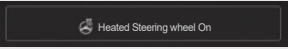
Item	Message	Activation conditions
Electronic Parking Brake (EPB)	 Close the doors, hood, and trunk, and fasten your seatbelt.	This message is displayed when you press the accelerator pedal with the condition for automatic release not met while the Electronic Parking Brake (EPB) is applied or the AUTO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

Item	Message	Activation conditions
Auto hold		• If the auto hold function is abnormal, the message is displayed. • If the message persists, visit a nearby KGM Authorized Service Center and have your vehicle checked and serviced.
		• This message is displayed when you operate the EPB switch without depressing the brake pedal for deactivating the AUTO HOLD function.
Safety distance warning		• This function is enabled when you tick the box at Driving Assistance → Driver Attention Warning → Safety distance warning under  (Vehicle Settings) in the hypervisor control panel. • The message is displayed when your vehicle is approaching the preceding vehicle.

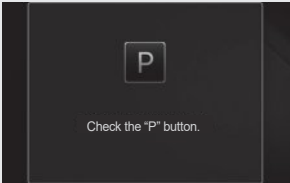
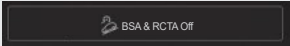
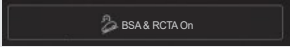
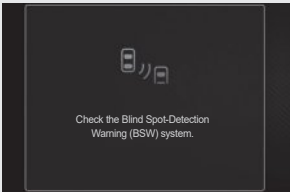
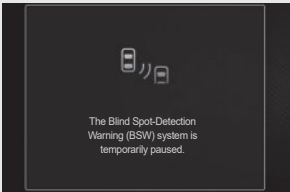
Safety Distance Warning (SDW)

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

Item	Message	Activation conditions
Hill Descent Control (HDC) ON/OFF	 Hill Descent Control Off  Hill Descent Control On	- This message is displayed for approximately 5 seconds according to the Hill Descent Control (HDC) ON/OFF status. - The color of the indicator changes according to the HDC operation status. - Green indicator turns on: The HDC is in ready status. - Green indicator blinks: The HDC is operating. - Red warning light turns on: The HDC system is overheated and abnormal.
HDC System	 Check the Hill Descent Control system.  Not in a condition to operate the Hill Descent Control function.	- If the Hill Descent Control (HDC) system is faulty, this message is displayed. - If the message stays on, have the system checked and serviced at a nearest KGM Authorized Service Center. - If the operating conditions of the HDC system are not met, this message is displayed.
Windshield wiper mode	 Front wiper mode AUTO  Front wiper mode HI  Front wiper mode LO  Front wiper mode OFF	The current status of the windshield wiper among 4 modes is displayed for approximately 5 seconds according to the position of the wiper operation lever.

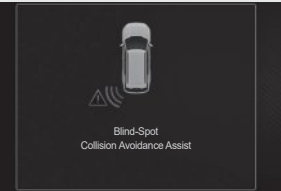
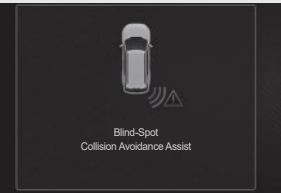
Item	Message	Activation conditions
Rear window wiper mode	  	The current status of the rear window wiper among 3 modes is displayed for approximately 5 seconds according to the position of the rear window wiper operation lever.
Steering wheel heater	 	The message is displayed for 5 seconds according to the steering wheel heater ON/OFF status with the START/STOP switch in the ON status or with the vehicle started.
Reminder from wireless phone charger		If any phone is on the wireless charging pad after the ignition is off (ignition switch in ACC or OFF position) while the wireless phone charger is operating with the ignition switch in ON position, a reminder message "The phone is on the wireless phone charger." is displayed on the instrument cluster. (However, reminder does not work when changing the ignition switch from the OFF position to ACC position even if the wireless phone charger is operating.)

Item	Message	Activation conditions
Shift By Wire (SBW)	 Check the gear lever.	- If there is a fault in the SBW system, this message is displayed. - If the message stays on, have the system checked and serviced at a nearest KGM Authorized Service Center.
	 Not in shifting conditions.	When operating the electric shift lever (SBW), the message is displayed if the shift condition is not met.
	 After parking, shift to the P position	If the vehicle is not completely stopped and the P (park) button is pressed, a corresponding message is displayed.
	 Depress the brake pedal and shift.	This message is displayed if the shift by wire is operated without the brake applied.

Item	Message	Activation conditions
Shift By Wire (SBW)		- This message is displayed when there is a fault in the shift by wire (SBW) button. - If the message stays on, have the system checked and serviced at a nearest KG Mobility Authorized Service Center.
Blind Spot-Collision Warning (BSW) system		This message is displayed for approximately 5 seconds according to the ON/OFF status of BSW system.
		
		- If the rear and side warning system is abnormal, this message is displayed. - If the message persists, visit a nearby KGM Authorized Service Center and have your vehicle checked and serviced.
		This message is displayed if the sensor cannot detect the rear, left and right sides with the BSW system activated. (When there are foreign materials on the outside or inside of the rear bumper, a trailer or other equipment is installed in the rear of the vehicle, the width of the road is wide, it snows or rains too much and etc.)

Item	Message	Activation conditions
Rear Cross Traffic Warning (RCTW)	 Rear Cross Traffic Warning	During Rear Collision Traffic Warning (RCTW) operation, a message is displayed when a vehicle is moved from the rear left/right side (risk of collision) is detected.
	 Rear Cross Traffic Warning	
	 Rear Cross Traffic Warning	

Item	Message	Activation conditions
Rear Cross Traffic Assist (RCTA)	 Please depress the brake pedal.	When the vehicle is reversing, a message is displayed if a vehicle approaching within the rear collision traffic assistance area detects a risk of collision. At this time, braking assistance is provided with a warning sound to support collision avoidance.
	 Please depress the brake pedal.	
	 Please depress the brake pedal.	

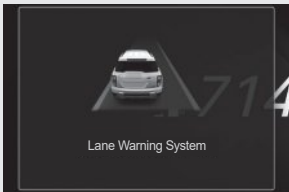
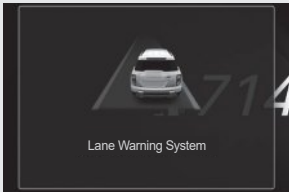
Item	Message	Activation conditions
Blind-Spot Collision Avoidance Assist	 Blind-Spot Collision Avoidance Assist	During Blind-Spot Collision Avoidance Assist (BSA) operation, if a collision risk is detected, a corresponding warning is displayed to perform braking assistance.
	 Blind-Spot Collision Avoidance Assist	

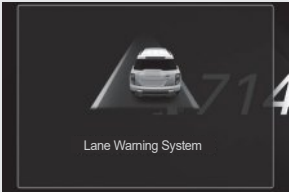
Item	Message	Activation conditions
Safety exit warning (SEW)		If you are about to open the door to leave the vehicle when a vehicle is approaching from the rear side, the vehicle exit alert system displays a message and generates a beep sound. However, it operates only when the SBW (shift by wire) is in P (park) or N (neutral) position.
		
		
Front vehicle start warning (FVSW)		This function is enabled when you tick the box at Driving Assistance → Driving Attention Warning → Front Vehicle Departure Warning → ON/OFF under  (Vehicle Settings) in the hypervisor control panel.

Front Vehicle Start Warning (FVSW)

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

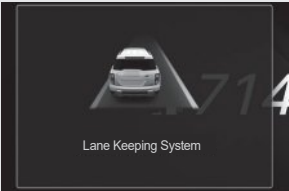
Item	Driving assistance	Message	Activation conditions
LDW (Lane Departure Warning)		-	Displayed when the lane departure warning system is disabled.
		-	The lane marker is shaded when the vehicle is driven at less than 40 kph (low speed conditions) or more than 155 kph (high speed conditions), or both lane lines are not detected.
		-	This message is displayed when the LDW is unavailable.
		-	- This message is displayed at all times if there is a malfunction with the Lane Departure Warning (LDW). - If the message stays on, have the system checked and serviced at our nearest authorized service center.

Item	Driving assistance	Message	Activation conditions
Lane departure warning (LDW) lane display area		-	Even though the left lane is detected only, the detected left lane will be displayed (green). (Pop-up messages will not be displayed.)
			If only the left lane is detected and the driver does not activate the turn signal, or if the driver turns on the right turn signal and the vehicle approaches the left lane, that lane flashes (green ↔ red) on the display.
		-	Even though the right lane is detected only, the detected right lane will be displayed (green). (Pop-up messages will not be displayed.)
			If only the right lane is detected and the driver does not activate the turn signal, or if the driver turns on the left turn signal and the vehicle approaches the right lane, that lane flashes (green ↔ red) on the display.

Item	Driving assistance	Message	Activation conditions
Lane departure warning (LDW) lane display area		-	If both lanes are detected, both detected lanes are displayed (green). (Pop-up messages will not be displayed.)
			When both lanes are detected and the driver is not using a turn signal, or when a vehicle approaches a lane, with a turn signal activated in the opposite direction from the direction of travel, the corresponding lane will blink (green ↔ red) on the display.
			

Item	Driving assistance	Message	Activation conditions
Lane keeping assistance (LKA)	 The display shows a top-down view of a car on a two-lane road. The text "Lane Keeping Off" is centered at the top. The speedometer on the left shows 714 km/h, and the tachometer on the right shows 0. The car is positioned in the center of the lane.	-	Displays when Lane Keeping Assist (LKAS) is disabled.
	 The display shows a top-down view of a car on a two-lane road. The text "Lane Keeping Standby" is centered at the top. The speedometer on the left shows 714 km/h, and the tachometer on the right shows 0. The car is positioned in the center of the lane, and the lane markings are shaded.	-	The lanes are shaded when the vehicle is driven at a low speed of less than 40km/h or at a high speed of 175km/h or higher or both lanes are not detected.
	 The display shows a top-down view of a car on a two-lane road. The text "Lane Keeping Error" is centered at the top. The speedometer on the left shows 714 km/h, and the tachometer on the right shows 0. The car is positioned in the center of the lane, and the lane markings are shaded.	-	Displays if the Lane Keeping Assist (LKAS) is unable to operate.
	 The display shows a top-down view of a car on a two-lane road. The text "Check Lane Keeping" is centered at the top. The speedometer on the left shows 714 km/h, and the tachometer on the right shows 0. The car is positioned in the center of the lane, and the lane markings are shaded. A warning icon is visible in the bottom left corner.	-	- This message is displayed at all times if there is an abnormality in the Lane Keeping Assist (LKA). - If the message stays on, have the system checked and serviced at our nearest authorized service center.

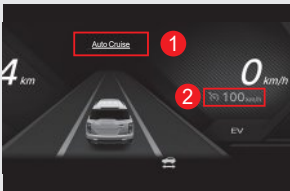
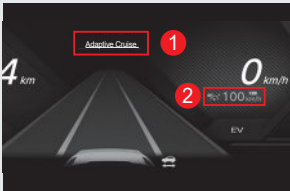
Item	Driving assistance	Message	Activation conditions
Lane keeping assist (LKA) lane display area		-	Even though the left lane is detected only, the detected left lane is displayed (green). (Pop-up messages will not be displayed.)
			- If only the left lane is detected and the vehicle approaches the left lane, that lane will blink (green ↔ red) on the display. - If the driver operates the turn signal while the LKAS system is activated, the LKAS system enters a standby mode.
		-	Even though the right lane is detected only, the detected right lane is displayed (green). (Pop-up messages will not be displayed.)
			- If only the right lane is detected and the vehicle approaches the right lane, that lane will blink (green ↔ red) on the display. - If the driver operates the turn signal while the LKAS system is activated, the LKAS system enters a standby mode.

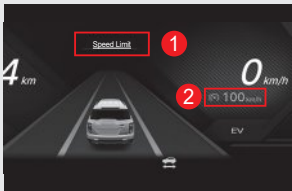
Item	Driving assistance	Message	Activation conditions
Lane keeping assist (LKA) lane display area		-	If both lanes are detected, both detected lanes are displayed (green). (Pop-up messages will not be displayed.)
			- If both lanes are detected and the vehicle approaches the left or right lane without turning on the turn signal, the corresponding lane will be flashed between green and red alternately. - If the driver operates the turn signal while the LKAS system is activated, the LKAS system enters a standby mode.
			

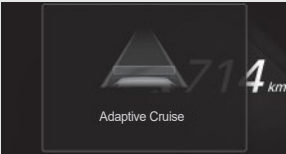
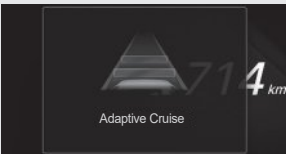
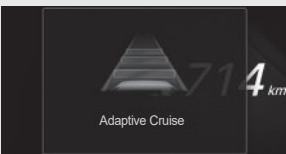
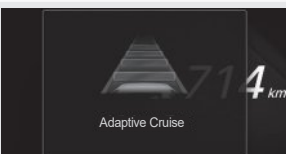
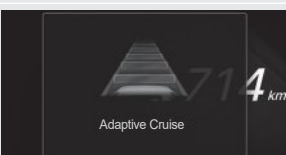
Item	Driving assistance	Message	Activation conditions
Centering lane keeping assist (CLKA)		-	Displayed when Centering Lane Keeping Assist (CLKA) is deactivated.
		-	The lanes are shaded when the vehicle is driven at a low speed of less than 1km/h or at a high speed of 180 km/h or higher or both lanes are not detected.
		-	Displayed when the Centering Lane Keeping Assist (CLKA) cannot be operated.
		-	- This message is always displayed in the event of the faulty Centering Lane Keeping Assist (CLKA). - If the message stays on, have the system checked and serviced at our nearest authorized service center.

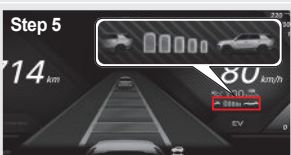
Item	Driving assistance	Message	Activation conditions
Centering Lane Keeping Assist (CLKA) lane display area		-	If only the left lane is detected with Centering Lane Keeping Assist (CLKA) activated, the detected left lane is displayed (in green) with an amber indicator in the center. (Pop-up messages will not be displayed.)
			- If only the left lane is detected and the vehicle approaches the left lane, that lane will blink (green ↔ red) on the display. - If the driver operates the turn signal while Centering Lane Keeping Assist (CLKA) system is activated, CLKA system enters a standby mode.
		-	If only the right lane is detected with Centering Lane Keeping Assist (CLKA) activated, the detected right lane is displayed (in green) with an amber indicator in the center. (Pop-up messages will not be displayed.)
			- If only the right lane is detected and the vehicle approaches the right lane, that lane will blink (green ↔ red) on the display. - If the driver operates the turn signal while Centering Lane Keeping Assist (CLKA) system is activated, CLKA system enters a standby mode.

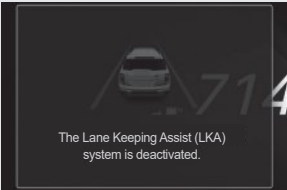
Item	Driving assistance	Message	Activation conditions
Centering lane keeping assist (CLKA) lane display area		-	If both lanes are detected with Centering Lane Keeping Assist (CLKA) activated, both lanes are displayed (in green) with an amber indicator in the center. (Pop-up messages will not be displayed.)
			- If both lanes are detected and the vehicle approaches the left or right lane without turning on the turn signal, the corresponding lane will be flashed between green and red alternately. - If the driver operates the turn signal while Centering Lane Keeping Assist (CLKA) system is activated, CLKA system enters a standby mode.
			

Item	Driving assistance	Message	Activation conditions
Auto cruise (without radar)		-	When cruise control is activated and the cruise control operating conditions are not met, the “Auto Cruise Standby” message (1) and symbol (2) are displayed and the vehicle is in the standby state for auto cruise control.
		-	With the electronic shift lever in the Drive (D) position, briefly pressing the Cruise Control switch while driving displays the message “Auto Cruise” (1) and the set speed (2) and activates Auto Cruise.
Adaptive Cruise Control (ACC) (With Radar)		-	When adaptive cruise control is activated and the adaptive cruise control operating conditions are not met, the “Adaptive Cruise Standby” message (1) and symbol (2) are displayed and the vehicle is in the standby state for adaptive cruise control.
		-	With the electronic shift lever in the Drive (D) position, briefly pressing the Adaptive Cruise Control switch while driving displays the message “Adaptive Cruise” (1) and the set speed (2) and activates Adaptive Cruise Control.

Item	Driving assistance	Message	Activation conditions
Speed limit		-	If you briefly press the Speed Limit switch with Speed Limit set, the driver will see a message (including a toast popup) (1) and a symbol (2) that says "Speed Limit in Standby" and Speed Limit will go into standby.
		-	- If the driver press and hold the Speed Limit switch while driving with the electronic shift lever in the Drive (D) position, the message "Speed Limit Set" (with a toast pop-up) (1) and the set speed (2) are displayed and the speed limit is activated. - You can adjust the vehicle speed by pushing the speed control lever up or pulling it down.

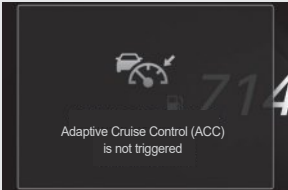
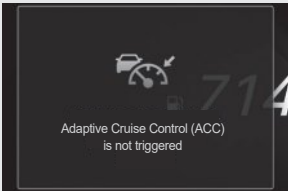
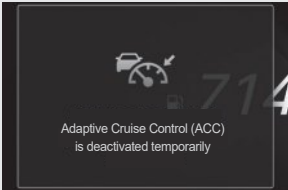
Item	Driving assistance	Message	Activation conditions
Adaptive Cruise Control (ACC) distance display area (front vehicle not displayed)	Step 1 		When you press the safety distance set button with the Adaptive Cruise Control (ACC) activated, the corresponding message is displayed while the setting is shifted by one step as an order of step 5 → step 4 → step 3 → step 2 → step 1 → step 5.
	Step 2 		
	Step 3 		
	Step 4 		
	Step 5 		

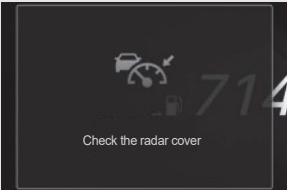
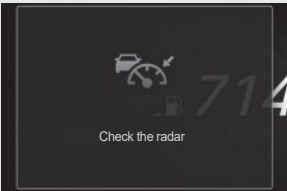
Item	Driving assistance	Message	Activation conditions
Adaptive Cruise Control (ACC) distance display area (front vehicle displayed)		-	When you press the safety distance set button with the Adaptive Cruise Control (ACC) activated, the corresponding message is displayed while the setting is shifted by one step as an order of step 5 → step 4 → step 3 → step 2 → step 1 → step 5. At this time, the front vehicle is also displayed on the message.
		-	
		-	
		-	
		-	

Item	Driving assistance	Message	Activation conditions
Lane Keeping Assist (LKA) hands-off	-		When a certain period of time has elapsed after the stage 1 warning, the message and beep are given as the stage 2 warning.
	-		After a period of time since the stage 2 warning message is issued, the message and different beep than 2 stage beep are given as the stage 3 warning.
	-		After the stage 3 warning, for safe operation, the LKA is disabled and the relevant message is displayed.

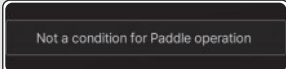
Item	Driving assistance	Message	Activation conditions
Centering Lane Keeping Assistance (CLKA) hands-off	-		If the system determines that the driver does not hold the steering wheel with the Centering Lane Keeping Assist (CLKA) activated, a message is displayed as the stage 1 warning.
	-		When a certain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

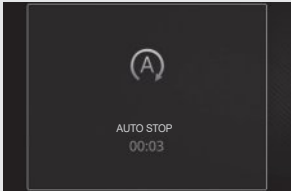
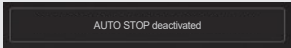
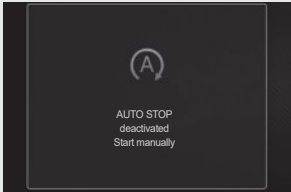
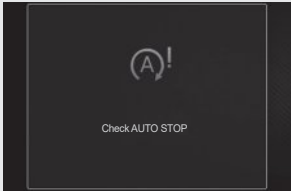
Item	Driving assistance	Message	Activation conditions
Adaptive Cruise Control (ACC) warning pop-up	-	 Forward Collision Warning	During Adaptive Cruise Control (ACC) operations, a message is displayed when the vehicle ahead disappears due to lane changes, etc.
	-	 When front vehicle departs, operate RES, SET button or pedal	During Adaptive Cruise Control (ACC) operations (or operations with the ISG), after a certain period of time since the vehicle has stopped, a message is displayed indicating that departure is possible by pressing the accelerator pedal or by raising or lowering the cruise control switch.
	-	 Front Vehicle Approach Warning	During Adaptive Cruise Control (ACC) operations, a message is displayed when the vehicle in front of you is close.
		-	When the driver presses the accelerator pedal during Adaptive Cruise Control (ACC) operations.

Item	Driving assistance	Message	Activation conditions
Adaptive Cruise Control (ACC) warning pop-up	-	 Adaptive Cruise Control (ACC) is not triggered	During Adaptive Cruise Control (ACC) operations, a message is displayed if the operating conditions are not met.
	-	 Adaptive Cruise Control (ACC) is not triggered	This message is displayed when the operating conditions are not met while adaptive cruise control (ACC) is operating.
	-	 Adaptive Cruise Control (ACC) is deactivated temporarily	If you depress the accelerator pedal while Adaptive Cruise Control (ACC) is operating, it will stop for a certain period of time.

Item	Driving assistance	Message	Activation conditions
Adaptive Cruise Control (ACC) check pop-up	-		A message is displayed on the front of the radar cover if it is dirty by dust, contaminants, etc. and does not recognize lanes, vehicles ahead, people, etc.
	-		- A message is displayed if there is something wrong with the radar system. - If the message persists, visit a nearby KGM Authorized Service Center and have your vehicle checked and serviced.
DDAW (Driver Drowsiness and Attention Warning)			This is a system that detects the drowsiness of the driver and alerts the driver. Please pay close attention to the road. When a signal is detected, a warning sound is emitted.

Item	Message	Activation conditions
Low battery level alarm	 Battery level is low	This message is displayed for about 5 seconds when the charge level of the high-voltage battery is low.
	 Power is limited. Please charge	This message is displayed for approximately five seconds before the power of the drive motor is limited due to insufficient high-voltage battery charge.
Battery charging reminder	 Please charge the battery	If the high-voltage battery is discharged to the point where it needs to be charged, a message will be displayed for about five seconds.
Virtual engine sound system (V ESS) check	 Check the Virtual Engine Sound system	In the event of the faulty virtual engine sound system, this message is displayed for approximately 5 seconds.

Item	Message	Activation conditions
Check hybrid system	 Check the hybrid system	This message is displayed for about 5 seconds if there is an abnormality in the hybrid system.
Paddle shift	 	When operating the paddle shift to adjust the regeneration braking stage, the message is displayed for about five seconds if the operating conditions are not met.
Driving battery check	 Check the main battery! Park in a safe location	This message is displayed for about 5 seconds if there is an abnormality in the high-voltage battery.
	 Battery overheating danger! Park in a safe location	This message is displayed for about 5 seconds when the temperature of the high-voltage battery is very high.

Item	Message	Activation conditions
ISG System		The message indicating the cumulative time that the engine has stopped is displayed while the ISG system is normally operating.
		If the vehicle's current status is inconsistent with the ISG system operating conditions, the toast pop-up message is displayed approximately 5 seconds.
		The message is displayed when the engine stops and is not automatically restarted depending on the vehicle status while the ISG system is normally operating.
		- This message is displayed in the event of the faulty ISG system. - If the message stays on, have the system checked and serviced at a nearest KGM Authorized Service Center.

Instrument cluster illumination brightness

To Adjust Instrument Cluster Illumination Brightness

The instrument panel lights are linked with the hypervisor control panel, allowing you to adjust the brightness of the lights in 20 steps from the hypervisor control panel.



① To make brighter

② To make darker

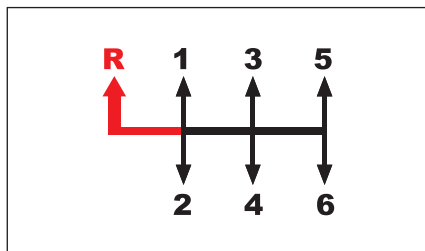
- A short touch of the instrument cluster illumination control switch will brighten or dim the illumination by one level.
- When you touch and hold the instrument cluster illumination control switch, brightness will lighten or darken by 1 step every about 0.2 seconds.

Notice

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

Shift lever in manual transmission

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



 : Move gear shift lever while pulling reverse shift lever up

 : Move gear shift lever while pulling reverse shift lever up

Reverse Gear

Position for reverse driving.

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

1st Gear

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

3rd Gear

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

5th Gear

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

6th Gear

Position for very high speed driving on a highway.

4th Gear

Position for normal and high speed driving

2nd Gear

Position for low speed driving

Notice

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

Downshifting

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

Gear position when parking

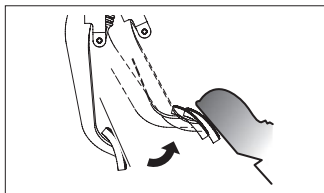
Always apply the parking brake fully and shut the engine off after parking. Shift the transmission into 1st gear when the vehicle is parked on a level ground or uphill grade, and shift into "R" on a downhill grade.

Using the clutch

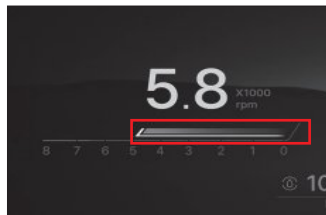
The clutch pedal should be depressed all the way to its travel end before shifting. The clutch pedal should be fully released while driving. Do not rest your foot on the clutch pedal while driving. This can cause unnecessary wear in clutch system. Do not operate the clutch pedal rapidly and repeatedly.

Driving tips for normal starting off or starting off on uphill

- 1 Depress the clutch pedal and the brake pedal, start the engine and move the shift lever to the 1st gear (reverse gear in reversing) position.
- 2 If the clutch pedal is released slightly with the brake pedal depressed, the engine rpm increases. (The increase in engine rpm varies depending on the road inclination).



Release the clutch pedal slightly



Increase in engine rpm

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

Notice

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



Caution

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

EPB operation when driving uphill

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

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

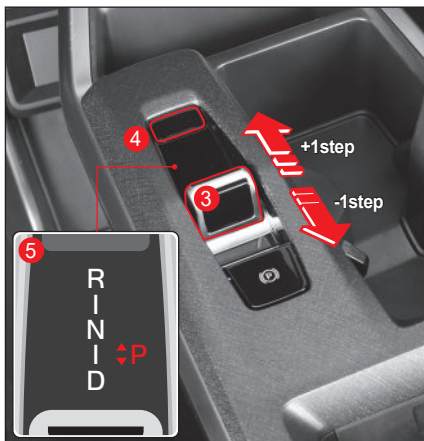
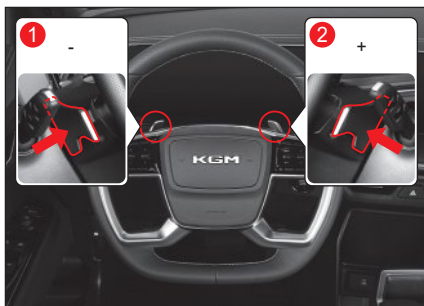


Caution

- To start the engine in manual transmission equipped vehicle, you must fully depress the clutch pedal.
- You should stop your vehicle and fully depress the clutch pedal before you shift into the reverse position.
- If the clutch pedal is frequently half-depressed, the clutch disc will be easily worn out. Use only as needed.
- Do not put your foot on the clutch pedal if not shifting gears.
- When shifting from a higher gear into a lower gear, ensure that the RPM gauge pointer does not go into the red zone on the gauge. Especially, when shifting from the 5th to the 4th gear, moving the gear shift lever to the left too much may result in shifting into the 2nd gear. This will cause a sudden increase of the engine speed and may damage the engine and the transmission.

- When the temperature of the transmission oil is very low on a cold day, you may have some difficulty for shifting gears. This is a normal phenomenon.
- When you have difficulty for shifting into the 1st or reserve gear, put the gear shift lever into the neutral position and release the clutch pedal. Then, depress the pedal again and shift into the intended gear.
- While your vehicle is moving, do not put your hand on the shift lever except to shift gears. Otherwise, the gear may be disengaged from the transmission and the internal transmission components may be damaged.
- Do not shift into the second next higher gear from a lower gear. Also, while the engine is rotating fast, do not shift into a lower gear.
- When using the half clutch mode, there is no need to abruptly depress the accelerator pedal because the engine power increases. When the accelerator pedal is continuously depressed in half clutch mode, the internal components can be worn or damaged. Frequent use of half clutch mode is not recommended.

SBW (shift by wire)



- ❶ Paddle shift (-)
- ❷ Paddle shift (+)
- ❸ Electronic shift lever
- ❹ P (park) button
- ❺ Lever position (gear) indicator

Warning

- When operating the electronic shift lever, always operate the lever with the brake pedal depressed.
- After parking, make sure the electronic shift stalk is in P (Park) position before exiting the vehicle.

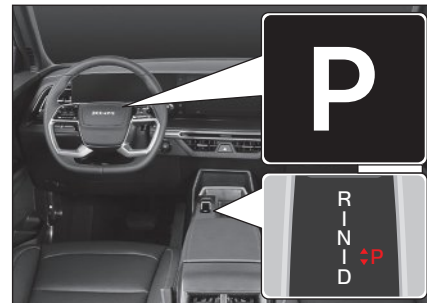
Transmission selector lever position

- P: Parking
- R: Reverse
- N: Neutral
- D: Drive

When changing the selector lever position, you can check the current position of the selector lever on the gear position display and on the electronic shift lever display in the instrument cluster.

Electronic shift lever position display

Depending on the shift position, you can see the current shift position on the instrument panel and in the electronic shift lever position display.



Caution

- When shifting, make sure the current gear is lit on the instrument panel's gear indicator and the electronic shift lever's display.

How to move shift lever to target gear position



The electronic shift lever can be moved at + 1 step and - 1 step, after which it is always aligned to the central position.

Notice

- When moving to the P (park) position, press the P (park) button with the brake pedal depressed at each position.

Target gear position		R	N	-	P	-	-	P	R	-	P	R	N
Shifting lever	+1 step	 	-	-	-	-	-	-	-	-	-	 	-
	+1 step			-	-	-	-	-		-	-	 	
	Current gear position	P position			R position			N position			D position		
	-1 step	-	-		-	  	-	-		-	-	-	
	-1 step	-	-	-	-	-	 	-	-	-	-	-	-
	Target gear position	-	-	D	P	N	D	P	-	D	P	-	-

: Operates for 0.5 sec or less

: Operates for more than 0.5 sec

Functions for each shift position

P (park) position



Select this position to park, start the vehicle, warm-up, and stop the vehicle for a long time.

- Be sure to depress the brake pedal and press the P (park) (A) button when moving to P (park) position from a position other than P (park).
- If the ignition switch is turned off in a position other than P (park), the shift lever automatically moves to the P (park) position.

Warning

- When moving from the P (park) position to another position, make sure that the ignition switch is turned on and the brake pedal is depressed. Do not apply excessive force to the electronic shift lever with the electronic shift lever in the P (park) position. This may lead to damage to the lever and transmission.
- Never move the shift lever to the P (park) position while driving. There is a risk of mechanical damage and accidents. Move the shift lever to the P (park) position after the vehicle has come to a complete stop.
- Do not attempt to place the shift lever in the P position instead of applying the parking brake. Always apply the parking brake when your vehicle is parked or stopped.

R (reverse) position



Use this position to reverse the vehicle.

When moving to the R (reverse) position, apply the brake pedal and operate the shift lever after the vehicle has come to a complete stop.

The parking aid system operates when the electronic shift lever is placed in the R (reverse) position.

Warning

- Do not shift into R position when the vehicle is moving forward. This may cause a shift shock and damage the transmission.
- If the electronic shift lever is placed in the R (reverse) position, the vehicle moves backward slowly without depressing the accelerator pedal, so drive carefully while pressing the brake pedal.

N (neutral) position



This is the neutral position where no power is transmitted.

At this position, the vehicle does not transfer power to the wheels and the vehicle will not move on level ground. However, be sure to depress the brake pedal for safety when stopping the vehicle with the electronic shift lever in the N (neutral) position.

Warning

- Do not move the electronic shift lever from D (drive) to N (neutral) or N (neutral) to D (drive) when the vehicle is moving.
- Be sure to depress the brake pedal when stopping the vehicle on a slope with the electronic shift lever in the N (neutral) position.
- Never move the shift lever to the N (neutral) position while driving.

D (drive) position



Select this position for driving on public roads and highways.

The system automatically selects the most desirable gear based on the vehicle speed and how far the throttle pedal is depressed. It also automatically activates the regenerative braking system according to the road conditions.



Warning

- If the electronic shift lever is placed in the D (drive) position, the vehicle moves forward slowly without depressing the accelerator pedal, so drive carefully.
- Do not move the shift lever to the D (drive) position until the vehicle has come to a complete stop. The decelerator damage may occur.
- Do not abruptly drive off or sharply accelerate the vehicle after moving the electronic shift lever into D (drive) position. In particular, when leaving after parking or stopping on a slope, move the shift lever to the D (drive) position with the brake pedal pressed, then wait for a few seconds for power to be transmitted inside the decelerator before starting off slowly.
- Even though the electronic shift lever is in D (drive) position, the vehicle can move down on a uphill even according to gradients, so you have to depress the brake pedal.

+/- (manual) position (paddle shift)



When the electric shift lever in D (drive) position, the driver can change the gear stage (1st to 6th) manually like the manual transmission with paddle shift switch.

Paddle shift is activated at shift position D (drive) and after a certain period of time, the gear stage is automatically shifted to suit the vehicle condition.



Caution

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

- You can shift gear by pulling the paddle shifts fitted to the rear left and right sides of the steering wheel while the paddle shift lever is in the gear shift lever D (drive) position.

– Left (-)

Pull briefly : 1 step down

– Right (+)

Pull briefly : 1 step up

Pull Long: Auto Shift Mode Entered

Notice

- When you move the gear shift lever to the +/- (manual) position while stopping, you can downshift the gear, and you can start driving the vehicle at the 2nd gear position on a snowy road or a wet road. (WINTER mode function)
- Sometimes, the gear cannot be shifted when you operate + (upshift) according to the vehicle speed for securing the driving performance. Also, the gear may not be shifted for preventing excessive engine RPM even if you downshift according to the vehicle speed.
- After adjusting the gear position by using the paddle shift switch, a certain period of time passed with the accelerator pedal depressed, or you hold the paddle shift marked “+” for about 2 seconds, the gear position is changed automatically (to D(drive) position) according to the vehicle condition.

Display of gear shift lever position on the instrument cluster



① Manual gear-shift point indicator

② Current gear position

Warning

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

Caution

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

Notice

- The gear shift point indicator lights up while the shift lever is in +/- (manual) position.
- If the gear shift point indicator (①) is displayed during driving with the 2nd gear, it indicates the time to shift to the 3rd gear (target) for the best driving.

How To Use Engine Brake

When you want to use engine braking, use the paddle shift switch to downshift one gear at a time.



Warning

- **Do not use the engine brake abruptly. Driving stability may be compromised. Avoid using sudden engine brake, especially when driving on snowy or icy road.**



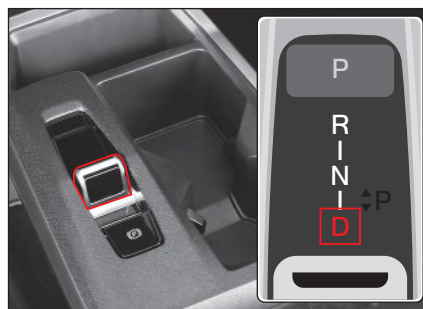
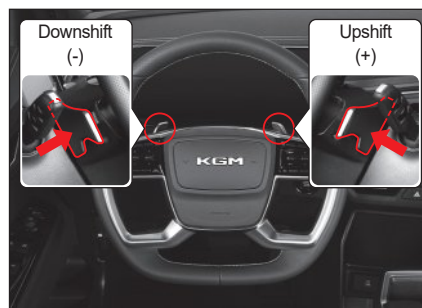
Caution

- **Operate the paddle shift switch one gear at a time. Please note that if you keep pressing and hold, multiple shifts will occur in succession.**
- **Be aware of that when you use the engine brake, the gear shift may be made in different manner than usual and the shift sensation may be more noticeable.**

Regenerative Braking System

Regenerative braking (paddle shift)

Regenerative braking is a system that converts the braking force generated when the vehicle is decelerating into electricity and charges the high-voltage battery. The level of regenerative braking force can be changed by using the paddle shift, depending on the driving conditions.



- While the electronic shift lever is in the D (Drive) position, the regenerative braking amount (0-3, SMART) can be set using the paddle shifters mounted on the left and right sides of the rear of the steering wheel.

– LH side (+)

Short pull: Increases regenerative braking level

Long pull: Enters SMART regenerative braking

– RH side (-)

Short pull: Decreases regenerative braking level

Long pull: Disables SMART regenerative braking



Caution

- You cannot adjust the regenerative braking force while Adaptive Cruise Control is active.
- Since SMART regenerative braking works independently of the brake system, it may not provide sufficient braking power, so be sure to depress the brake pedal for safe stopping.

Notice

- SMART regenerative braking is a feature that adjusts the amount of regenerative braking based on the distance of the vehicle in front of you, providing you with driving comfort.

The instrument panel displays the regenerative braking warning light and regenerative braking force levels (levels 0 to 3, SMART).



Refer to "Parking brake ON indicator (Red)" (p.4-34)

Regenerative braking changes to the preset level or maintains the previously set level, depending on the driving mode selection.

How to set up regenerative braking

Regenerative braking changes to the preset level or maintains the previously set level, depending on the driving mode selection.

If you turn off the ignition while using SMART regenerative braking, the default values based on the driving mode are applied upon restart.

Notice

- To engage SMART regenerative braking, pull the paddle shift (+) lever for an extended period.

Driving a vehicle equipped with automatic transmission

- 1 Place the gear shift lever in the P (parking) position and start the engine with the brake pedal depressed.
- 2 Ensure that the engine RPM is in normal range and place the gear shift lever in the D (driving) or the R (reverse) position with the brake pedal depressed.
- 3 Release the parking brake, take your foot off the brake pedal and drive the vehicle slowly.



Warning

- Do not depress the accelerator pedal when starting the engine. Doing so may make the vehicle move suddenly, causing an accident.
- The engine can also be started after the gear shift lever is placed in the N (neutral) position. However, start the engine after placing it in the P (parking) position for safety.
- Do not drive or accelerate the vehicle suddenly after moving the gear shift lever from the P (parking) position to the D (driving) or the R (reverse) position.
In particular, when you drive the vehicle after stopping on a hillside road, move the gear shift lever to the D (driving) or R (reverse) position with the brake pedal depressed, wait a number of seconds until the power is transferred in the transmission and drive the vehicle slowly.

- Caution should be taken that the vehicle may roll down when it is parked on a sloping road even if the gear shift lever is placed in the D (driving) or the R (reverse) position.
- When moving the gear shift lever while stopping the vehicle, be sure to depress the brake pedal for safety.
- Never depress the accelerator pedal when moving the gear shift lever.
- Be sure to apply the parking brake and depress the brake pedal when stopping on a sloping road.
- On a steep uphill road or downhill road, the vehicle may move in the opposite direction of its moving direction even if the creep phenomenon occurs. Be sure to depress the brake pedal when stopping on an uphill road or a downhill road.
- Do not move the gear shift lever to the N (neutral) position while driving. Doing so may cause the engine brake to not be applied, resulting in an accident. The devices inside the transmission also may not be lubricated smoothly, damaging the transmission.
- When driving downhill after fully charging the high voltage battery, the regenerative braking system may not work. This may cause braking slippage during downhill driving, so be sure to drive at a low speed.

Notice

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

What is the creep phenomenon?

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

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

What is automatic shift point?

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

Using the engine brake

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

What is the engine brake?

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



Warning

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

Using the kick down function

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

What is the kick down function?

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



Warning

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

Safety mode of the automatic transmission

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

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

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



Caution

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

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

Resetting the safety mode

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

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

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

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

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

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



Caution

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

Cautions for using a vehicle equipped with automatic transmission



Warning

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



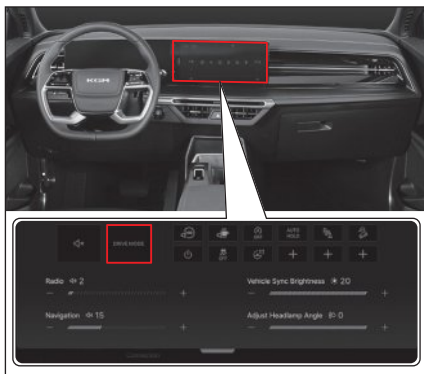
Caution

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

Drive mode switch

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

“COMFORT → SPORT → WINTER → COMFORT”

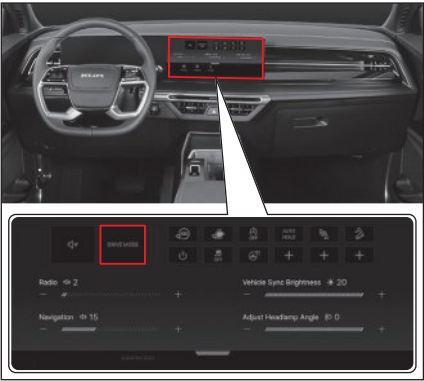


Default Settings by Drive Mode

Drive Mode	COMFORT	SPORT	WINTER
Driving characteristics	Normal driving mode	Sporty driving mode	Rough road escape mode
Indicator lamp on instrument cluster	-	SPORT	WINTER
Speed limit	-	-	-
Steering force	COMFORT	SPORT	COMFORT

Drive mode switch (HEV)

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



Default settings for each mode

Drive Mode	COMFORT	SPORT	ECO
Driving characteristics	Normal driving mode	Sporty driving mode	Economic driving mode
Switch operation	Default	Short press	Short press
Indicator lamp on instrument cluster	COMFORT	SPORT	ECO
Speed limit	-	-	-
Steering force	COMFORT	SPORT	COMFORT
Default when turning IGN from OFF to ON	COMFORT	COMFORT	ECO

ECO mode

- In ECO mode, when the minimum temperature is set, the air conditioning operating temperature is set approximately 5°C higher than in COMFORT and SPORT modes to improve energy efficiency.

What is Electric AWD (All Wheel Drive)?

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

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

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

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

What is 4WD?

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

4WD LOCK Shift

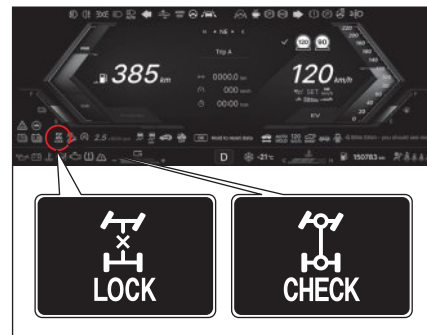
Lightly touch the switch AWD LOCK (4WD LOCK shift) (A). The vehicle will enter 4WD LOCK mode.

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

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



Driving Modes and Indicators



4WD LOCK indicator (green)

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

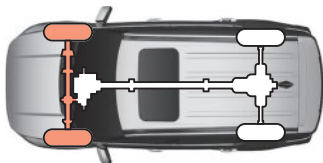
4WD CHECK warning lamp (red)

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

Driving Modes

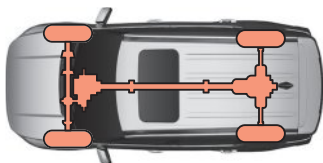
4WD AUTO

2WD



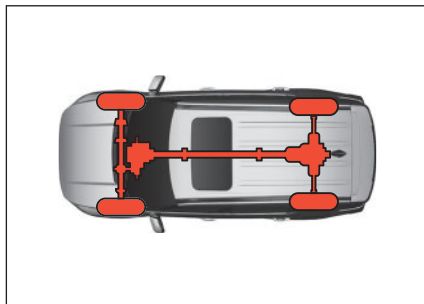
Normal driving condition.

4WD



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

4WD LOCK



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

Cautions for using 4WD system



Caution

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

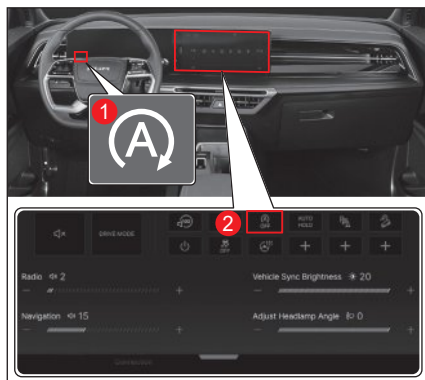


Caution

- For the vehicles with the constant 4WD system, do not allow the vehicle to be towed with the tire on the ground. To prevent damage to the driving-related parts, always lift the towed vehicle wheels on the tow truck or place the dolly under the rear wheel when towing.
 - ☞ Refer to "When you need to have your vehicle towed" (p.5-24)
- In 4WD mode, the vehicle performance depends greatly on the tire condition.
 - Check tire wear and tire pressure on a regular basis.
 - For vehicles with 4WD system, to prevent damage to the drive system, the tires with same size from the same manufacturer should be used for all 4 wheels. When replacing the tire and wheels, replace all four wheels at the same time.

ISG (Idle Stop & Go) System*

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



1 ISG ON indicator

2 ISG OFF switch



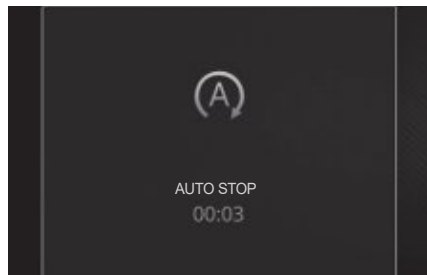
Caution

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

Engine Automatic Shutdown

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

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

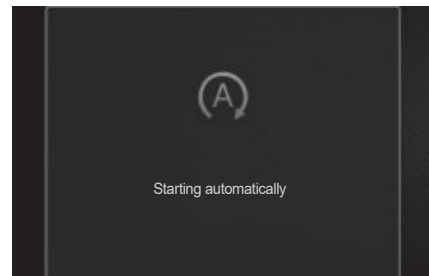


Notice

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

Automatic Engine Restart

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



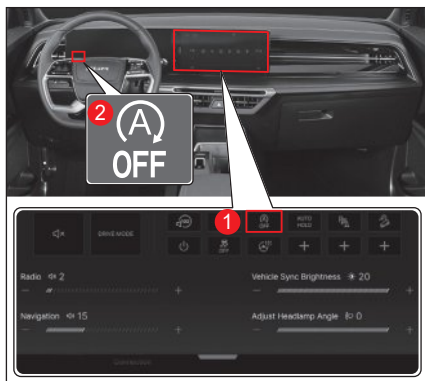
Notice

Engine restarts automatically when:

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

ISG system OFF

- 1 When you touch the ISG OFF switch (1) lightly, the ISG function stops and the ISG OFF indicator (2) lights up.
- 2 Lightly touching the ISG OFF switch again resumes normal operation of the ISG system and turns off the ISG OFF indicator on the instrument cluster.



Conditions for ISG system activation

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

Forced restart conditions

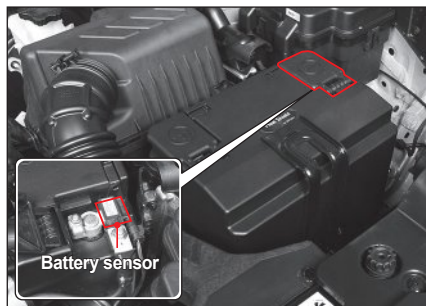
- Press ISG OFF touch switch to stop ISG system
- Engine coolant temperature higher than 110°C
- Heater and A/C controller operating at maximum level
- Defroster in operation
- Poor battery charge level
- Vehicle speed over 2 km/h
- Engine automatic shutdown maximum time (3 min) elapsed
- Faulty components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

Battery sensor (BSC)

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

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

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



Conditions for activating battery sensor (BSC)

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



Caution

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



Warning

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

Warning Light and Indicator Related to Brake



Parking brake ON indicator
(Red)



ABS warning light



Brake system warning lamp
(EBD system)



Electronic parking brake (EPB)
warning lamp (amber)

**AUTO
HOLD**

AUTO HOLD indicator / warning
lamp



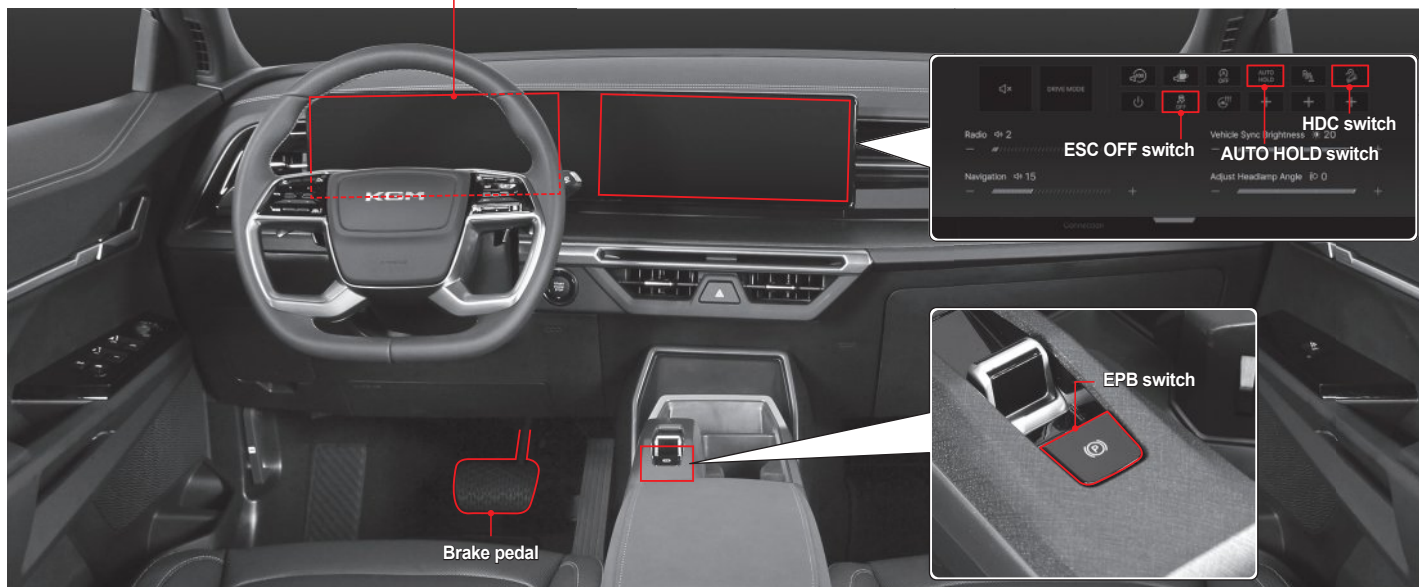
Hill descent control (HDC) ON
indicator / warning lamp



Electronic stability control (ESC)
ON indicator/warning lamp



Electronic stability control (ESC)
OFF indicator lamp



Foot brake

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

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

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



Caution

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

What is the fade phenomenon?

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

What is the vapor lock phenomenon?

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



Warning

Checking for foreign materials on the pedal operation area



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

Checking and replacing the brake pads/discs

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

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



Warning

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

If the brake is not working

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

ABS (Anti-Lock Brake System)

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

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

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



Warning

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



Caution

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

ABS warning light



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



Warning

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

Electronic Brake-Force Distribution (EBD)

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

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

Brake system warning lamp (EBD system)



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



Caution

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

Emergency Stop Signal (ESS)

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

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

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

Activation and deactivation conditions

	Emergency braking light
Activation conditions	• When the vehicle speed is 50 km/h or higher • When a sudden braking with the vehicle deceleration of 6.5m/s² or higher is applied • When the ABS system is operating while applying braking
Deactivation conditions	• If there is no ESS from the vehicle • When the hazard warning lamp is activated • When the ABS operation is finished

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

Electronic stability control system (ESC)

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

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

ESC indicator/warning light



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



Caution

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

Notice

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

ESC OFF indicator



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



Caution

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

Notice

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

Phenomenon that occurs when the ESC is activated

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

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

When it is necessary to deactivate the ESC function

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

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

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

The ESC OFF indicator on the instrument cluster turns on and the ESC function is deactivated.

- Pressing the ESC OFF touch switch again activates the ESC function.



Warning

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

Notice

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

- BAS (Brake Assist System)

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

- ARP (Active Roll-over Protection)

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

Caution

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

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

Hill Descent Control (HDC)

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

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

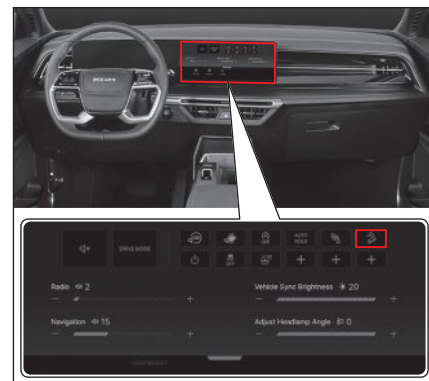


Warning

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

Activating/deactivating the HDC function

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



HDC indicator/warning light



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



Caution

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

HDC activation conditions

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

HDC deactivation conditions

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

Notice

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

HDC operation

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

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

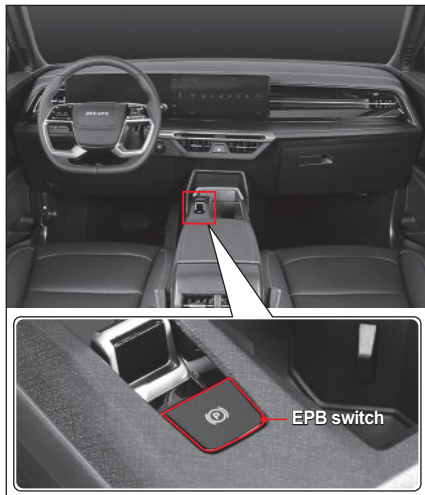


Caution

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

Electronic Parking Brake (EPB)

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



Warning

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

Caution

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

Applying the EPB

1 Park the vehicle on a flat and safe place.

2 Pull the EPB switch.

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



Releasing the EPB

With the brake pedal depressed, press the EPB switch.

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



Releasing the EPB automatically

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

Notice

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

EPB warning light/brake warning light

EPB warning light



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

Parking brake ON indicator (Red)



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

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



Caution

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

EPB emergency mode

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

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



Warning

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



Caution

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

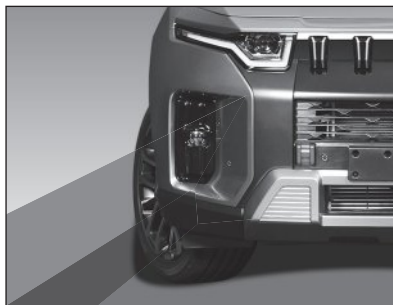


Caution

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

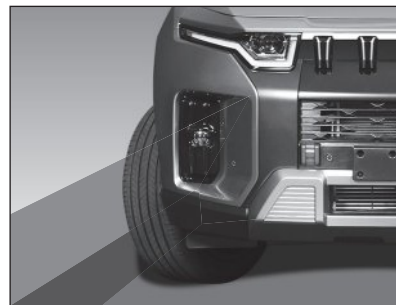
When parking the vehicle on a uphill road

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



When parking the vehicle on a downhill road

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



AUTO HOLD

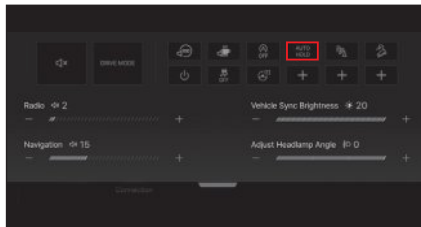
When the "AUTO HOLD" function is activated, the vehicle keep the brake pressure in order to hold the vehicle stationary when you stop the vehicle by depressing the brake pedal in order to wait for a signal or in case of traffic congestion.

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



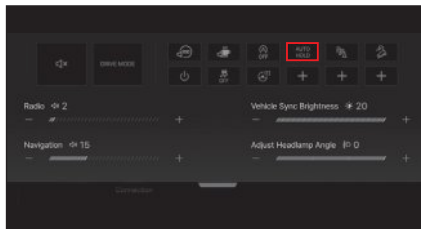
Activating the AUTO HOLD function

- Lightly touch the AUTO HOLD switch to turn on the AUTO HOLD indicator (white) on the instrument cluster and set the AUTO HOLD.



Deactivating the AUTO HOLD function

- With AUTO HOLD set, lightly touch the AUTO HOLD switch to disable the feature.
- When the ignition switch is turned off and turned on back, the AUTO HOLD function maintains the state before turning off the ignition.



Using the AUTO HOLD function

- 1 Touch the AUTO HOLD switch.
The AUTO HOLD indicator (white) on the instrument cluster turns on.
- 2 Stop the vehicle completely by depressing the brake pedal while driving.
The color of the AUTO HOLD indicator changes from white to green and the brake is applied.
- 3 Depress the accelerator pedal slowly when driving the vehicle.
The color of the AUTO HOLD indicator changes from green to white, and the brake is released.

4

Warning

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

AUTO HOLD indicator/warning light

AUTO HOLD

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



Caution

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



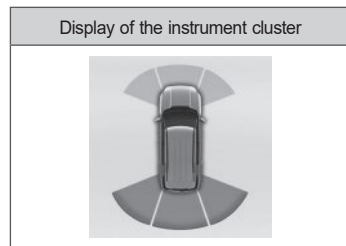
Caution

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

Parking assist system*

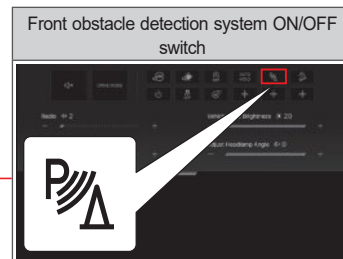
Front/rear obstacle detection system

The front/rear obstacle detection system is a parking assist system that detects an obstacle through the ultrasonic sensor installed on the bumper and informs the driver with a warning buzzer when the driver places the gear shift lever in the D (driving) or the R (reverse) position and drives the vehicle.



The distance from the obstacle is displayed on the instrument cluster along with the warning buzzer.

You can turn on or off the front parking assist warning. Lightly touch the front parking assist warning ON/OFF switch to illuminate the front parking assist warning.



4



Activating the obstacle detection system

D (driving) position	4 obstacle detection sensors
	

If the transmission selector lever is in the D (drive) position, the detection sensor operates when:

- Vehicle starts to move after initial start (at vehicle speed of 15 km/h or lower).
- Transmission selector lever is changed from R (reverse) position to D (drive) position (at vehicle speed of 15 km/h or lower).
- Front obstacle detection warning switch is turned on (at vehicle speed of 15 km/h or lower).

However, it will remain off after the vehicle speed exceeds 15 km/h.

R (reverse) position	6 obstacle detection sensors
	

When the gear shift lever is placed in the R (reverse) position, 2 front obstacle detection sensors and 4 rear obstacle detection sensors are activated at the same time.

Notice
• Even if the front parking assist warning ON/OFF switch in the OFF position (indicator off), the front obstacle detection sensor operates when reversing the vehicle. • An alarm may sound intermittently in the event of rain and this is not a malfunction but normal operation.

Indication on the display of the instrument cluster

When an obstacle is detected, the relevant edge indicating the detection distance and direction blinks.



Display of the instrument cluster	
D (driving) position	R (reverse) position
	



When no obstacle is detected



The range of front and rear sensors is displayed and blinks (no warning buzzer)

If an obstacle is detected from 40 cm at the front left side or the front right side



Line No. ① at the front left side is deleted and Line No. ② blinks (Warning buzzer sounds)

If an obstacle is detected from 80 cm at the rear left side, front side or right side



Line No. ③ at the rear right side is deleted and Line No. ④ blinks (Warning buzzer sounds)

Warning buzzer interval

The warning buzzer sounds as follows depending on the distance from the obstacle.

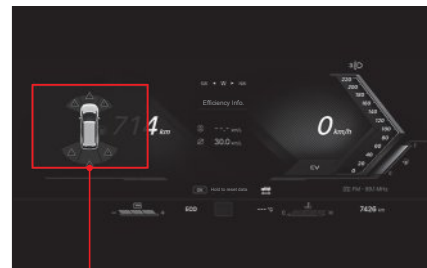
Front obstacle detection sensor (level 2 warning buzzer)

Warning buzzer interval	Distance from the obstacle	
	Center	Side
No warning buzzer	100 cm	60 cm
① 0.15 second	50 cm ~ 100 cm	40 cm ~ 60 cm
② Continuous	25 cm ~ 50 cm	25 cm ~ 40 cm

Rear obstacle detection sensor (Level 3 warning buzzer)

Warning buzzer interval	Distance from the obstacle	
	Center	Side
③ 0.3 second	80 cm ~ 120 cm	-
④ 0.15 second	50 cm ~ 80 cm	
⑤ Continuous	25 cm ~ 50 cm	

Sensor and relevant system malfunction



Display of the instrument cluster	
D (driving) position	R (reverse) position

When the obstacle detection sensor is abnormal, “



Caution

- If the distance between the sensor and the obstacle is 25 cm or less, the warning buzzer does not sound. However, if the obstacle is recognized clearly, the warning buzzer may sound.
- When the warning buzzer sounds, the distance from the obstacle may be different from the actual distance by approximately ± 10 cm.
- Do not rely too much on the parking assist system and reverse the vehicle while checking the rear side.
- If an abnormal warning buzzer whose duration is different from a warning buzzer that occurs due to the detection of an obstacle or a long warning buzzer for 3 seconds occur when the gear shift lever is placed in the R (reverse) position, the obstacle detection system or the detection sensor is abnormal. Have your vehicle checked.

If the system does not operate or malfunctions

If there is an object that cannot be detected by the sensor

- A thin object such as steel wire, rope or chain
- An object such as cotton, sponge, fiber or snow that absorbs sound waves
- An object that is located lower than the bumper (example : drainage or puddle)

The sensor cannot detect

- when the sensor is frozen (the normal function is restored after thawed.)
- When sensor is clogged by foreign materials such as snow, mud or water drops (the normal function is restored after removed)

When the sensor detection range becomes narrower

- The sensor is partially covered with snow or mud so that the signal detection area becomes narrower (the normal function is restored after removal)
- When the temperature near the sensor is extremely high or low

Cases that may cause malfunction although it is not a system failure

- Driving the vehicle on bumpy roads, gravel roads, hillside road, or grass
- When the height of the bumper is lowered due to heavy load
- When other ultrasound waves are received (metallic sound, air brake sound of a large vehicle, etc)
- When a high-power radio set is used
- When there is a heavy rain
- When an accessory is attached to or near the area where the sensor is installed

When towing a trailer

- The sensor may detect the trailer, sounding the warning buzzer continuously.

Cautions regarding the front/rear obstacle detection system



Caution

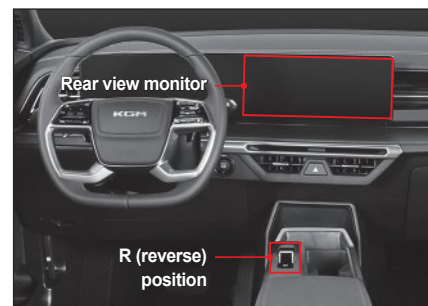
- When parking or reversing the vehicle, check if there is any person, animal or especially a child around. If you cannot check it properly, be sure to get out of the vehicle and check.
- The parking assist system is only a system for the user's convenience and this system does not guarantee safety. The driver should pay attention to all possible conditions.
- When you strongly press or apply an impact to the sensor part on the bumper or strong water pressure is applied during car wash, the sensor may be damaged.
- When the system is normal and the gear shift lever is placed in the R (reverse) position with the START/STOP switch in the ON status, a beep sounds once briefly.
- If an abnormal warning buzzer whose duration is different from a warning buzzer that occurs due to the detection of an obstacle or a long warning buzzer for 3 seconds occur when the gear shift lever is placed in the R (reverse) position, the obstacle detection system or the detection sensor is abnormal. Have your vehicle checked.

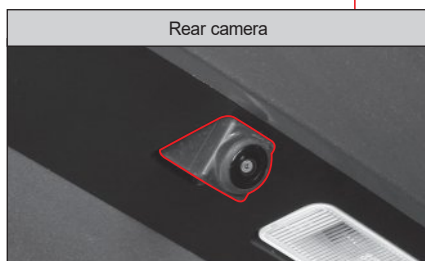
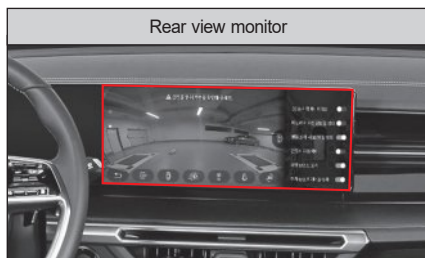
- In the parking space shown in the figure below, the upper portion of the vehicle may collide before the detection sensor at the bottom operates. Park the vehicle while checking through the outside rearview mirror or turning your head directly.



Rear camera system

The rear camera system is an auxiliary safety system that allows the driver to view the situation behind the vehicle through the rear camera using the monitor when the gear shift lever is placed in the R (reverse) position.





! Caution

- The rear camera uses a wide-angle lens to secure a wide view, so the actual distance is different from what you see through the monitor. Be sure to check the rear, left and right view directly.
- The screen shown on the monitor is a part of, not the whole background view of the vehicle.
- Clean the rear camera lens frequently using a camera lens cleaner to prevent it from being contaminated.

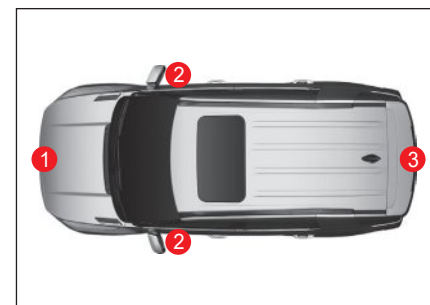
! Warning

- The rear camera screen does not work during software update. Always stop the vehicle to update the software and do not drive the vehicle until the update is completed.
- Be careful when reversing since the rear obstacle may be hidden by the warning messages and parking guide lines if the rear camera system is activated.

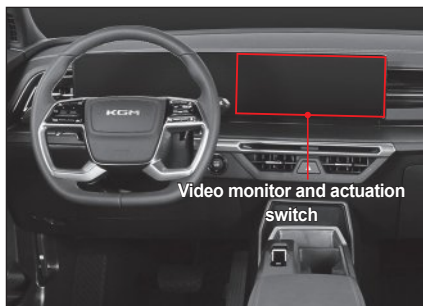
Around View Monitoring (AVM) system*

The AVM system is a parking assist system that helps the driver to park the vehicle safely by allowing the driver to view the outside situation in the vehicle through the monitor.

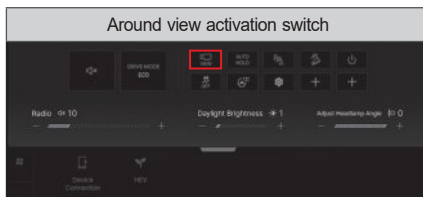
The driver can see the information received from 4 cameras installed on the exterior of the vehicle through the monitor. The driver can activate 3D view and check the outside of the vehicle in the desired direction if necessary.



- ① Front camera
- ② Left/right camera
- ③ Rear camera



Video monitor and actuation switch



Caution

- The AVM system combines 4 camera images and displays the combined image on the monitor. Therefore, the actual position of the vehicle and parking guide line are different from those shown in the screen. When parking the vehicle, be sure to check the rear, left and right view directly for safety.
- Since the AVM camera uses a wide-angle lens for securing wide view, the actual distance may be different from what you see through the monitor. Be sure to check the rear, left and right view directly for safety.
- If the surface of the camera lens is contaminated by foreign materials, a system error may occur due to performance degradation. Always keep the lens clean.

Operating conditions

For the around view monitoring system to be activated, the following conditions must be met:

- The ignition switch is in the ON position or the vehicle is started.
- Vehicle speed is less than 20 km/h.
- Around view activation switch is turned on when the electronic shift lever is in the P (Park), R (Reverse), N (Neutral) or D (Drive) position.

Notice

- When the electronic shift lever is in the R (Reverse) position, the around view monitoring system is activated regardless of whether the ignition switch is in the ON or OFF position.
- If the electronic shift lever is in the P (Park) position, the around view monitoring system operates but the monitor displays the previously active view.
- When the front AVM is activated, driving at a speed of about 20km/h or more deactivates the AVM. If this is the case, the AVM system remains deactivated even if the vehicle slows down below 20 km/h.

How to operate AVM

- With the ignition ON and the electronic shifting lever in the N (neutral) or D (drive) position, pressing the around view switch will activate the front AVM system.
- When the ignition is on and the electronic shifting lever is in the R (reverse) position, the rear AVM system is activated.
- You can switch between the 2D and 3D screens in real time by just pushing the 2D or 3D icon.

360 Around view



Capture blind spots by real-time video to prevent crash

Driving rear view



Check the rear view from the AV monitor while driving for safety

Clear-sight ground view



Secure the visibility of the bottom space of the vehicle

Double-Parking (Second Row Parking)

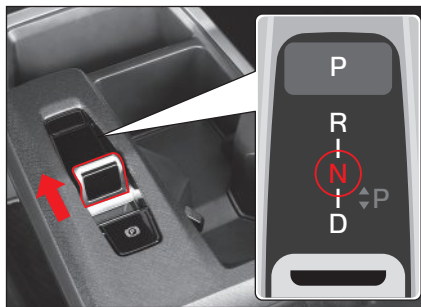
If you need to double-park (second row park) due to lack of parking space, operate as follows:

- 1 Release AUTO HOLD with the engine started.
- 2 Press the ignition switch to turn the ignition off.

Notice

- If the AUTO HOLD is activated, the EPB operates automatically when the ignition is turned off, so be sure to press the AUTO HOLD switch to deactivate the function.

- 3 With the brake pedal depressed, long push the electronic shift lever in the direction of the arrow. And check the gear in N (neutral) position. (Entering N position disengages the electronic parking brake (EPB)).



Warning

- Double-parking (second row parking) must be done on a level surface with no slope, and additional safety measures must be taken, such as installing chocks on the vehicle's wheels. Otherwise, the vehicle could roll, creating a very dangerous situation.
- When using an automatic car washer, etc. in double parking mode, i.e. with the gear selector lever in the N (neutral) position, never press the P (park) button. If you drive the vehicle into a car wash with the gear selector lever in the P (parking) position, problems may occur in your vehicle, automatic car washer and etc.

Notice

- If you open the vehicle's doors while in double parking (neutral), the vehicle may shift into P (Park) for your safety. So if you need to double-park, reset it according to the double-parking method.

Autonomous Emergency Braking (AEB)*

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

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

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



Warning

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

Notice

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

AEB indicator/warning light

AEBS OFF indicator

AEBS OFF

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

Notice

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

AEB indicator/warning light

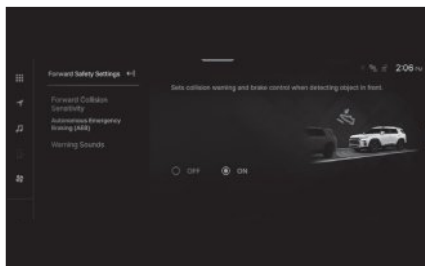


The AEB indicator and warning light operate as follows depending on the AEB status.

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

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

How to set Autonomous emergency braking (AEB)



- From the main menu of the hypervisor control panel, select Vehicle Settings (🚗) → Driving Assistance → Forward Safety Settings → Autonomous Emergency Braking (AEB) → OFF/ON.

Notice

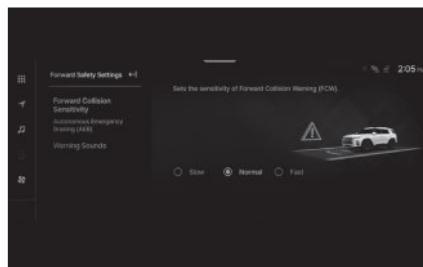
- Selecting OFF disables the feature and the “AEB OFF” indicator lights up.
- Selecting ON sets the feature on.



Caution

- Activate or deactivate the AEB system before driving the vehicle or after stopping the vehicle at a safe place for safety.

How to set AEB Sensitivity



- Select Vehicle Settings (🚗) → Driving Assistance → Forward Safety Settings → Forward Collision Sensitivity → SLOW/NORMAL/FAST in the main menu of the hypervisor control panel.
- When set to FAST, the Autonomous Emergency Braking (AEB) is sensitive.
- If AEB is too sensitive, set it to NORMAL or SLOW.



Caution

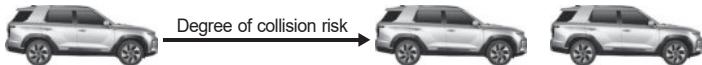
- Even if Fast is set for the sensitivity of the AEB warning, you may feel it is slow when a front vehicle applies a sudden braking.

How to set Autonomous Emergency Braking (AEB) warning sound



- Select Vehicle Settings (🚗) → Driving Assistance → Forward Safety Settings → Warning sounds → ON/OFF in the main menu of the hypervisor control panel.
- You can turn the warning sound off or on when the AEB system is operating.

AEBS operation

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



Warning

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

Activation conditions

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

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

Notice

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

Deactivation conditions

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

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

The AEB cannot detect a vehicle properly:

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

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



Caution

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

Curved road



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

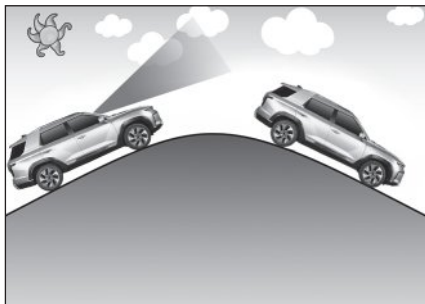
Check the front road and driving conditions on a curved road and adjust the vehicle speed directly by depressing the brake pedal if necessary.



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

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

Sloping road

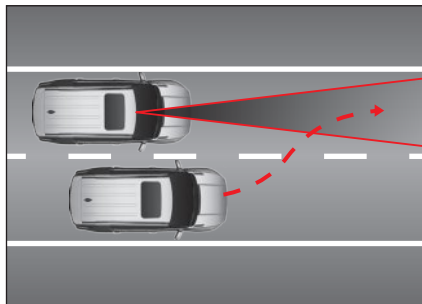


On a uphill road or a downhill road, a vehicle on the same lane cannot be detected and the AEB performance is lowered so that unnecessary warning or braking is applied or the system may not operate.

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

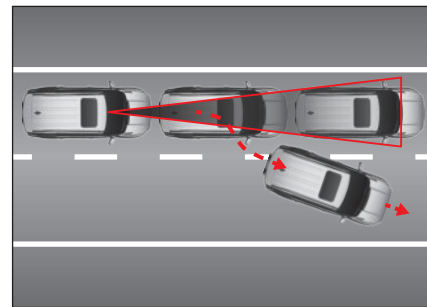
Check the front road and driving conditions on a uphill road or a downhill road and adjust the vehicle speed directly by depressing the brake pedal if necessary.

When changing the lane



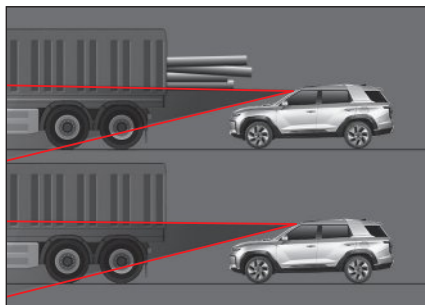
When a vehicle on the next lane changes the lane to the same lane, the vehicle may not be detected until it enters the detection range of the Front Camera Module (FCM).

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



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

Recognition of a vehicle ahead



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

The AEB cannot detect a pedestrian

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



Warning

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

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



Caution

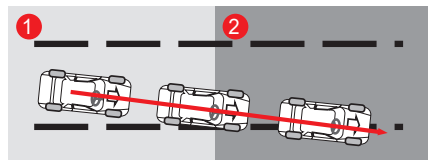
- The AEB may be deactivated temporarily by a strong electromagnetic wave.
- Do not tint the Front Camera Module (FCM) detection area. Doing so may cause the relevant system to malfunction or not to operate.

Part prohibited for tinting (FCM detection area)



LDW (Lane Departure Warning)*

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



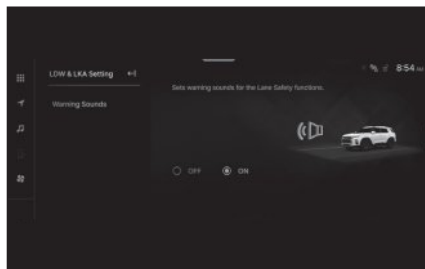
- 1 Detect the deviation of the lane with the turn signal not activated
- 2 Display a warning message and sound the warning buzzer



Warning

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

How to set LDW warning sound



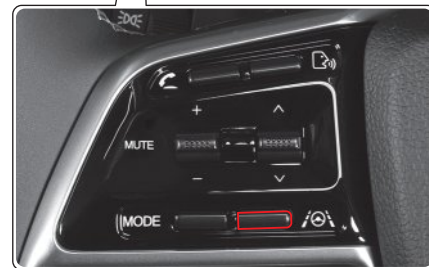
- From the main menu of the hypervisor control panel, select Vehicle Settings (⚙️) → Driving Assistance → LDW & LKA Setting → Warning Sounds → ON/OFF.

You can turn the warning sound off or on when the Lane Departure Warning (LDW) system is operating.

To activate / deactivate Lane Departure Warning (LDW)

- Turn the ignition switch to the “ON” position and press and hold the LDW setting button.
- At this time, the lane departure warning (LDW) indicator will illuminate and LDW is activated.

While the lane departure warning (LDW) is activated, press and hold the button again to deactivate the function.



LDW ON indicator



When the lane departure warning system is activated, the indicator on the instrument cluster turns on.

- White indicator turns on: The lane departure warning system is in ready status (the vehicle speed is below a prescribed speed or the lane is not recognized).
- Green indicator turns on: The lane departure warning system is operating normally.
- Yellow warning light turns on/blinks: When the LDW is abnormal

Activation conditions

If the following conditions are met, the LDW is activated.

- When the LDW is set
- When the vehicle speed is between 40 kph and 175 kph
- When the front camera recognizes the left and right lanes
- A straight road or gently curved road

☞ Refer to "LKA (LDW) indicator / warning lamp*" (p.4-40)

Notice

- **Entry and release conditions depending on vehicle speed**
 - **Entry conditions: 40 kph or above, 155 kph or less**
 - **Release conditions: 35 kph or less, 165 kph or above**



Warning

- Be sure to hold the steering wheel while driving.
- The driver is responsible for operating the steering wheel to ensure the safe driving of the vehicle.
- Do not steer the vehicle rapidly when the lane departure warning system is activated.
- The lane departure warning system only gives a warning and sounds the warning buzzer. Therefore, the driver should keep the vehicle in the lane by steering the vehicle carefully while driving.
- The lane departure warning system may be deactivated, may not operate or may operate unnecessarily according to road condition and surrounding environment. Therefore, pay attention while driving.
- Do not attempt dangerous driving for activating the lane departure warning system.



Caution

- Do not tint or attach a sticker or an accessory to the Front Camera Module (FCM) detection area. Doing so may cause the relevant system to malfunction or not to operate normally.
- The lane departure warning system recognizes a lane using the camera, and if the lane is not recognized properly, the system may be deactivated or may operate unnecessarily, so be careful when using the system.
- If the lane is not recognized properly, be sure to check the conditions for driver's attention.
- Do not detach any component from the LDW or apply an impact to the LDW.
- Do not place a reflecting object (white paper or mirror) on the dashboard. Doing so may cause the system to malfunction due to the reflection of light.
- The warning buzzer of the LDW may not be heard due to the loud sound from the audio system.

Cases that the system is not activated

- When the turn signal and the hazard warning lamp are operated for changing the lane
- When both the left and right lanes are not recognized
- When the vehicle is driven on one side of the lane continuously without moving to the center of the lane after changing the lane
- If the steering wheel is operated suddenly for changing the lane (the system is not activated temporarily)
- When the Electronic stability control system (ESC) is activated
- When the vehicle is circling fast on a curved road
- When the vehicle speed is less than 40 kph and more than 175 kph
- When you need to change the lane rapidly
- When the width of the lane is too narrow or too wide so that the lane cannot be detected
- When there are 2 or more lane markings on the lane while driving (example: construction section)
- If the radius of a curved road is too small

- In case of a steep sloping road
- When the vehicle speed is reduced rapidly
- When the tinted part of the windshield covers a part of the Front Camera Module (FCM) detection range



Warning

- Change the lane after operating the turn signal switch.



Caution

- Do not tint the Front Camera Module (FCM) detection area. Doing so may cause the relevant system to malfunction or not to operate.

Part prohibited for tinting (FCM detection area)



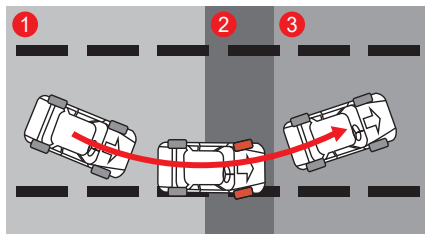
Cases requiring the driver's attention

In any of the following cases, the system may not operate or may operate unnecessarily. Therefore, the driver's attention is necessary.

- If the lanes are not visible due to foreign substances (rain, snow, dust, puddle, wet road surface)
- If the color of lane markings and the road cannot be distinguished clearly
- If the lane markings are not clear or are damaged or two or more lane markings are present on one side
- If there are markings other than or similar to the lane marking near the lane
- If the lane markings are covered in the shade of median strips, guardrails, noise barriers, other structures or roadside trees
- If there are boundary structures such as sidewalk blocks
- If the lane is crowded due to the construction section or some lanes are replaced with structures
- When the lane suddenly disappears or is invisible on the intersection
- There is a section where the number of lanes increases or decreases or the lanes intersect complicatedly (tollgate entrance, road junction/merge section, etc)
- If the lane is too narrow or too wide
- If the distance from a vehicle ahead is extremely short or a vehicle ahead is driving while hiding the lane
- There is a marking for a crosswalk or road sign on the road surface
- If the visibility is poor due to bad weather such as fog, heavy rain or heavy snow
- If the visibility is poor so that the lane cannot be recognized
- When the brightness outside the vehicle changes rapidly such as the entering a tunnel
- When the light is weak or the head light of the vehicle is not used at night or in a tunnel section
- When you drive the vehicle on the bus-only lane or on the left or right lane of the bus-only lane
- On a sharply curved section or a steeply sloping road
- when the vehicle wobbles significantly
- When a reflecting object (white paper or mirror, etc.) is placed on the dashboard
- When the windshield or the front side of the camera lens is contaminated with dust
- When the moisture formed on the glass of the windshield is not removed completely
- When the temperature near the camera is very high due to direct sunlight
- When there is backlight in the moving direction of the vehicle
- When the sunlight, streetlight or the light from an incoming vehicle is reflected by water on the road surface
- When front camera is arbitrarily refitted (Be sure to visit our authorized service center to perform the calibration of the front camera. Otherwise, it may cause the camera to malfunction.)

LKA (Lane Keeping Assistance)*

The LKA (Lane Keeping Assist) is an assistive vehicle operation technology that detects vehicles up ahead using the FCM (Front Camera Module), and when the system detects that the vehicle is departing from the current lane without a lane change indication, the vehicle visually and audibly warns the driver through the LDW (Lane Departure Warning), and if the vehicle continues to depart from the lane, the vehicle maintains stays in the current lane by taking control using the ESC system.

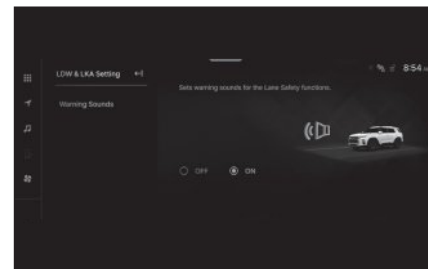


- 1 Lane departure without activation of turn signal lamp detected
- 2 Steering control by ESC as well as warning message and buzzer
- 3 The vehicle is steered toward the center of the lane.

Warning

- The LKA assists the driver with audible and visual warnings so that the vehicle does not move out of the driving lane unintentionally. Do not drive the vehicle in a dangerous or reckless manner relying on the LKA. Always drive safely paying attention to the road conditions.
- The LKA is an assistive device that precisely controls the steering wheel so that the vehicle does not leave the lane regardless of the intention of the driver.

How to set LKA warning sound



- From the main menu of the hypervisor control panel, select Vehicle Settings (🚗) → Driving Assistance → LDW & LKA Setting → Warning Sounds → ON/OFF.

You can turn the warning sound off or on when the Lane Keeping Assistance (LKA) system is operating.

To enable / disable LKA

- Turn the ignition switch to the "ON" position and press and hold the LKA setting button.
- At this time, the lane keeping assistance (LKA) indicator will illuminate and LKA is activated.

While the lane keeping assistance (LKA) is activated, press and hold the button again to deactivate the function.



LKA ON indicator



This indicator light up on the instrument cluster when the LKA is activated.

- Indicator ON in white: System READY state (Vehicle speed below specified value or no lane detected)
- Indicator ON in green: LKA operates normally
- Indicator ON in yellow / flash: Faulty LKA system

Operating conditions

The LKA system is activated when:

- LKA is enabled
 - Vehicle travels at a speed between 40 kph and 175 kph
 - Front camera recognizes left/right lanes
 - Driving on a straight road or gentle curve
 - Turn signal is not activated
-  Refer to "LKA (LDW) indicator / warning lamp*" (p.4-40)

Notice

- **Entry and release conditions depending on vehicle speed**
 - Entry conditions: 40 kph or above, 155 kph or less
 - Release conditions: 35 kph or less, 165 kph or above

Warning

- Do not release your hands from the steering wheel while driving.
- The driver is responsible for safe driving of the vehicle by maneuvering the steering wheel.
- Do not steer the vehicle rapidly while the LKA is activated.
- The LKA does not always control the steering wheel automatically.



Warning

- The LKA is only a device to assist with the steering wheel operation, and the driver is entirely responsible for maintaining the lane with the steering wheel operation.
- The LKA may be deactivated, not work at all, or activated when it is not desired depending on the road conditions and surrounding environment.
- Never drive the vehicle in a dangerous or reckless manner to test the LKA.
- When replacing the steering wheel system-relevant parts, have the system checked and serviced at a KGM Dealer or KGM Authorized Service Center.



Caution

- Do not attach sticker, accessory, tinting films on the detection area of the FCM. This can cause malfunctions and abnormal operation of the related systems.
- The LDW recognizes the lanes by using the images from the cameras. Keep in mind that the LDW may be deactivated or activated when it is not desired if the lanes are not recognized successfully.
- Pay close attention especially when the LKA fails to detect the lane markings.



Caution

- Do not remove any part of the LDW or apply impact on it.
- Do not put any object with reflective surface (white paper, mirror, etc.) on the instrument panel. Reflected lights can cause system malfunction.
- You may not hear the audible alert (chime) if the sound from your audio source is too loud.
- If you drive without holding the steering wheel for too long, LKA will be turned off automatically after the hands off alert.
- Please note that when driving at high speed, the steering assist force of the lane keeping assist system may be reduced, which can cause the vehicle to leave the lane.
- The driver is responsible for operating the steering wheel.
- The driver can still steer the vehicle in the event of the faulty LKA.
- Please operate the steering wheel by hand without using the LKA when:
 - Weather is bad
 - Road condition is not good
 - Frequent steering wheel control is required
- You may feel that the steering wheel is heavy or light when the LKA is not operating.

Cases that the system is not activated

- When the turn signal and the hazard warning lamp are operated for changing the lane
- When both the left and right lanes are not recognized
- When the vehicle is driven on one side of the lane continuously without moving to the center of the lane after changing the lane
- If the steering wheel is operated suddenly for changing the lane (the system is not activated temporarily)
- When the Electronic stability control system (ESC) is activated
- When the vehicle is circling fast on a curved road
- When the vehicle speed is less than 40 kph and more than 175 kph
- When you need to change the lane rapidly
- When the width of the lane is too narrow or too wide so that the lane cannot be detected
- When there are 2 or more lane markings on the lane while driving (example: construction section)
- If the radius of a curved road is too small

- In case of a steep sloping road
- When the vehicle speed is reduced rapidly
- When the tinted part of the windshield covers a part of the Front Camera Module (FCM) detection range



Warning

- **Change the lane after operating the turn signal switch.**



Caution

- **Do not tint the Front Camera Module (FCM) detection area. Doing so may cause the relevant system to malfunction or not to operate.**

Part prohibited for tinting (FCM detection area)



Cases requiring the driver's attention

In any of the following cases, the system may not operate or may operate unnecessarily. Therefore, the driver's attention is necessary.

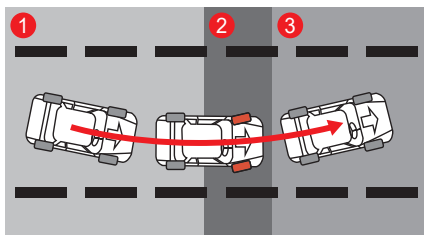
- If the lanes are not visible due to foreign substances (rain, snow, dust, puddle, wet road surface)
- If the color of lane markings and the road cannot be distinguished clearly
- If the lane markings are not clear or are damaged or two or more lane markings are present on one side
- If there are markings other than or similar to the lane marking near the lane
- If the lane markings are covered in the shade of median strips, guardrails, noise barriers, other structures or roadside trees
- If there are boundary structures such as sidewalk blocks
- If the lane is crowded due to the construction section or some lanes are replaced with structures
- When the lane suddenly disappears or is invisible on the intersection
- There is a section where the number of lanes increases or decreases or the lanes intersect complicatedly (tollgate entrance, road junction/merge section, etc)

- If the lane is too narrow or too wide
- If the distance from a vehicle ahead is extremely short or a vehicle ahead is driving while hiding the lane
- There is a marking for a crosswalk or road sign on the road surface
- If the visibility is poor due to bad weather such as fog, heavy rain or heavy snow
- If the visibility is poor so that the lane cannot be recognized
- When the brightness outside the vehicle changes rapidly such as the entering a tunnel
- When the light is weak or the head light of the vehicle is not used at night or in a tunnel section
- When you drive the vehicle on the bus-only lane or on the left or right lane of the bus-only lane
- On a sharply curved section or a steeply sloping road
- when the vehicle wobbles significantly
- When a reflecting object (white paper or mirror, etc.) is placed on the dashboard
- When the windshield or the front side of the camera lens is contaminated with dust
- When the moisture formed on the glass of the windshield is not removed completely
- When the temperature near the camera is very high due to direct sunlight

- When there is backlight in the moving direction of the vehicle
- When the sunlight, streetlight or the light from an incoming vehicle is reflected by water on the road surface
- When front camera is arbitrarily refitted (Be sure to visit our authorized service center to perform the calibration of the front camera. Otherwise, it may cause the camera to malfunction.)

Centering Lane Keeping Assist (CLKA)

The centering lane keeping assist is a driving aid that, once the front camera module (FCM) recognizes the lane ahead, helps the driver's vehicle stay on the road-edge through steering wheel (EPS) control.



- 1 Vehicle leaving center of lane detected
- 2 Steering control by EPS as well as warning message and buzzer
- 3 Controls vehicle to move to center of lane

Notice

- To operate the centering lane keeping assist (CLKA), the driver must always press the LKA setting button briefly after turning the ignition switch to the ON position.

Warning

- The centering lane keeping assist (CLKA) is the system that provides a visual and audible warning to the driver to keep the driver's vehicle between lanes (center). Do not drive the vehicle in a dangerous or reckless manner relying on the CLKA. Always drive safely paying attention to the road conditions.
- The CLKA is an assistive device that precisely controls the steering wheel so that the vehicle does not get out of the middle of the lane regardless of the driver's intention.

To activate / deactivate CLKA

Turn the ignition switch to the "ON" position and press the LKA setting button briefly.

At this time, the centering lane keeping assist (CLKA) indicator will illuminate and CLKA is activated regardless of the lane departure warning (LDW) and lane keeping assistance (LKA) settings.

While the CLKA is activated, press the button briefly again to deactivate the function.



4

Centering lane keeping assist (CLKA) ON indicator lamp



- When the centering lane keeping assist (CLKA) is activated, the indicator illuminates on the instrument cluster.
- Indicator ON in white: CLKA standby mode (Vehicle speed below specified value or no lane detected)
- Indicator ON in green: CLKA normal operation
- Indicator ON in yellow / flash: In the event of faulty CLKA

Notice

- For safe operation, turning the ignition switch to the OFF position cancels the setting of the centering lane keeping assist (CLKA). Press the button briefly to operate the CLKA.
- If intelligent cruise control (IACC) is activated during CLKA operation, CLKA will be disabled. If IACC is subsequently disabled, CLKA is automatically reactivated.

Conditions for activation

CLKA will be activated when:

- LKA setting button is pressed briefly.
 - Vehicle speed is 180 km/h or lower.
 - Front camera recognizes left/right lanes.
 - The vehicle is driving on a straight road or gentle curve.
 - Turn signal is not activated.
 - Turn signal on the opposite side of direction in which you are about to move is operated.
- ☞ Refer to “Centering lane keeping assist (CLKA) indicator / warning lamp” (p.4-40)



Warning

- Do not release your hands from the steering wheel while driving.
- The driver is responsible for safe driving of the vehicle by maneuvering the steering wheel.
- Do not steer the vehicle unnecessarily rapidly while the CLKA is activated.
- The CLKA does not always provide the steering wheel control automatically.
- The CLKA is only a device to assist with the steering wheel operation, and the driver is entirely responsible for maintaining the lane with the steering wheel operation.
- The CLKA may be deactivated, not work at all, or activated when it is not desired depending on the road conditions and surrounding environment.
- Do not try to drive the vehicle in a dangerous or reckless manner to see how the CLKA is operated.
- When replacing the steering wheel system-relevant parts, have the system checked and serviced at a KGM Dealer or KGM Authorized Service Center.



Caution

- Do not attach sticker, accessory, tinting films on the detection area of the FCM. This can cause malfunctions and abnormal operation of the related systems.
- The CLKA recognizes the lanes by using the images from the cameras. Keep in mind that the CLKA may be deactivated or perform unnecessary operations if the lanes are not recognized successfully.
- Pay close attention especially when the LKAS fails to detect the lane markings.
- Do not remove any part of the CLKA arbitrarily or apply impact on it.
- Do not put any object with reflective surface (white paper, mirror, etc.) on the instrument panel. Reflected lights can cause system malfunction.
- You may not hear the audible alert (chime) from CLKA if the sound from your audio source is too loud.
- If you drive without holding the steering wheel for too long, CLKA will be disabled automatically after the hands off alert.



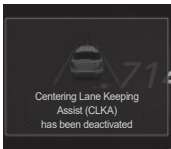
Caution

- Please note that when driving at high speed, the steering assist force of the CLKA may be reduced, which can cause the vehicle to leave the lane.
- The driver is responsible for operating the steering wheel.
- The driver can still steer the vehicle in the event of the faulty CLKA.
- Please operate the steering wheel by hand without using the CLKA when:
 - Weather is bad
 - Road condition is not good
 - Frequent steering wheel control is required
- You may feel that the steering wheel is heavy or light under conditions in which CLKA does not assist steering wheel operation.

Centering lane keeping assist (CLKA) hands-off warning

If the driver is not holding the steering wheel while the steering wheel is being controlled by the central lane keeping assist (CLKA), the hands-off warning is displayed in three stages, and the CLKA function is stopped when it is in the third stage.

Pop-up	Description
 Please hold the steering wheel.	• Step 1: Message • Warning message is displayed.
 Please hold the steering wheel.	• Step 2: Message + warning • Warning message is displayed and beep sounds.
 Please hold the steering wheel.	• Step 3: Message + Beep (different from step 2) • Warning message is displayed, and a beep different from one in step 2 will sound.

Pop-up	Description
	• System deactivated: Message + feature disabled • The feature will be disabled (including steering control) with a message.

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

! Caution
The steering wheel (steering force) control system may not function or intervene unnecessarily under following circumstances: • The system cannot recognize the lane markings because of rain, snow, dust, standing water or puddles, other obstruction on the road. • The color of the lane markings is not clearly distinct from the road color. • The lane markings are not clear or tampered by the traffic, or there are 2 or more lane markings on one side. • There are other markings similar to the lane markings on the roads. • The lane markings are covered in shadows of the median barriers, guardrails, noise barrier walls, roadside trees. • There are environmental barriers, such as bollard. • The traffic is heavy due to the construction in the area or traffic control items, such as traffic cones, are used to separate traffic flows. • The lane markings are suddenly discontinued at roundabouts and road intersections. • The vehicle is passing through a certain section, such as highway interchange, where the number of lanes increases or decreases.

! Caution
• The width of the driving lane is too narrow or wide. • The distance to the vehicle ahead is too short or a wheel of the vehicle ahead is touching the lane marker. • There are other roadway markings on the roads, such as crosswalk markings, arrows, symbols, along with the lane markings. • Poor visibility due to factors such as fog, heavy rain, heavy snow, etc. • Hard to recognize other vehicles and pedestrians because of poor visibility. • There is rapid change of illumination, for example at tunnel entry and exit points • The headlamps are not turned on or the brightness of the lamps is too low when driving at night or through tunnels. • When you are traveling within or near the outer edges of the bus-only lane. • The vehicle is driven on a steep hill or around sharp corners. • the vehicle is driven under specific conditions which cause severe vibration. • Objects with reflective surface (white paper, mirror, etc.) are on the dashboard. • The windshield glass in front of the camera module is covered with ice, snow, slush, mud, dirt or debris.



Caution

- Fog or mist on the windshield.
- The temperature around the front view camera is too high because of the direct sunlight.
- The vehicle is moving towards a light source.
- The light from the sun, streetlamps, or headlamps of oncoming vehicles is reflected by the wet road surface.
- Bend such as sharp S-curve

The CLKA does not work when:

- The driver activates the turn signal lamps or hazard warning lamp.
- Both lanes are not detected.
- The vehicle keeps being driven too close to any side of the lane after changing the lane.
- The driver changes the lane with abrupt steering wheel operation. (temporarily system inactivated)
- Electronic stability control (ESC) is activated.
- The vehicle is cornering at high speed.
- Vehicle speed is above 180 km/h
- The driver changes the lane abruptly.
- The lane is too narrow or too wide to recognize it.
- There are 2 or more lane markings (e.g. construction zone).
- The vehicle is driven around a curve with too small radius.
- The vehicle is driven on steep hills.
- The vehicle decelerates abruptly.
- The windshield tinting film covers the detection range of the front camera module (FCM).



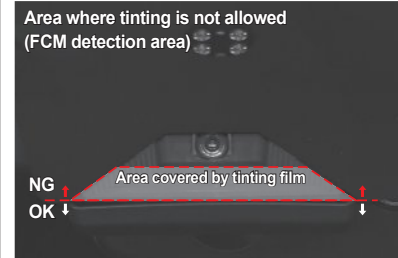
Warning

- Activate the turn signal lamps before trying to make a lane-change.



Caution

- Do not apply tinting film on the FCM detection area. This may cause the related system to malfunction or not work.



Driver Attention Required

The CLKA may not work at all or be activated when it is not desired in the following conditions:

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

Cruise control system

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

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

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

Conditions for using the cruise control

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

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

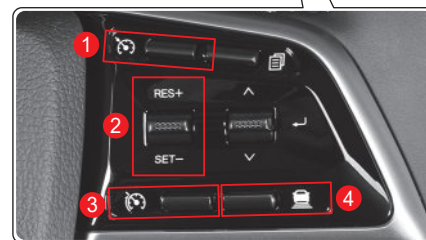


Warning

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

Cruise control switch and indicator

Cruise control switch



1 Cruise control ON/OFF switch

2 Speed selector lever

RES+

- Reactivating cruise control
- Increasing speed

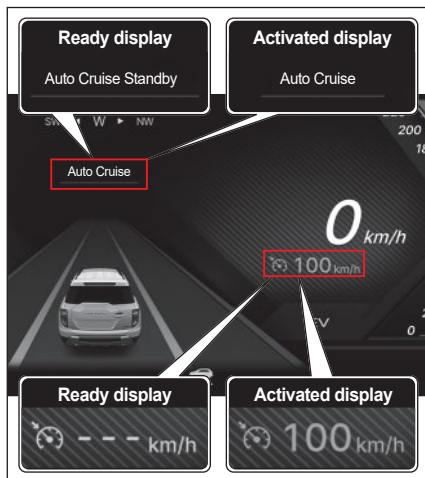
SET-

- Set driving speed on cruise control
- Decreasing speed

3 Speed limit ON/OFF switch

4 Button for setting safe distance

Cruise Control Ready / Enabled Display



Auto cruise ACTIVATED

When Intelligent Cruise Control and Speed Limit are not active, briefly pressing the switch engages Intelligent Cruise Control (ON)

- “Auto Cruise Activate” pop-up displayed
- Symbol and set speed, “100km/h” displayed

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

Auto cruise READY

With Auto Cruise Control activated, briefly press the corresponding switch. The instrument cluster displays the following message and Auto Cruise Control enters the Ready mode.

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

Setting the cruise control driving speed

- 1 Press the cruise control ON/OFF switch. The instrument cluster shows “Auto cruise Activate”.
- 2 Adjust the vehicle speed so that the speed range for the cruise control operation is between approximately 40 km/h and 190 km/h.
- 3 Set the desired driving speed by raising or lowering the speed control lever of the cruise control in the SET- direction.

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





Warning

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



Caution

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

Notice

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

Speed acceleration process of the cruise control

When the cruise control system is activated

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



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

When the cruise control system is not activated

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

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

Increasing the set speed by phases with the cruise control activated

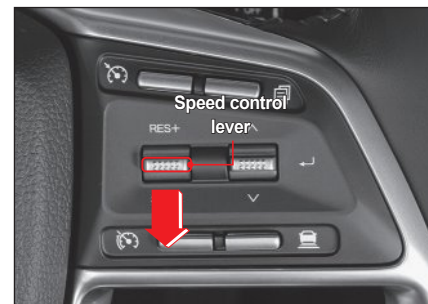
To increase the speed cruise control slightly by phases with the cruise control activated, carry out the following steps.

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

Speed deceleration of the cruise control

When the cruise control system is activated

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



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

Decreasing the set speed by phases with the cruise control activated

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

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

Deactivating the cruise control

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

Deactivation condition

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

Other deactivation conditions according to the vehicle condition

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

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

Resuming the cruise control

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

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



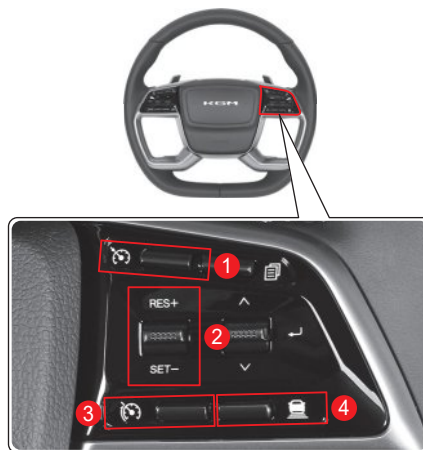
- The last set speed memorized before the cruise control was deactivated is resumed.
- The AUTO CRUISE indicator on the instrument cluster turns on.

Adaptive Cruise Control*

The Adaptive Cruise Control System is an auxiliary convenience device that maintains a constant vehicle speed without having to press the accelerator pedal in a traffic flow that is above the legal safety distance, and maintains a constant distance from the vehicle in front at a set distance when detecting a vehicle in front.

The ACC system is not a safety driving device, so always drive with an eye on the vehicle's speed and the surrounding conditions.

Adaptive Cruise Control Switch



- 1 Adaptive cruise control switch
 - When Adaptive Cruise Control and Speed Limit are not active, briefly pressing the switch engages Adaptive Cruise Control (ON)
 - With Adaptive Cruise Control activated (ON) or on standby, pressing briefly switch turns Adaptive Cruise Control off (OFF)
- 2 Speed selector lever
 - RES+
 - Reactivating Cruise Control
 - Increasing speed
 - SET-
 - Setting cruise control driving speed
 - Decreasing speed
- 3 Speed limit ON/OFF switch
- 4 Switch to set safety distance to front vehicle

☞ For how to operate the speed limit control, see Speed Limit (p. Page 4-201)

Conditions for using Cruise Control

Use cruise control only in the following traffic and road conditions.

- Use it when the traffic is smooth.
- Use only on motorways or highways where the traffic conditions are not expected to change due to traffic lights, vehicles, pedestrians, or other factors.
- Do not use it on general roads.



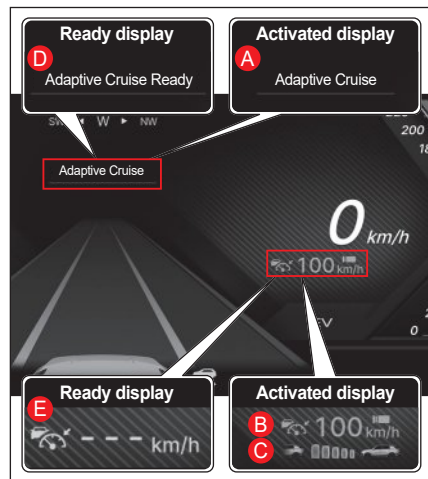
Warning

- Use the cruise control system only on a motorway or expressway with good road conditions.
- Stop using it in the following road conditions as it may be impossible to control the vehicle and cause an accident.
 - Hard wind or crosswind
 - Traffic congestion
 - Slippery roads, ramps or continuous turns

Notice

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

Adaptive Cruise Control Ready / Enabled Display



Set adaptive cruise (enabled)

When Adaptive Cruise Control and Speed Limit are not active, briefly pressing the switch engages Adaptive Cruise Control (ON).

- A** “Adaptive Cruise Activate” pop-up displayed
- B** “Adaptive Cruise” message displayed
- C** Shows how distance to vehicle in front is set (It does not appear when the system is in a ready state).
- D** Shows speed set for vehicle

Adaptive Cruise Control (ACC) operates when the vehicle is traveling at speeds above about 10km/h.

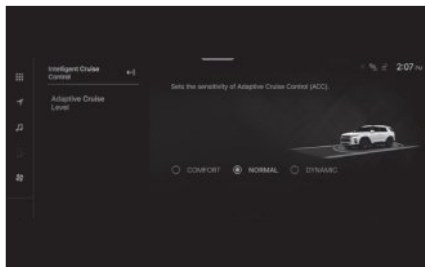
Adaptive Cruise Control Ready

With Adaptive Cruise Control active, briefly press the corresponding switch.

The instrument cluster displays the following message and Adaptive Cruise Control enters the ready mode.

- “Adaptive cruise READY” pop-up displayed
- Symbol and “--- km/h” indicating that system ready to display speed displayed

To set adaptive cruise control (ACC) operation sensitivity



- In the main menu of the hypervisor control panel, select **Vehicle Settings** (⚙️) → **Driving Assistance** → **Intelligent Cruise Control** → **Adaptive Cruise Level** → **COMFORT/ NORMAL/ DYNAMIC**.

Driving settings of adaptive cruise control (ACC)

- 1 Press the cruise control ON/OFF switch. The adaptive cruise control (ACC) is activated.
- 2 “Adaptive cruise control set” message is displayed on the instrument cluster.
 - Then, the vehicle maintains the set speed without depressing the accelerator pedal and keeps driving in the middle of the lane via steering wheel (steering force) control.
 - If a preceding vehicle is detected, the driver's vehicle will travel while maintaining a set distance to the vehicle ahead.
- 3 When the adaptive cruise control (ACC) is activated, the vehicle speed is set as follows:
 - Set to 30 km/h if vehicle speed less than 30 km/h
 - Set to current speed if vehicle speed 30 km/h or higher
- 4 You can change the set speed by lowering the speed control lever towards SET- or raising it towards RES+.



! Caution

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

Warning

- Familiarize yourself with the Adaptive Cruise Control (ACC) system thoroughly before setting or disabling the function. ACC operation must be set while driving, so if it is operated improperly or without understanding the system, it may cause an accident.
- Do not change the transmission shift lever to the N (neutral) position when the ACC is activated while driving. This may cause an abnormality in the relevant system or cause an accident.
- When cruising at a constant speed with Adaptive Cruise Control (ACC) activated, you should drive safely to be prepared for any situation that may arise on the road, and be prepared to immediately operate the brake and accelerator pedals.
- Always keep a safe braking distance and step on the brake when necessary.
- The vehicle speed may vary and different from the set speed when driving up and down a hill. If possible, avoid using the Adaptive Cruise Control (ACC) system on hills or slopes. In particular, use the engine brake and foot brake on steep slopes for safety and to protect the vehicle system as well as for safe driving.

Increasing speed

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



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

Caution

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

Decreasing speed

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



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

Temporary acceleration (override)

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

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

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



Caution

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

Deactivating

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

Disable conditions

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

- 3rd warning, emergency braking applied by AEB
- HDC system in operation
- Heavily contaminated radar sensor cover

Other disable conditions

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

Notice

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

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



Notice

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

Resume

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

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



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

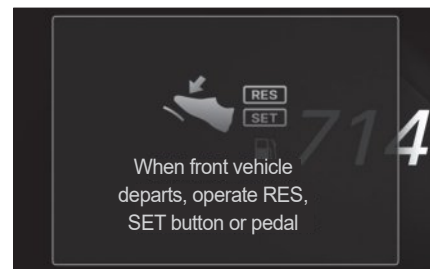
! Caution

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

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

Then, the adaptive cruise control resumes.

Depressing the accelerator pedal also resumes the adaptive cruise control.



To Deactivate

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

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

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



Caution

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



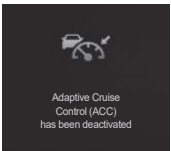
Warning

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

Steering wheel (steering force) control alert

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

Pop-up	Description
	Step 1: Message • Warning message is displayed.
	Step 2: Message + Beep • Warning message is displayed and beep sounds.
	Step 3: Message + Beep (different from step 2) • Warning message is displayed, and a beep different from one in step 2 will sound.

Pop-up	Description
 Adaptive Cruise Control (ACC) has been deactivated	Step 3: Message + System disabled “Adaptive cruise control disabled” message is displayed and steering control is disabled at the same time. However, the cruise control still functions.

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

Notice
- For the safe operation of the driver, the ACC will be deactivated when the ignition switch is in the OFF position. - In order to use ACC, you need to reset it.

! Caution
The steering wheel (steering force) control system may not function or intervene unnecessarily under following circumstances: - The system cannot recognize the lane markings because of rain, snow, dust, standing water or puddles, other obstruction on the road. - The color of the lane markings is not clearly distinct from the road color.

- The lane markings are not clear or tampered by the traffic, or there are 2 or more lane markings on one side. - There are other markings similar to the lane markings on the roads. - The lane markings are covered in shadows of the median barriers, guardrails, noise barrier walls, roadside trees. - There are environmental barriers, such as bollard. - The traffic is heavy due to the construction in the area or traffic control items, such as traffic cones, are used to separate traffic flows. - The lane markings are suddenly discontinued at roundabouts and road intersections. - The vehicle is passing through a certain section, such as highway interchange, where the number of lanes increases or decreases. - The width of the driving lane is too narrow or wide. - The distance to the vehicle ahead is too short or a wheel of the vehicle ahead is touching the lane marker. - There are other roadway markings on the roads, such as crosswalk markings, arrows, symbols, along with the lane markings. - Poor visibility due to factors such as fog, heavy rain, heavy snow, etc.
--

- Hard to recognize other vehicles and pedestrians because of poor visibility.
- There is rapid change of illumination, for example at tunnel entry and exit points.
- The headlamps are not turned on or the brightness of the lamps is too low when driving at night or through tunnels.
- When you are traveling within or near the outer edges of the bus-only lane.
- The vehicle is driven on a steep hill or around sharp corners.
- the vehicle is driven under specific conditions which cause severe vibration.
- Objects with reflective surface (white paper, mirror, etc.) are on the dashboard.
- The windshield glass in front of the camera module is covered with ice, snow, slush, mud, dirt or debris.
- Fog or mist on the windshield.
- The temperature around the front view camera is too high because of the direct sunlight.
- The vehicle is moving towards a light source.
- The light from the sun, streetlamps, or headlamps of oncoming vehicles is reflected by the wet road surface.
- Bend such as sharp S-curve

To set safety distance to front vehicle

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

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

Set the safety distance according to the current vehicle speed.



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

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

Driving assistance group	Pop-up
Step 1 	
Step 2 	
Step 3 	
Step 4 	
Step 5 	

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

Forward situation awareness



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

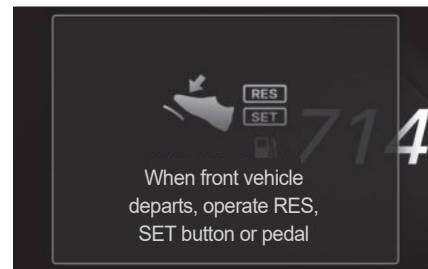
- If the driver has to operate the brake pedal or steering wheel, immediately reduce the vehicle speed or change the direction.



Caution

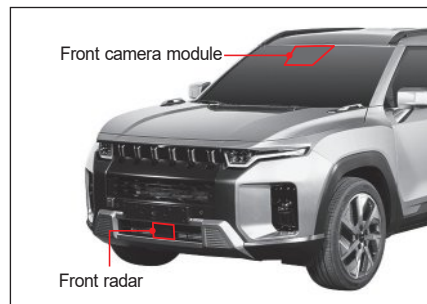
- **If the front vehicle disappears from the front view due to lane change, etc. while traveling and maintaining the distance to the front vehicle constant at a low speed the driver's vehicle may collide with a newly appearing stationary vehicle or object.**

Starting at congested areas



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

Front detection sensor (Front radar + front camera)

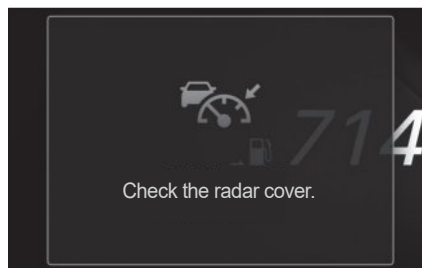


Front radar

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

Front camera

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



Caution

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

Vehicle detection is difficult under the following circumstances:

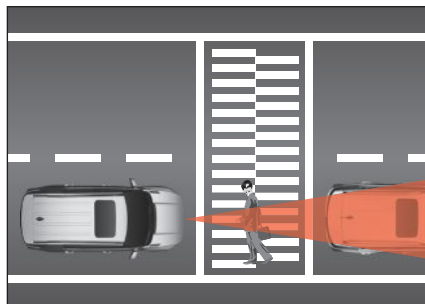
- Driving on a steep hill or sharp corners
- Driving under specific conditions which cause severe vehicle vibration
- A vehicle or a pedestrian recklessly cuts in front of you
- There is an approaching or reversing vehicle
- there is a vehicle with arbitrary shape
- Vehicle traveling close to one side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



Caution

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

Not detected preceding pedestrian



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

Curved road

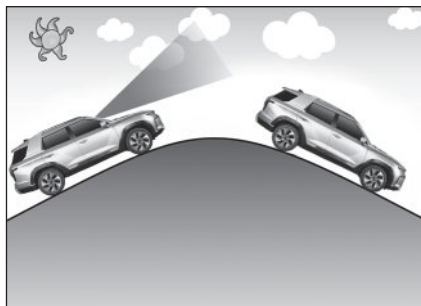


- The system may fail to recognize a preceding vehicle in the same lane on a curved road and accelerate the vehicle to the set speed rapidly.
- If the preceding vehicle is suddenly detected, the vehicle speed may decelerate rapidly.
- Always be careful of motor traffic and reduce the vehicle speed by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



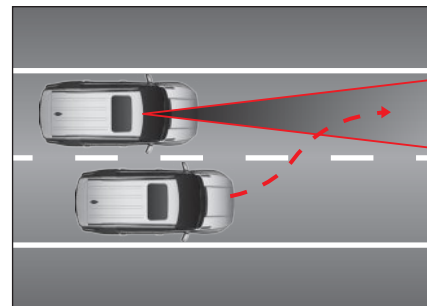
- It may detect a vehicle in a different lane on a curve and which may affect the driver's vehicle speed. Always be careful of motor traffic and reduce the vehicle speed by depressing the brake pedal.
- In this case, check the traffic conditions around you, then step on the accelerator pedal to prevent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

Uphill or downhill

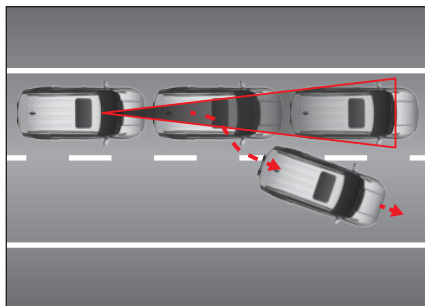


- The vehicle may accelerate to the driver set speed rapidly by failing to recognize a preceding vehicle in the same lane on an uphill or downhill.
- If the preceding vehicle is suddenly detected, the vehicle speed may decelerate rapidly.
- Always be careful of motor traffic on the uphill or downhill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

To change lane

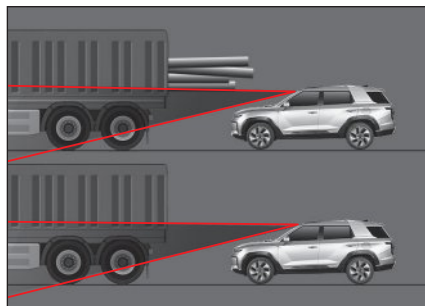


- When a vehicle in the lane next to you enters the same lane, the system may fail to recognize this vehicle until it enters into the sensor detection area.
- Be cautious at all times since the sensor may detect a vehicle cutting in suddenly late.
- Make sure to decelerate to maintain the vehicle-to-vehicle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



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

Detecting vehicle ahead



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



Warning

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



Warning

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



Caution

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

Intelligent Speed Assistance (ISA)*

ISA (Intelligent Speed Assistance) is a driver safety system that recognizes the speed limit through the front camera module and controls the vehicle speed with visual and audible warnings to ensure that the vehicle does not exceed the speed limit.

Notice

- Uses a vehicle's built-in camera and navigation to display information about the speed limit on the road currently traveling on a cluster to help drivers stay within the speed limit.



Caution

- Depending on your navigation information and vehicle speed, the distance at which road signs are recognized can vary. In some cases, the system may not recognize road signs.
- ISA is intended for the purpose of vehicle safety support. Even when using this system, the driver must remain aware of the surrounding environment and comply with all traffic regulations while driving.
- ISA is a driving assistance function, so the driver is responsible for driving even when using the system.
- If a navigation is applied to the vehicle, the navigation needs to be regularly updated for Intelligent Speed Assist to operate properly. For checking latest map version and downloading, visit <https://ssangyong.navshop.com/#/downloads>.
You can update the map at General settings → System → Navigation map update after inserting a USB contains the map file.



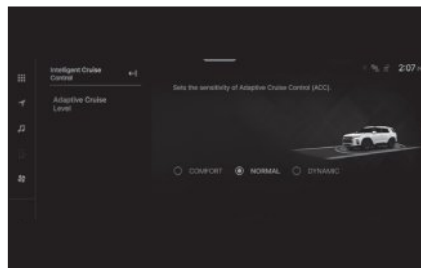
Warning

- All warnings from the ISA system installed in the vehicle do not violate the actual road speed limit, and the driver is solely responsible for checking and complying with it.
- Temporary changes in speed limits for specific periods of time and on specific sections due to non-routine events such as accidents or construction may not be reflected by the ISA system.

Intelligent Speed Assistance (ISA) operation switch

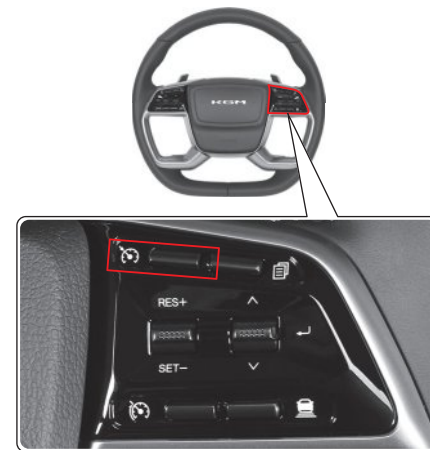


How To Set ISA



- From the main menu of the hypervisor control panel, select Vehicle Settings (⚙️) → Driving Assistance → Intelligent Cruise Control → Adaptive Cruise Level → COMFORT/ NORMAL/ DYNAMIC.

How to operate Intelligent Speed Assistance (ISA)



With Intelligent Speed Assistance set, pressing the right Intelligent Speed Assistance switch on the steering wheel will enable the function.

How ISA appears on instrument panel



Based on information from the front camera (road sign detection) and navigation, the instrument panel displays speed limit information for the lane you're driving in.

Notice

- Traffic sign detection is only available at vehicle speeds below 250 km/h and displays the sign on the instrument panel within 0.1 seconds of detection.

Speed limit warning

Enabling speed limit warnings

Basic conditions for speed limit warnings to operate

- Speed limit warning enabled
- Speed limit recognized
- Speed of the vehicle you are driving is higher than 1 km/h above the speed limit

If all of the speed limit warning default conditions are met, the system notifies the driver with a visual warning.

Disabling speed limit warnings

The speed limit warning is turned off if any of the following conditions are met:

- Speed limit not recognized
- Speed of vehicle you are driving is below speed limit

Speed Limit Assist

Enabling Speed Limit Assist

Basic conditions for Speed Limit Assist to operate

- Speed Limit Assist enabled
- Vehicle not stationary
- Speed limit over 30 km/h recognized
- Speed limit (instrument panel display speed) differs from set speed
- Intelligent Cruise Control or Speed Limit enabled

If the driver presses the Intelligent Speed Control switch while the SET indicator is displayed to the left of the instrument panel speed limit display, it will change to the recognized speed limit.

Notice

- **Speed Limit Assist only operates when the speed limit indicator is displayed on the instrument panel.**

Disabling Speed Limit Assist

Speed Limit Assist enters a standby mode if any of the following conditions are met:

- Intelligent Cruise Control or Speed Limit turned off
- Speed limit (instrument panel display speed) is equal to set speed
- Vehicle is stationary
- Faulty Speed Limit Assist system

Recognizing Traffic Signs

Lateral distance condition based on velocity

- Depending on the vehicle speed, traffic signs may not be recognized.

Notice
• Intelligent Speed Assistance (ISA) determines road properties (local roads, freeways) based on information from navigation.

Recognizable traffic signs

Speed limit signs

- Recognizable diameters: 0.3m to 1.0m
- Typical speed signs (10 to 140 km/h)
- LED type speed signs (30 to 140 km/h)
- Speed limit remove signs

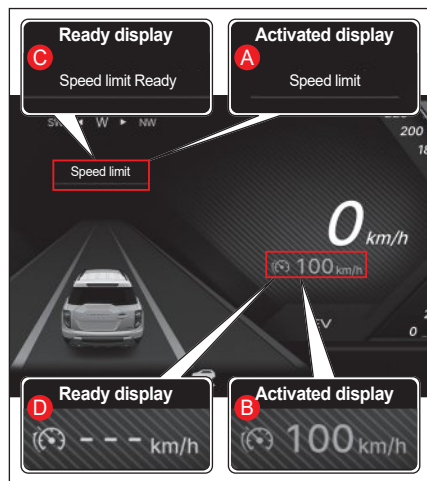
Traffic signs can be difficult to recognize when:

- Signs are obscured by shade from overpasses or street trees.
- Difficulty recognizing the front camera due to backlighting, rain, or snowfall.
- The sign is obscured by other objects, such as tree branches along the road.
- The sign is damaged.
- Visibility is poor enough to make it difficult to recognize the sign.
- The sign is not recognized by the headlight illumination angle or if only part of the sign is detected.
- Glare is caused by sign reflections.
- The light from the light source is reflected due to rain or snowfall.

Speed Limit*

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

Images that show readiness and operation



Speed Limit Ready (Standby)

When the Speed Limit switch is pressed, the following message is displayed on the instrument panel and the speed limit is ready (standby).

- A** Display of "Speed Limit" operating status
- B** Shows speed set for vehicle

Speed Limit Setting (Activation)

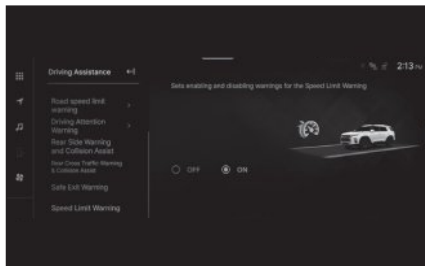
While the Speed Limit is in the ready (standby) state, move the speed control lever down.

The following message will be displayed on the instrument panel and the Speed Limit will be activated (ON).

- C** Display of "Speed Limit Ready" status
- D** Displayed "---" as vehicle's set speed

How to enable speed limit in hypervisor control panel

- Go to **Driving Assistance** → **Speed Limit Warning** under  (Vehicle Settings) in the hypervisor control panel and tick the box.



Issue speed limit warning

Speed Limit is activated when the operation switch is pressed and held with Adaptive Cruise Control and Speed Limit unset.

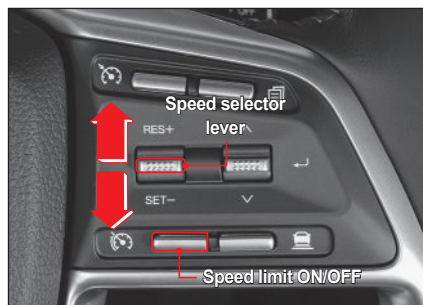
When the Speed Limit Warning control is engaged, the vehicle does not accelerate beyond the set speed when the accelerator pedal is pressed, or a warning sounds, depending on the vehicle settings.

If you want to travel above the set speed, you must press the accelerator pedal to the maximum.

Press briefly the switch with Speed Limit in active to put Speed Limit into standby mode.

To set speed

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



Notice

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

To deactivate speed limit warning

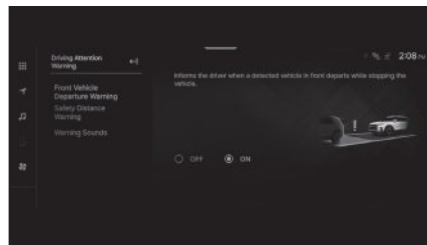
- Operate speed limit warning ON/OFF switch twice
- Operate cruise control ON/OFF switch once

FVSW (Front Vehicle Start Warning)*

It is a system that notifies the driver when the driver does not recognize that the ahead vehicle departed while the driver's vehicle is stationary, using the sensor (FCM) at front of the vehicle.

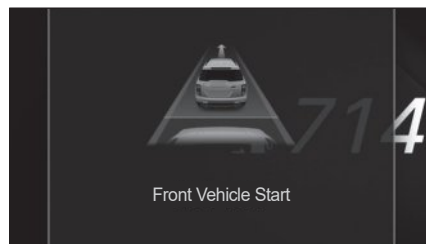
FVSW : Front Vehicle Start Warning

How To Set



From the main menu of the hypervisor control panel, select Vehicle Settings (⚙️) → Driving Assistance → Driver Attention Warning → Front Vehicle Departure Warning → OFF/ON.

Operation



If the driver does not perform any operation (such as not starting the vehicle) about 1 second after the ahead vehicle departs, the message will be displayed on the LCD and alarm will sound.



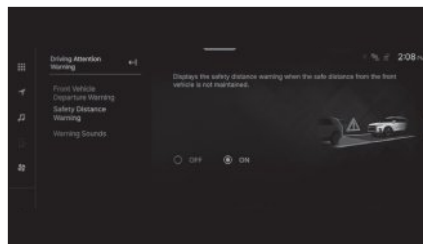
Caution

- For safe driving, be sure to check the front and surrounding road conditions before starting the vehicle.
- The FVSW (Front Vehicle Start Warning) does not work in stop situations other than stop by the brake pedal, auto hold, or smart cruise control system.
- If you stop the vehicle with shift lever in N (neutral) position, it may not operate or may generate a false alarm.
- In an environment other than the normal driving situation (non-motorway / highway), it may generate a false alarm.
- The FVSW works only when the shift lever is in D (drive) or N (neutral) position.
- There may be a false alarm if you stop at a speed bump or ramp.

Safe Distance Warning (SDW)*

Safety Distance Warning is a system that utilizes the front camera module (FCM) and front radar (FRM) to alert the driver when the vehicle does not maintain a safe distance from the vehicle in front of it relative to the vehicle speed while driving.

How to set Safe distance Warning (SDW)



- From the main menu of the hypervisor control panel, select Vehicle Settings (🚗) → Driving Assistance → Driver Attention Warning → Safety Distance Warning → OFF/ON.

How Safe Distance Warning (SDW) operates



A "Keep a safe distance" pop-up appears when the distance to the vehicle in front of you is closing.

Slow down the vehicle you're traveling in to gain distance from the vehicle in front of you.

Rear and side warning system*

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

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

Display of rear and side warning system activation



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

Note

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

Warning

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

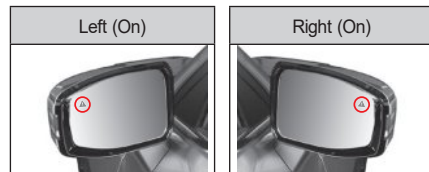
Caution

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

Warning Steps in BSW System

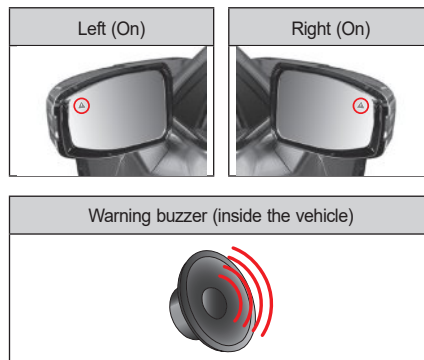
A first warning or second warning is issued when a vehicle approaching at a driving speed that matches the function settings of the blind spot-detection warning system is detected.

1st warning



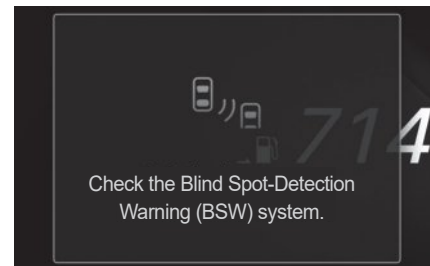
- Red warning lamp flashes on outside rearview mirror
- Functions affected by first warning
 - Blind spot-detection warning (BSW) system
 - Lane change warning (LCW) system

2nd warning



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

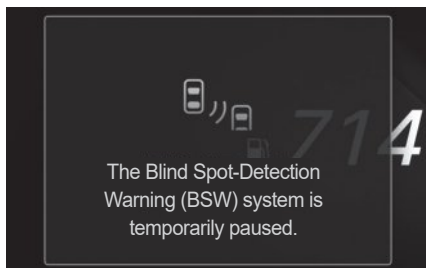
When the rear and side warning system is abnormal



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

! Caution

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

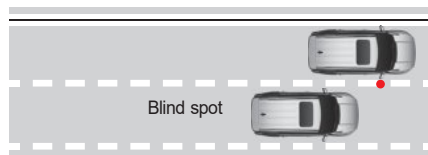


If the sensor cannot detect the rear and both side areas of the vehicle normally with the rear and side warning system activated, the message is displayed on the display of the instrument cluster.

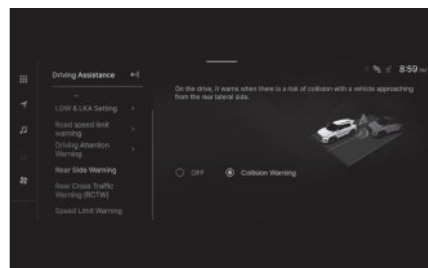
- When there is a foreign material on the outside and inside of the rear bumper
- When equipment such as a trailer is installed on the rear of the vehicle
- When driving on open area where no objects around road continuously (e.g., desert, meadow)
- When there is a heavy snow or a heavy rain
- When the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

Blind Spot Detection Warning (BSW) system

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



Activating / deactivating BSW system



- From the main menu of the hypervisor control panel, select Vehicle Settings (🚗) → Driving Assistance → Rear Side Warning and Collision Assist → OFF/Collision Warning/ Collision Assist

Activation conditions

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

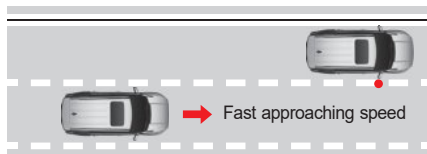
- When the rear and side warning system is activated
- When the vehicle speed is more than 16 km/h and less than 255 km/h
- When a vehicle is present in the blind spot detection area

Warning

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

Lane Change Collision Warning (LCW) system

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



Operating conditions

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

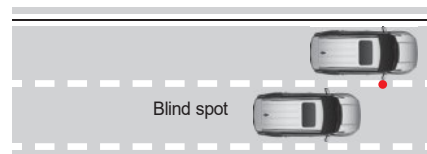
- BSW system is activated.
- Vehicle speed is between 20 km/h and 255 km/h.
- When a vehicle approaching at a high speed is in the detection area.
- Driver's vehicle is driving on a straight road.

Warning

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

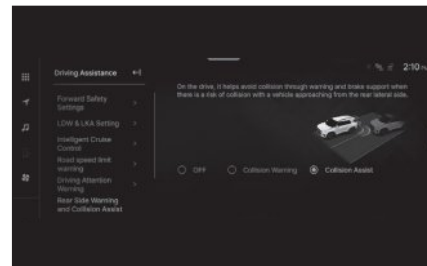
BSA System

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



4

Activating / deactivating BSA system



- From the main menu of the hypervisor control panel, select Vehicle Settings (⚙️) → Driving Assistance → Rear Side Warning and Collision Assist → OFF/Collision Warning/Collision Assist.

Operating conditions

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

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

BSA is deactivated when:

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



Caution

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

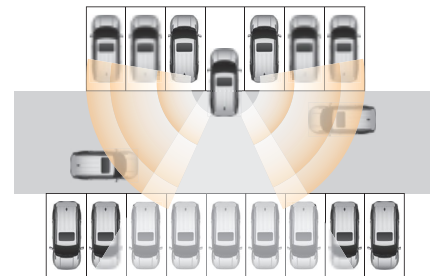


Warning

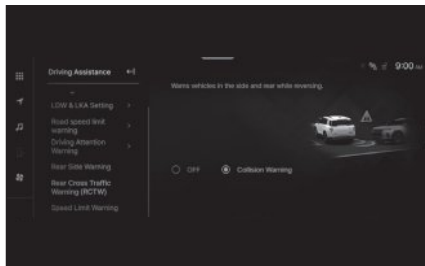
- The braking control may not work depending on the electronic stability control (ESC).
- When the electronic stability control (ESC) warning light comes on, the braking control does not work.
- When the electronic stability control (ESC) performs another function, the braking control does not work.

RCTW System

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



Activating / deactivating RCTW system

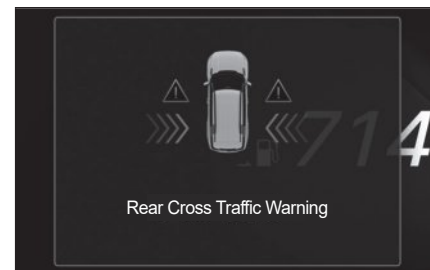
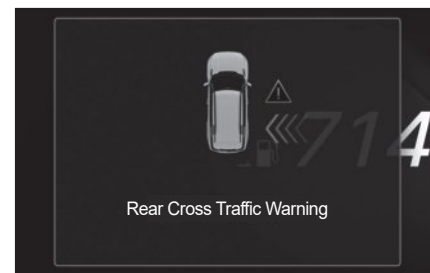
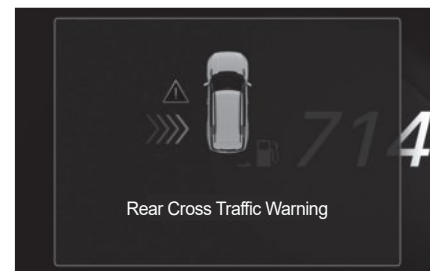


- From the main menu of the hypervisor control panel, select Vehicle Settings (🔧) → Driving Assistance → Rear Cross Traffic Warning & Collision Assist → OFF/Collision Warning/ Collision Assist.

Activation conditions

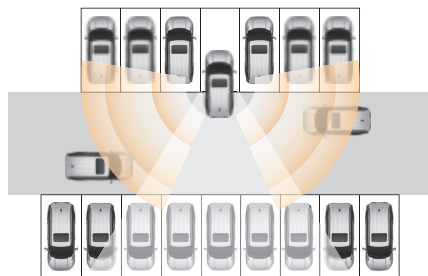
- RCTW system is activated
- If the gear shift lever is placed in the R (reverse) position
- When the vehicle speed is less than 10km/h
- If a vehicle exists within the RCTW range and the speed of the approaching vehicle is 24 km/h or less

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

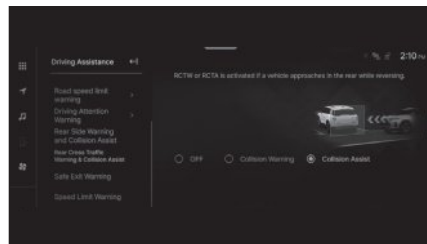


RCTA System

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



Activating / deactivating RCTA system

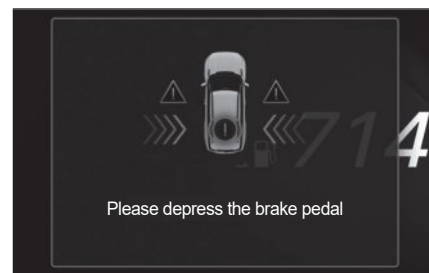
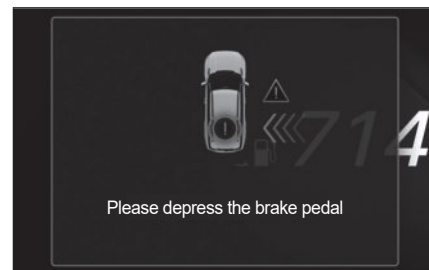
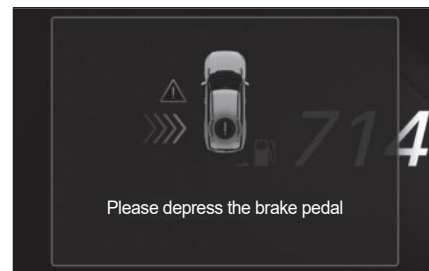


- From the main menu of the hypervisor control panel, select Vehicle Settings (⚙️) → Driving Assistance → Rear Cross Traffic Warning & Collision Assist → OFF/Collision Warning/ Collision Assist.

Operating conditions:

- Rear cross traffic-collision assist (RCTA) enabled
- Shift lever in R (reverse) position
- Vehicle speed of below 8 km/h
- If a vehicle exists within the RCTA range and the speed of the approaching vehicle is 5 km/h or more.
- If the risk of collision is detected due to an approaching vehicle during operation of the RCTA system, emergency braking (braking assist) is performed.
- The braking assist does not restart for about 10 seconds after it operates.

Message on instrument cluster



Cases where RCTA system not work

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

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

Cases where the RCTA system malfunctions

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

- If the rear bumper is stained with foreign materials (rain, snow, dust, sticker, etc)
- When equipment such as a trailer is installed on the rear of the vehicle
- When the rear bumper is damaged or the vehicle body is distorted
- Sharp curve, tollgate entrance and exit section
- Tire pressure imbalance and excessive loading
- Bad (heavy snow, heavy rain) weather

- When there is a fixed object (median strips, guardrails, noise barriers) on the road or a construction section
- When a large vehicle or a small motor cycle (bicycle) is driving at a close range
- When your vehicle is passing by heavy-duty trailer
- When you accelerate the vehicle with an opposite vehicle together at the same time
- When the speed of a vehicle behind is very fast (passing)
- When you change the lane
- Steep uphill road, downhill road or a road condition where the height of lanes is different
- When an opposite vehicle is driving very closely to the rear side of the vehicle
- When a vehicle behind driving closely passes
- When the area near the sensor is covered with a vehicle, a column or a wall in the parking lot
- A vehicle that moves in the same direction when reversing the vehicle
- A small moving object such as a person, a shopping cart or a stroller
- When parking conditions are complicated (diagonal parking, near the ramp, obstacle, etc.)
- A vehicle with very low vehicle body
- A narrow road densely covered with trees or grass

- When the width of the road is very wide
- When the road surface is wet
- When the sensor detection area is changed due to a rear collision

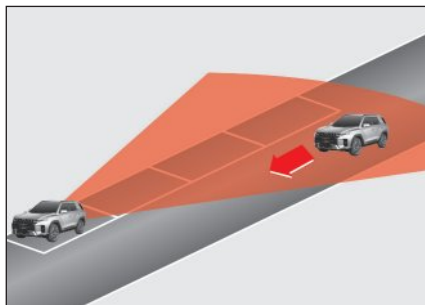


Warning

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

SEW System

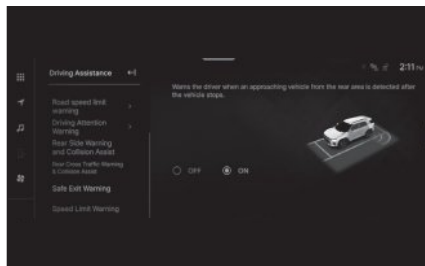
The SEW (Safety Exit Warning) system is an assistive device that warns the driver and passengers about the risk of an accident by displaying a warning message on the instrument panel along with a buzzer when there is a vehicle approaching from the rear side when the driver or passenger is getting off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



Caution

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

Activating / deactivating SEW system



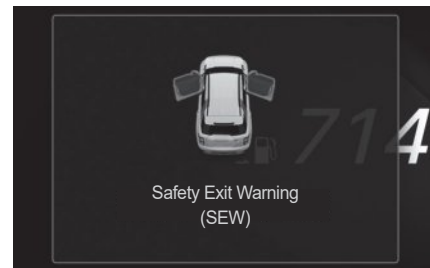
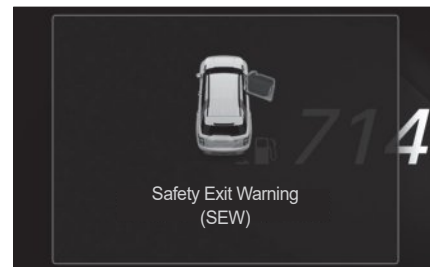
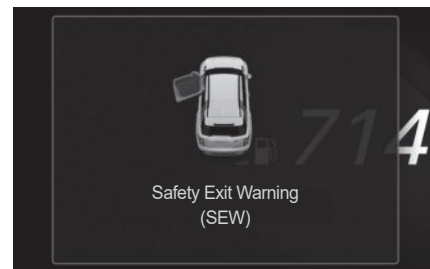
- From the main menu of the hypervisor control panel, select Vehicle Settings (⚙️) → Driving Assistance → Safety Exit Warning → OFF/ON.

Operating conditions:

- Shift lever in P (park) or N (neutral) position
- Vehicle parked
- You are about to open the door to leave the vehicle when a vehicle is approaching from the rear side
- Vehicle speed is 8 km/h or less.
- Vehicle approaching to the driver vehicle has speed between 6km/h and 8km/h.

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

Message on instrument cluster



5. Emergency Measures in the Event of Emergency

You can check useful information and emergency measures for various emergency situations you can face while driving.

Information regarding the warning triangle and OVM tools, the correct procedure in case of a dead battery, engine overheating, flat tire, and towing a vehicle is provided. An explanation is also provided for how to respond to a fire, heavy snow, vehicle trouble, and an accident safely.

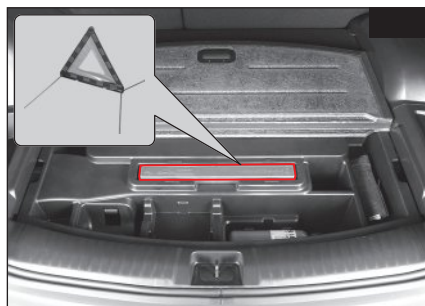
Warning triangle and OVM (Owner Vehicle Maintenance) tools

Warning triangle

A warning triangle is a stop sign that should be placed in the rear side of the vehicle in order to prevent any secondary accidents in the event of emergency such as car trouble or the occurrence of an accident.

Carrying and placement of a warning triangle is mandatory by the Road Traffic Act. A fine is imposed if you violate it.

Storage place of the warning triangle*



The warning triangle is stored at the bottom of the luggage board.

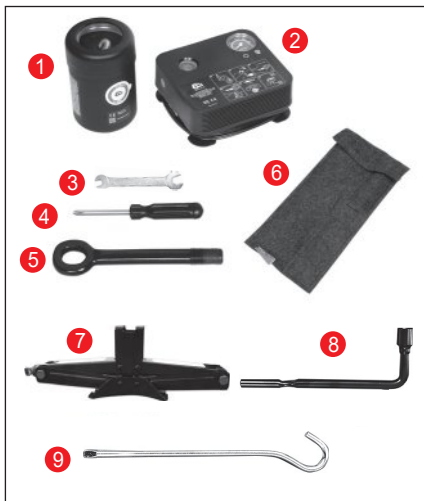


Caution

- While paying particular attention to surrounding traffic conditions, place the warning triangle in a position where its reflecting plate can be clearly visible to vehicles approaching from the rear.
- Place a road flare in addition to the warning triangle at night.
- If your vehicle becomes operational again or the problem is fixed, move the vehicle promptly while paying particular attention to the traffic conditions.

OVM tools

The OVM tools are apparatuses or tools stored in the vehicle in preparation for a failure or an emergency situation that can occur while driving the vehicle.



- 1 Sealant (Emergency sealing compound in case of a flat tire)
- 2 Compressor (managing the tire pressure and injecting sealant in case of a flat tire)
- 3 Spanner
- 4 Screwdriver (+ and -)
- 5 Vehicle towing hook
- 6 Tool roll pouch
- 7 Jack
- 8 Wheel nut wrench
- 9 Jack connection

- Service kit: 1, 2, 3, 4, 5, 6
- Spare tire: 3, 4, 5, 6, 7, 8, 9
- Non spare tire: 3, 4, 5, 6

※ CE, UKCA certified parts: Compressor (2), Jack (7)

(1) CE

- Representative: KGM European Parts Center B.V.
- Address: IABC 5253&5254, 4814RD Breda, The Netherlands

(2) UKCA

- Importer: KGM UK Ltd
- Address: G Offices, Parsonage Road, Stratton St. Margaret, Swindon, Wiltshire SN3 4RN

Location where the OVM tools are stored



The OVM tools are stored in the storage box at the rear left side of the luggage compartment.

Take out and use the OVM tools any time when necessary.

When the engine cannot be started due to depletion of the battery

If the engine cannot be started due to depletion of the battery, you can start the engine by connecting a battery of the same standard and capacity from another vehicle or an auxiliary battery to your battery using the jump cable.

Starting the engine using the jump cable

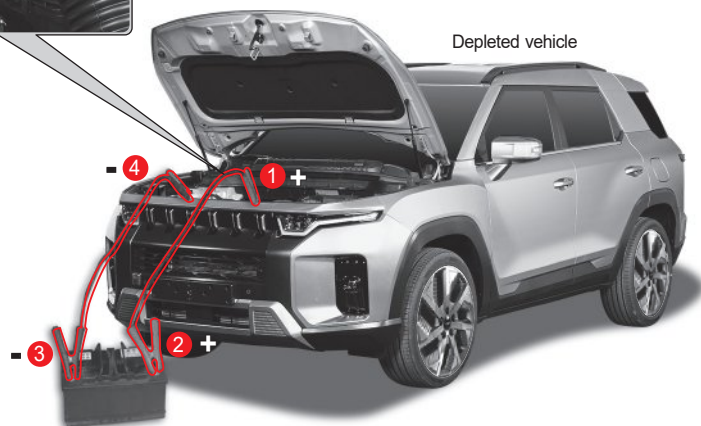
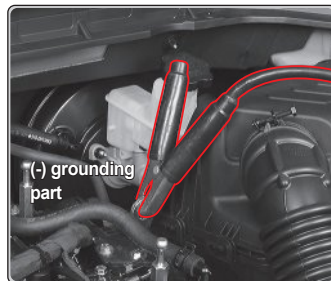
Move another vehicle that has the same 12 V power or an auxiliary battery closely to the depleted battery that can be reached by the jump cable and start the engine according to the following order.

- 1 Switch off all electrical accessories of the depleted vehicle.
- 2 Place the gear shift lever of the depleted vehicle in the P (parking) position and apply the parking brake.
- 3 Connect the jump cable in the following order.
 - + terminal (1) of the depleted battery
 - + terminal (2) of the battery in another vehicle or an auxiliary battery that provides power supply
 - - terminal (3) of the battery in another vehicle or an auxiliary battery that provides power supply
 - Vehicle body of the depleted vehicle (4) (a location far from the battery)

- 4 If the battery of another vehicle is used, start the engine of the relevant vehicle and idle the engine for several minutes.
- 5 Start the engine of the depleted vehicle.

- 6 When the engine is started, separate the jump cable in the following order.

- Jump cable connected to the minus (-) terminal
- Jump cable connected to the positive (+) terminal



When 12V Battery Discharged

Low voltage (12V) battery discharge protection mode

What is discharge protection mode?

The low-voltage (12V) battery used in hybrid cars has a discharge protection mode activated to prevent damage to the battery and prevent the low-voltage (12V) battery from being completely discharged.

When the discharge protection mode is activated, electrical devices such as the smart key system will not operate.

At this time, open the door according to the discharge protection mode release procedure and start the engine within one minute to charge the low voltage (12V) battery.

Low voltage (12V)
battery
Discharge warning
signal (LBMS)



Enters discharge
protection mode



Caution

- If the vehicle is left without starting after the discharge protection mode is released, the low voltage (12V) battery will be completely discharged, causing serious damage to the battery.

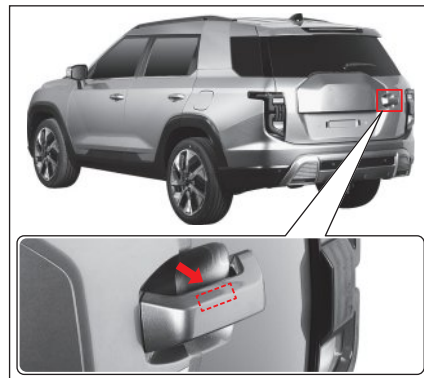
Notice

- When the discharge protection mode is activated, all systems (high-voltage and low-voltage) of the hybrid vehicle are not operational.

Starting after emergency release of door

When the discharge protection mode is activated, follow the procedure below to start the engine after releasing the door emergency release.

- 1 Press the tailgate's opening switch for about 5 to 15 seconds.



Notice

- Depending on the conditions of the various modules applied to the hybrid car, the tailgate switch must be pressed for up to 15 seconds to release the discharge protection mode.

- 2 When the discharge mode is released, the tailgate will unlock and open.
- 3 After releasing the discharge mode, be sure to start the engine within one minute to recharge the low-voltage (12V) battery.

Notice

- After starting the engine, the low voltage (12V) battery is charged regardless of whether the engine is running when the Ready indicator lamp (⚡) is turned on on the instrument panel.
- When charging the low-voltage (12V) battery, depressing the accelerator pedal is not necessary.

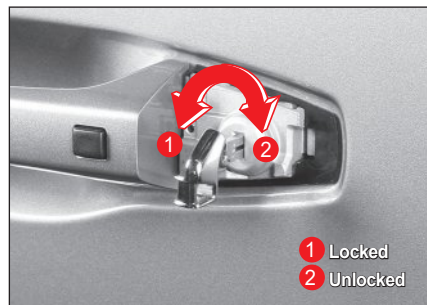
If a low-voltage (12V) battery is completely discharged

If the low voltage (12V) battery is completely discharged and the discharge protection mode does not activate, you can start the engine by connecting a battery of the same specification and capacity or a spare battery with a jump cable.

Start the engine using the jump cable according to the following procedure:

Starting up using a jump cable

- 1 After removing the emergency key cover, use the emergency key to unlock the door.



☞ Refer to “Using the emergency key” (p.4-18)

- 2 Open the engine compartment hood.

- 3 Open the engine compartment fuse box cover (A).



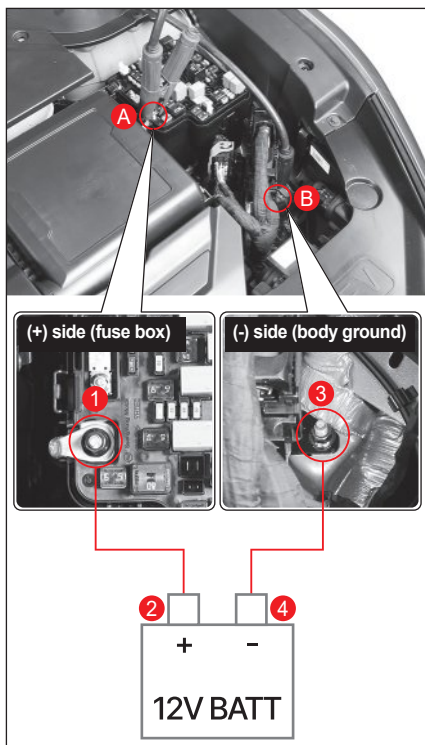
- 4 Connect the jump cables in the following order.

A. Red jump cable (+) (positive):

- Low voltage (12V) battery (+) terminal of the engine compartment fuse box of a discharged vehicle (1)
- Positive terminal of the auxiliary battery or other vehicle supplying power (2)

B. Black jump cable (-) (negative):

- Unpainted areas of the body of a discharged vehicle (3)
- Negative terminal of the auxiliary battery or other vehicle supplying power (4)



- 5 Start the discharged vehicle.
- 6 Once the engine starts, disconnect the jumper cables in the reverse order in which they were connected.

Warning

- Follow the procedure to start the engine using the jump cable explained in this owner's manual. Failure to do so may cause an injury or damage the vehicle due to a battery explosion.
- If the battery is frozen, do not attempt to start the engine using the jump cable. Doing so may lead the battery to burst or explode, causing serious injury.
- Be sure to wear insulated gloves for starting the engine using the jump cable to prevent an electric shock.
- Make sure that two vehicles do not come into contact with each other. Failure to do so may result in ground connection status, causing an electric shock and a vehicle failure.
- Be sure to use the jump cable of the specified standard and a battery of the same standard and capacity. Failure to do so may cause a spark when the jump cables are connected and gas generated from the battery may explode.
- When using the battery of another vehicle, connect the jump cable with the engine of the other vehicle turned off for safety.

- When connecting the jump cables, make sure that the positive (+) and negative (-) cables do not come into contact with each other. Otherwise, an electric spark may occur, resulting in the explosion of the battery.
- Do not connect the jump cable to the negative (-) terminal of the depleted battery directly. Otherwise, an electric spark may occur, resulting in the explosion of the battery. Be sure to connect the jump cable to the vehicle body of the depleted vehicle.
- Make sure that the jump cables are securely fixed to each terminal. Failure to do so may cause disconnection due to an instantaneous vibration when the engine is started. If the jump cable is separated and comes into contact with the vehicle body, an electric shock may be applied to the vehicle, damaging electric and electronic components.
- The battery fluid is very acidic, so if it comes into contact with your eyes or on your skin, take off the clothes that are stained with the battery fluid immediately, rinse the contacted area with clean water continuously and contact your doctor. While being transported to a hospital, gently wipe the contacted area with a water-wet soft cloth or sponge continuously.



Caution

- Make sure when starting the engine that the jump cable is not wound around the fan in the engine room.
- After starting the engine using the jump cable, do not turn off the engine for a certain period of time to allow the depleted battery to be recharged. Otherwise, you may not be able to start the engine again according to the charging status of the battery.
- If the cause of the depleted battery is not clear, have your vehicle checked at a KGM Authorized Service Center.

When the engine is overheated or other problems have occurred

When the engine is overheated so that the warning light turns on



When the engine is overheated, various symptoms appear such as the warning light turns on and steam comes out from the engine.

In such case, park your vehicle at a safe place immediately and take the necessary action.



Symptoms that appear when the engine is overheated

- The engine overheat warning lamp blinks and the warning buzzer sounds.
- The coolant temperature gauge indicates the H part.
- Steam comes out from the engine.
- A decrease in the engine output

Emergency measures when the engine is overheated

Place the warning triangle at the rear side of the vehicle, evacuate all occupants to a safe place, check for safety again if necessary and take emergency measures according to the following procedure.

- 1 Place the gear shift lever in the P (parking) position and apply the parking brake.
- 2 Turn off the heater and the air conditioner.
- 3 Open the engine hood so that the engine room can be well ventilated.

At this time, if steam comes out of the engine, turn off the engine immediately.

If steam does not come out, idle the engine continuously with the engine hood opened.

If the coolant temperature gauge does not go down while the engine is idling, turn off the engine and let it cool down properly.

- 4 Check the coolant level on the coolant reservoir.

If the coolant level is low, add coolant and check if a leak occurs from the connecting part of each hose and the radiator.

Cover the reservoir cap with a cloth, turn it a little bit to release steam pressure, remove the cap and add the coolant. Close the reservoir cap after adding the coolant.

If the engine is overheated when the coolant level is normal, have the cooling systems (including the electric fan) and belts checked and serviced at a KGM Authorized Service Center.

Warning

- **Caution should be taken that hot steam or coolant may come out when you open the engine hood.**
- **Be careful not to allow your clothes or hands to come into contact with the driving parts (belts, etc.) of the engine when you open the engine hood while the engine is running.**
- **Do not open the coolant reservoir cap rapidly when the engine is hot. Hot steam or water may come out, causing a burn. Be sure to open the coolant reservoir cap slowly after the engine is turned off and the engine has been cooled down properly.**



Caution

- If the engine is overheated with insufficient coolant, turn off the engine immediately, cool down the engine and add coolant.
- Do not add cold coolant suddenly when the engine is overheated. Doing so may damage the engine or the radiator.
- Only use the KGM genuine coolant that meets the standard.
- If the engine is overheated continuously after taking the emergency measures, have your vehicle checked and serviced at a KGM Authorized Service Center.

When the engine check indicator turns on



The engine check indicator turns on when various sensors (including automatic transmission) and equipment related to the engine control are abnormal.

If the engine check indicator turns on while driving, have your vehicle checked and serviced at a KGM Authorized Service Center.



Caution

- If the engine check indicator turns on, the driving power of the engine may decrease or the engine may stall.



Caution

- If you continue to drive with the Check Engine warning light on, the exhaust gas will increase due to engine shutdown, and increased fuel consumption, which can cause serious damage to the exhaust gas reduction device and result in sanctions related to exhaust gas regulations. If the corresponding warning lamp is turned on, have the vehicle checked and serviced at our nearest authorized service center.
- When the Check Engine warning light comes on, the vehicle enters safe mode to protect the engine. At this time, the engine output is partially restricted.
- If you do not completely close the fuel cap after refueling, the Check Engine warning light may come on due to fuel leakage. This is not a vehicle malfunction, and the warning light will turn off when you re-close the fuel cap until you hear a 'click' sound. However, if the Check Engine warning light does not go off even after you re-close the fuel cap, have the vehicle checked and serviced at our nearest authorized service center.
- If you refuel with the engine started, the Check Engine warning light may come on.

When a tire is flat



If a tire becomes flat while driving, do not panic and take action according to the following order.

- 1 Turn on the hazard warning lamp indicator.
- 2 Stop the vehicle at a safe place.
For such purpose, hold the steering wheel firmly, take your foot off the accelerator pedal, decelerate the vehicle slowly and depress the brake pedal slightly to stop the vehicle safely.
- 3 Place the gear shift lever in the P (parking) position and apply the parking brake.
- 4 Place a chock in front of and at the back of the tires located in the diagonal direction of the flat tire.

- 5 Be sure to place the warning triangle on a road or an expressway where other vehicles are driving.

The position that is easily identified by a driver in an approaching vehicle while maintaining a safe distance (100 m during daytime, 200 m in the rear during night time) is an appropriate place to place the warning triangle.

- 6 If there are other occupants besides the driver, evacuate such occupants to a safe place.
- 7 Judge if the flat tire can be repaired using the service kit for tire repair (stored in the storage box of the luggage compartment) and take the necessary action accordingly.

Warning

- If a tire becomes flat while driving, do not steer the vehicle or depress the brake suddenly. Doing so may cause the vehicle to lose its stability, leading to an accident.
- Do not drive the vehicle for even a short distance with a flat tire. Doing so may damage the wheels and disable normal driving, leading to a dangerous situation.
- Turn on the hazard warning lamp indicator, move the vehicle to the shoulder of the road or a safe location and place the warning triangle in a place easily identified by a driver in an approaching vehicle.
- If possible, park the vehicle on a flat, solid, and non-slippery road surface and repair the tire with no occupants in the vehicle.

Notice

- If you are not good at repairing a flat tire, request a KGM Authorized Service Center or your auto insurance company for help.

Repairing a flat tire/inflating a tire using the service kit for tire repair

Components of the service kit for tire repair*



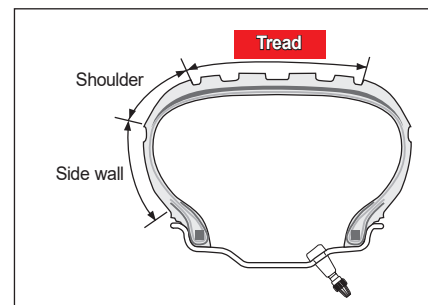
- 1 Sealant filler hose
- 2 Sealant
- 3 Air injection hose
- 4 Sealant removal button
- 5 Sealant mounting
- 6 Pressure gauge
- 7 Positive (+) cable
- 8 Negative (-) cable
- 9 Power switch
- 10 Deflating button

Storage location of the service kit



The service kit for tire repair is stored in the storage box at the rear left side of the luggage compartment with the OVM tools.

Confirming whether it is possible to repair the flat tire with the service kit or not



When a tire is flat, check the position of the hole first and use the service kit after judging whether it can be repaired using the service kit or not.

- If the size of the hole on the tread of the tire is less than 6 mm, it can be repaired using the service kit.

Warning

- Do not repair the tire using the service kit if the tire shoulder or the side wall is torn or there is a sign of cracks or damage. In such case, have the tire checked and serviced at a KGM Authorized Service Center or contact your car insurance company.

Operating principle of the service kit

When the vehicle is driven after the sealant is injected using the compressor, the sealant is spread on the inner surface of the tire, filling up the hole and enabling temporary driving.



Repairing a flat tire

When a tire is flat, it can be repaired in the following method using the service kit.

- 1 Take out the tire repair service kit from the bottom of the luggage compartment board.



- 2 Remove the speed limit sticker on the side of the sealant container and attach it to the steering wheel.



Caution

- The speed limit sticker alerts the driver that the tire has been repaired using the service kit and the speed should be limited. Do not drive the vehicle at a speed faster than 110 km/h at any time.

- 3 Take out the sealant filler hose at the top of the sealant container.



Caution

- Check the expiration date of the sealant. The expiration date is marked on top of the sealant. Replace expired sealant with a new one since the sealing performance of the expired sealant may be degraded.
- Be sure to read the cautions on the container before using the sealant.

Notice

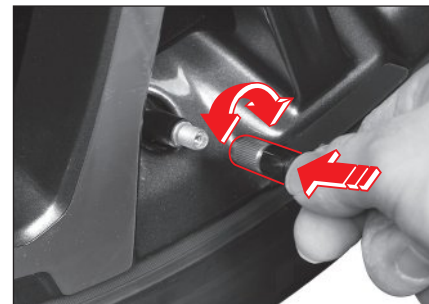
- Before using the sealant, shake the container well to mix the contents.

- 4 Fix the sealant container onto the compressor body completely.



- 5 Remove the air valve cap of the flat tire.

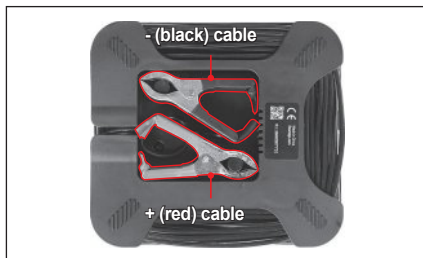
- 6 Connect the sealant filler hose which you took out at the sealant container to the air valve of the flat tire firmly.



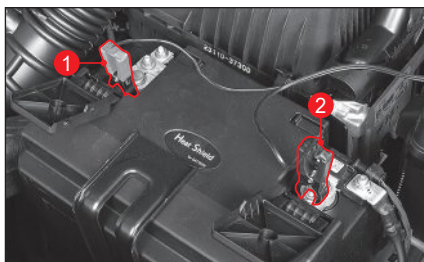
Caution

- The power switch of the service kit should be in the OFF position.

- 7 Take out the + (red) / - (black) cables at the bottom of the compressor.



- 8 Connect the + (red) (1) cable of the service kit to the vehicle battery and then connect the - (black) (2) cable.



Warning

- Use caution when connecting the cables. Sparks may occur.



Caution

- Connecting the positive (+) and negative (-) terminals of the battery in reverse may result in damage to the battery and the tire service kit. Be sure to connect the cables in the correct order.
- Be sure to start with removing the negative (-) terminal (black cable) when disconnecting the cables.

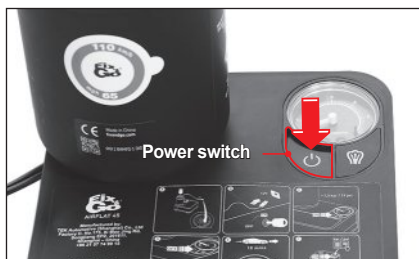
- 9 Start the engine.



Warning

- Be sure to repair a tire in a well-ventilated area. Failure to do so may lead to suffocation due to exhaust gas after starting the engine.

- 10 Press the power switch of the service kit to activate the compressor.



Caution

- Do not operate the compressor for more than 10 minutes. Doing so may overheat the compressor, leading to a malfunction.

- 11 Wait until the pressure reaches the prescribed pressure (34psi, 2.3bar) while checking the pressure gauge of the service kit.





Warning

- If the specified tire pressure is not reached within 8 minutes (however, current tire pressure has reached at least 26 psi), re-inflate the tire as described below:
 1. Stop using the service kit and remove the sealant from the compressor.
 2. Place the service kit back in place (bottom of the luggage compartment board).
 3. Drive the vehicle at low speed for about 10 m so that the sealant is applied on the inner surface of the tire evenly.
 4. Fit the air injection hose at the compressor to the flat tire.
 5. Connect the power cable at the bottom of the compressor to the vehicle battery.
 6. Start the engine to operate the compressor.
 7. Operate the compressor until the tire pressure reaches to the specified value (34 psi, 2.3 bar).

If the tire is overinflated, press the air pressure release button to adjust the tire pressure.



- 12 When the prescribed pressure is reached, turn off the service kit.



Caution

- If the tire pressure does not go above 26psi after operating the compressor for more than 10 minutes, the tire cannot be repaired using the service kit. Request an emergency rescue service or vehicle towing.

- 13 Disconnect the air hose from the tire.
- 14 Install the air valve cap on the tire.
- 15 Turn off the engine.
- 16 Remove the sealant container and the air hose from the service kit and place the service kit back to its original position (bottom of luggage compartment board).
- 17 Drive the vehicle immediately for approximately 10 km to allow the sealant to be spread on the inner surface of the tire evenly.
- 18 Stop the vehicle at a safe place and measure the tire pressure with the service kit.



Warning

- Use the service kit only when a small hole (approximately 6 mm or less) has occurred on the tread of the tire.
- Do not use the service kit if the tire shoulder or side wall is torn or the hole is too large. In such case, have your vehicle towed or serviced at a KGM Authorized Service Center.
- When a tire repaired using the service kit is fixed, drive the vehicle at a speed less than 80 km/h.
- The service kit should be used only for temporary repair. The maximum distance that can be traveled with a tire repaired by injecting sealant is approximately 200 km.
- If a vibration occurs or the steering is unstable and a noise occurs while driving, stop driving the vehicle immediately. In such case, have your vehicle serviced at a KGM Authorized Service Center.



Caution

- Remove the sealant container carefully to prevent the sealant from coming into contact with your skin. If sealant comes into contact with your skin, wash it with soapy water.
 - The sealant container cannot be used after it is used once. Just in case, purchase and replace with new sealant.
 - Do not discard the used sealant container anywhere. Return it to a KGM Authorized Service Center.
 - Do not use an unauthorized sealant which is not KGM genuine sealant. Doing so may damage the sensor of the TPMS.
 - Replace the tire repaired using the sealant with a new one at a KGM Authorized Service Center as soon as possible and have the TPMS checked for abnormality.
- ☞ Refer to “Tire pressure monitoring system (TPMS)” (p.2-29)

Checking the tire pressure after repairing a flat tire

The pressure of the tire repaired using the service kit should be checked as follows after driving for approximately 10 km.

- 1 Take out the tire repair service kit from the bottom of the luggage compartment board.
- 2 Take out the air hose from the service kit.
- 3 Remove the air valve cap of the tire.
- 4 Connect the air hose of the service kit to the air valve on the tire firmly.
- 5 Check the tire pressure from the pressure gauge of the service kit.

If the tire pressure is higher or lower than the prescribed pressure (34psi, 2.3bar), adjust it to the prescribed pressure using the air valve of the tire.



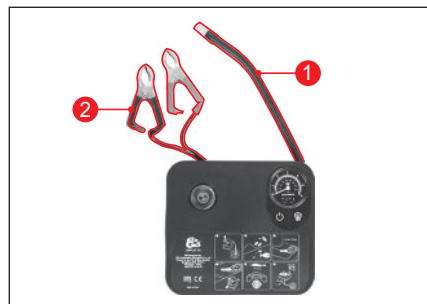
Warning

- If the tire pressure is not maintained at the prescribed pressure (34psi, 2.3bar), stop driving the vehicle immediately and request a KGM authorized service for help.

Inflating a tire

When the tire pressure is insufficient, you can inflate the tire to the prescribed pressure with the following method using the service kit.

- 1 Take out the tire repair service kit from the bottom of the luggage compartment board.
- 2 Take out the air hose (1) and the power cable (2) from the service kit.



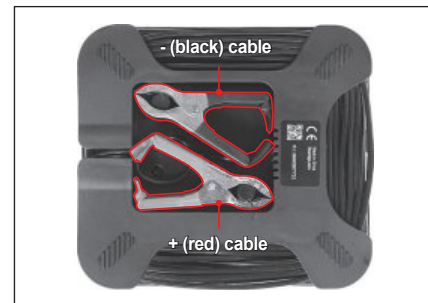
- 3 Remove the air valve cap of the tire you wish to inflate.
- 4 Connect the air hose of the service kit to the air valve on the tire firmly.



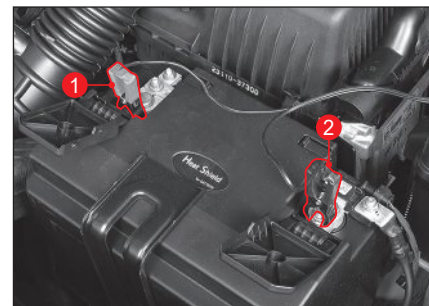
Caution

- The power switch of the service kit should be in the OFF position.

- 5 Take out the + (red) / - (black) cables at the bottom of the compressor.



- 6 Connect the + (red) (1) cable of the service kit to the vehicle battery and then connect the - (black) (2) cable.



7 Start the engine.



Warning

- Be sure to repair a tire in a well-ventilated area. Failure to do so may lead to suffocation due to exhaust gas after starting the engine.

8 Press the power switch (1) of the service kit to activate the compressor.

9 Wait until the pressure reaches the prescribed pressure (34psi, 2.3bar) while checking the pressure gauge (2) of the service kit.



If the tire is overinflated, press the air pressure release button to adjust the tire pressure.



10 When the prescribed pressure is reached, press the power switch (1) of the service kit to turn it off.



Caution

- Do not operate the compressor for more than 10 minutes. Doing so may overheat the compressor, leading to a malfunction.

11 Turn off the engine.

12 Disconnect the air hose from the tire.

13 Install the air valve cap on the tire.

14 Place the service kit back to its original position (storage box at the rear left side of the luggage compartment).

Removing the spare tire (Temporary)*



Open the cover in luggage compartment and remove the spare tire.



Caution

- When reinstalling the spare tire to the carrier, be sure to securely lock it to the carrier holder.
- While your vehicle is being raised up with the jack, avoid any impact on your vehicle. Otherwise, you may get injured.



Warning

- The emergency spare tire is only for emergency situations. Never use it for normal driving. After installing the spare tire on a wheel, take your vehicle to a KGM Authorized Service Center or a tire-specialized shop to replace it with a new regular tire.

Changing a spare tire (Temporary)



- 1 Chock the front and rear of the wheel diagonally opposite to the wheel being changed.



Warning

- The parking brake should always be applied when replacing the flat tire.

- 2 Loosen the wheel nuts two or three turns by turning them counterclockwise with the wheel nut wrench.



Caution

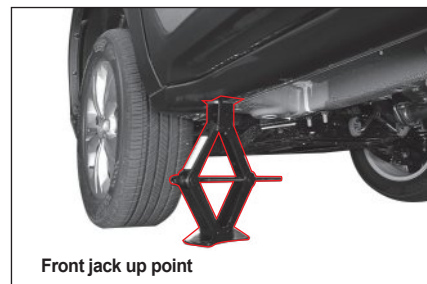
- When reinstalling the wheel cap, be sure to completely fit it into its location.



Warning

- Do not remove the nuts yet from the wheel. If they are removed, the wheel could slip off from the vehicle. Then, the body of the vehicle will fall down on you and you may get seriously injured.
- Loosen the wheel nuts two or three turns.
- The parking brake should always be applied when replacing the flat tire.
- Chock the front and rear of the wheel opposite to the wheel being changed.

When replacing a front tire



Front jack up point

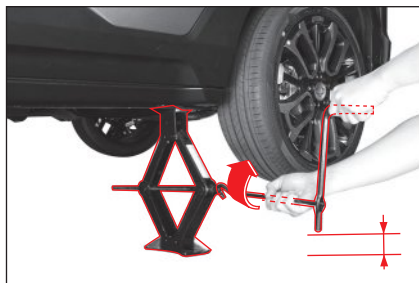
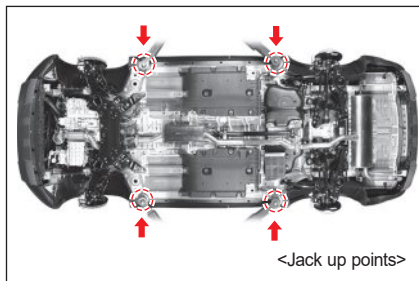
- 3 Place the jack directly under the jack-up points so that the top of the jack contacts the vehicle at the jack-up point.



Warning

- The jack should be used on level firm ground wherever possible.
- It is recommended that the wheels of the vehicle be chocked, and that no person should remain in a vehicle that is being jacked.
- No person should place any portion of their body under a vehicle that is supported by a jack.
- Jack working load limit 1,300 kg.

When replacing a rear tire



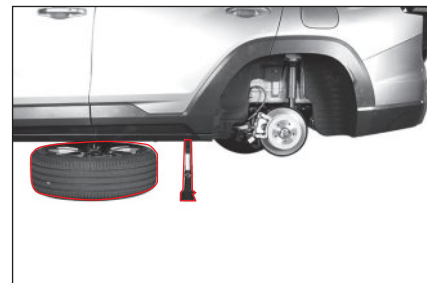
- 4 Combine the jack, jack extension and the wheel nut wrench as shown in the figure. Raise up the vehicle by rotating the combined wrench clockwise until the tire is off from the ground about 3 cm.

- 5 Remove the wheel nuts by hands while the vehicle is stationary. Remove all of the wheel nuts.



Warning

- Do not attempt to raise the vehicle until the jack is in the proper position, and secure both to the vehicle and the ground. It may cause a personal injury or vehicle damage.



- 6 Take the wheel off and place the wheel under the vehicle body. This helps to minimize any danger if the jack slip off position.



Tighten the wheel nuts in 2 or 3 steps with the sequence as shown in the figure.

- 7 Then mount the tighten the wheel nuts until the temporary tire wheel is no longer loose.



Warning

- By tightening up the spare tire until it is not loose any more, you can avoid any tilting of the tire on the wheel hub when the tire touches the ground.

- 8 Lower the vehicle by rotating the combined wrench counter-clockwise until the tire touches the ground. Remove the jack.



Warning

- While the jack is supporting your vehicle, do not use too much force to tighten the nuts. Otherwise, the vehicle may slip off and you may get injured.

- 9 Tighten the wheel nuts in 2 or 3 steps with the sequence as shown in the figure.
- 10 When done with mounting the spare tire, place the flat tire in the luggage room. Store the jack and other emergency tools in their storages.



If over tightened, the wheel nuts could be damaged. Do not overtighten the wheel nuts by pressing the wheel nut wrench by foot or using an assist pipe.



Caution

- After changing the tire and driving the vehicle about 1000 km, retighten the wheel nuts.
- Wheel nut tightening torque: 120 ~ 140 Nm



Warning

- With the emergency spare tire, do not drive any faster than 60 km/h.
- The temporary spare tire is only for emergency situations. Never use it for normal driving. After installing the spare tire on a wheel, take your vehicle to a KGM Authorized Service Center or a tire-specialized shop to replace it with a new regular tire.
- Improperly tightened wheel nuts can cause the wheel to become loose and even come off or any malfunctioning in the steering and braking system.
- This could lead to an accident. Be sure to tighten the wheel nuts as specified. If the wheel comes off due to a loose wheel nut, you may have a fatal accident.
- Using different tires could cause you to lose control while driving. Be sure to use the same size and type tires from the same manufacturer on all wheels.

Cautions when changing the tire



Caution

► Before changing the tire

- Turn on hazard flashers and move off the road to a safe place away from traffic. Park on a firm and level ground.
- Set up the jack at the specified position. Never get under the vehicle while it is supported by the jack. While the vehicle is on the jack, never start or run the engine or push the vehicle.
- Have all passengers get out of the vehicle and stay in a place away from traffic.

► During changing the tire

- Do not completely tighten the wheel nuts at a time. Tighten the wheel nuts in the diagonal sequence in 2 or 3 steps.
- Never apply oil or grease to either wheel studs or nuts as it will cause them to overtighten.

► After changing the tire

- Check, repair, and retighten the replaced tire at the nearest KGM Authorized Service Center or a qualified tire shop after an emergency change.
- Securely fix the tire in its carrier. Check to see if the spare tire is securely locked into the carrier without any looseness. Otherwise, it may make some abnormal noises or fall out from the carrier on the road while the vehicle is moving. This may cause an accident or hit a pedestrian.
- If this happens, the fallen tire can be a great danger to other vehicles or people. Check the tightness of the wheel nuts and tire pressure before driving.
- The spare tire is designed as an emergency spare only. Do not exceed 60 km/h speed when the spare tire is installed on the vehicle.



Caution

- Repair or change the flat tire. Stow the emergency tire in its location properly.
- Make sure to check the tightness and inflation pressure of tires before driving.
- In the vehicle equipped with TPMS, the TPMS warning lamp comes on and TPMS does not work when installing the emergency tire.



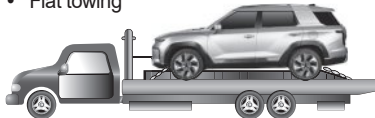
Warning

- Make sure that tighten the wheel nuts again after driving of about 1,000 km when the tires have been replaced.
- Drive the vehicle at the speed of 60km/h or less (maximum speed 80 km; maximum distance 200 km) when the vehicle is driven with the spare tire.
- Drive the vehicle in 2H mode when the spare tire is fitted. When driving in 4H mode, it will damage the drive system.
- Be sure to use the same size and type tires of the same manufacturer on all wheels so that the vehicle characteristics can be maintained safely.

When you need to have your vehicle towed

Towing a disabled vehicle

- Flat towing



- Towing with front wheels on ground



Dolly

- Towing with rear wheels on ground



Dolly

Towing with tow truck

The best towing method is to lift the entire vehicle onto the flatbed so that all wheels are off the ground. If it is impossible, put the front or rear wheels on the jig and tow the vehicle using a dolly, with other wheels off the ground.

For 4WD vehicle

Your vehicle must be towed with a wheel lift and dollies or flatbed equipment with all the wheels off the ground.



Warning

- The 4WD system equipped vehicle should never be towed with the wheels on the ground. This can cause serious damage to the transmission or the 4WD system.
- If your vehicle should be towed due to wheel slips in mud or sand, you can use the towing hooks in your vehicle. However, if the load to hooks is too heavy, the towing hook, rope or chain could be broken, resulting in serious personal injury and vehicle damage.
- To prevent damage to your vehicle, proper lifting and towing procedures are necessary. When you need a towing service, contact KGM Dealer or KGM Authorized Service Center.

For 2WD vehicles

It is not allowed to use a tow truck or keep the rear wheels from moving with the parking brake released for towing, as shown in the following figure.



Caution



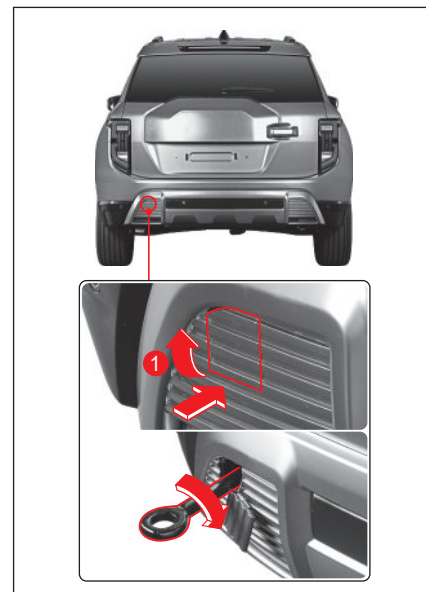
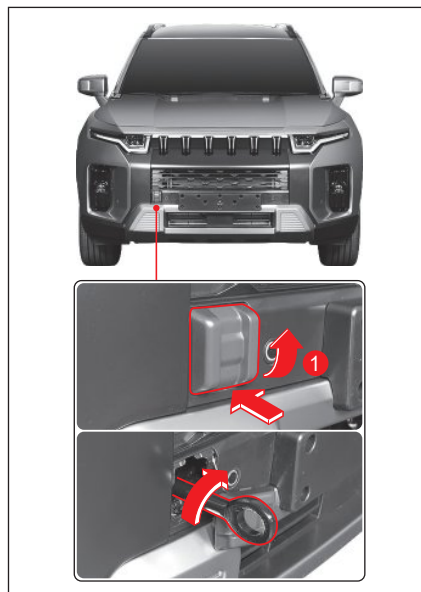
- Do not tow with the sling-type equipment or the bumper and lower parts can be damaged.
- If the vehicle is towed with the driving wheels on the ground, the transmission may be damaged.
- Be careful not to damage the bumper and lower parts during towing.

When a tow truck is unavailable (in case of emergency)

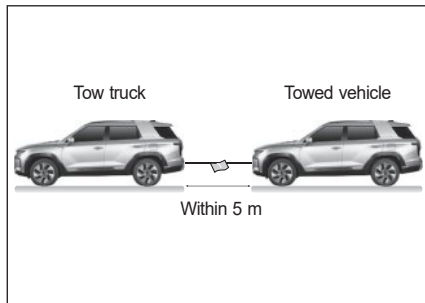
If your vehicle needs to be towed when a tow truck is unavailable, you can have your vehicle towed by installing the towing hook to a towing vehicle and the vehicle to be towed and connecting the two vehicles with the towing rope (sold separately).

Installing the towing hook

- 1 Take out the towing hooks from the OVM tools stored in the storage box at the rear left side of the luggage compartment.
- 2 Press the bottom side (1) of the hole cover located in the front bumper of the vehicle to be towed and the rear bumper of the towing vehicle each to remove the cover.
- 3 Insert the towing hook into each hole and fasten it firmly.



Using a towing rope



- 1 Connect the towing rope to the towing hook of the towing vehicle and the vehicle to be towed securely.
- 2 Tie a white cloth in the middle of the rope so that the towing rope is clearly visible.
- 3 Release the parking brake of the vehicle to be towed and place the gear shift lever in the N (neutral) position.
- 4 If the engine of the vehicle to be towed is turned off, place the START/STOP switch in the ON position.
- 5 Turn on the hazard warning lamp of both the towing vehicle and the vehicle to be towed.

- 6 Start the engine of the towing vehicle and tow the vehicle to be towed.

At this time, the length of the towing rope should be less than 5 m and the total length of the towing vehicle and the vehicle to be towed should not exceed 25 m.

Tow the vehicle at a speed of 5 km/h or less.



Warning

- Use the towing hook only for towing a vehicle for a short distance temporarily or in an emergency situation. Avoid using it for towing all the time.
- If you want to tow the vehicle using the towing hook, make sure that the force is applied in the front, rear and horizontal direction. Do not drive off suddenly or recklessly since it can apply excessive load to the towing hook. Doing so may damage the towing rope or chain, leading to vehicle damage or a serious injury.



Caution

- Avoid impractical towing and towing a vehicle which is heavier than the towing vehicle.
- If there are many steep downhill or slopes in the towing path, do not attempt to tow the vehicle using the towing hook.
- The brake performance is significantly lowered while the engine is not running. Therefore, depress the brake pedal stronger than usual when towing the vehicle using the towing hook.
- Tow the vehicle while operating the turn signal and the hazard warning lamp along with the towing vehicle's signals.

Trailer towing

Your vehicle is designed primarily as a passenger vehicle therefore handling, braking, durability and economy will be affected by towing a trailer.

Your safety and satisfaction depend upon proper use of correct equipment. Also, you should avoid overloading and other abusive use.

The maximum loaded trailer weight you can pull with your vehicle depends on your intended use and what special equipment has been installed on it. Before attempting any towing, ensure that the correct equipment is fitted to your vehicle.

Your KGM Dealer will help supply and install towing equipment to suit your requirement.

Trailer loading

To load your trailer properly, you must know how to measure gross trailer weight and trailer ball weight. Gross trailer weight is the weight of the trailer plus all cargo in it.

You can measure gross trailer weight by putting the fully loaded trailer on a vehicle scale.

Trailer ball weight is the downward force exerted on the hitch by the trailer coupler at its normal towing height. This weight can be measured using a bathroom scale.

The weight of your loaded trailer (gross trailer weight) should never exceed the specified values.

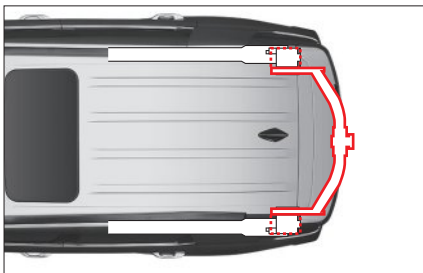
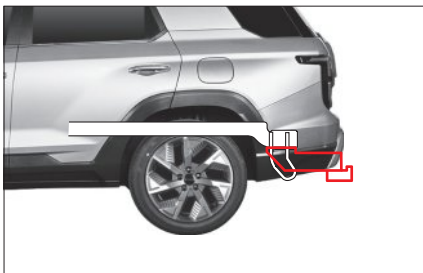
The permissible trailer loads are valid for several gradients from 6.8% to 12.6% according to engine power applied.

When the trailer has been coupled, the permissible rear axle load for the fully loaded towing vehicle (including occupants) must not be exceeded.

Maximum Load Limits

(unit: kg)

Engine	Type	Maximum Trailer	Trailer coupling weight	
			Maximum permissible static vertical load on the coupling device	Maximum trailer hitch
G15DTF (M/T)	with brake	1,500	60	25
	without brake	750		
G15DTF (A/T)	with brake	1,500	60	25
	without brake	500		
HEV	with brake	1,300	52	25
	without brake	500		



If you want to pull a trailer

Important points:

- You have to consider a sway control. You can check the sway control to hitch dealer.
- If the total driving distance of your new vehicle is under 800 km (500 miles), do not tow a trailer. For the first 800 km (500 miles) that you tow a trailer, do not drive over 80 km/h (50 mph) and do not start off your vehicle at full throttle. Otherwise, your engine and other parts could be damaged due to heavier loads.
- Always drive your vehicle at a moderate speed (less than 80 km/h).
- You have to consider the weight of trailer.
- The permissible trailer ball weight varies according to the cargo weight on the deck.
- It has to be limited to the number of passengers by 5 people including a driver.

Weight of trailer

To keep the vehicle and trailer safely, you must consider many factors except the maximum load limit.

The vehicle and trailer's safety depends on how you use your trailer. Vehicle speed, altitude, load, outside temperature and frequency of using trailer are all very important. Any special equipment on your vehicle also affects on your vehicle.

Weight of trailer tongue

The tongue load of a trailer is also considered very carefully because it affects the gross vehicle weight (GVW) of your vehicle. This weight includes the curb weight of vehicle, any luggage in trailer, and the passengers in vehicle. In addition to that, you must add the trailer tongue load to the GVW because your vehicle will carry all the weight.

The trailer tongue should weigh a maximum of 4% of total loaded trailer weight. To check the weights are proper, you must weigh the trailer and the tongue separately after loading. If the weights are not proper, unload some items from the trailer.



Caution

- **Never load a trailer with more weight in the rear side than in the front side. (Recommendation - Front: approx. 60%, Rear: approx. 40%)**
- **Never exceed the maximum load limits of trailer or trailer towing equipment. Improper loading may result in damage to your vehicle. It may occur the personal injury. Before driving, check the weight and loading at a commercial scale or highway patrol office equipped with scales.**
- **An improperly loaded trailer may cause the loss of vehicle control.**
- **When towing the trailer, turn the Idle Stop & Go (ISG) system off.**

Trailer brakes

If the trailer brakes are used, you should follow all instructions provided by the manufacturer. Never modify the brake system of your vehicle.

Trailer lights

Make sure your trailer is equipped with lights which meet country and local requirements.

Always check for the proper operation of all trailer lights before you start to tow.

Tires

When towing trailers, be sure your tires are properly inflated to the inflation pressure.

Safety chains

Always attach safety chains between your vehicle and the trailer. Cross the safety chains under the tongue of the trailer so that the tongue will not drop to the road if it becomes separated from the hitch. Follow the manufacturer's recommendation for attaching safety chains. Always leave just enough slack to permit full turning. Never allow safety chains to drag on the road.

Brake fluid

Change the brake fluid every 15,000 km (9,000 miles) under the following conditions.

- Towing a trailer frequently.
- Driving in hilly or mountainous terrain.

Automatic transmission fluid

More frequent maintenance is required if your vehicle tows trailer frequently.

Towing tips

When towing a trailer, your vehicle will handle differently compared with normal driving condition.

- For safety, observe the following precautions:
- Practice turning, stopping, and reversing before you begin towing in traffic.
Do not tow in traffic until you are confident that you can handle the vehicle and trailer safely.
- Before driving, make sure that the lighting system of the trailer works properly.
- Do not drive faster than 80 km/h.
- Make sure that you have enough room when cornering and avoid sudden maneuvers.
- Avoid abrupt starts, acceleration or stops.
- Avoid sharp turns or lane changes.
- Always have someone guide you when reversing.
- Allow adequate stopping distance.
Stopping distance is increased when you tow a trailer.
- Avoid holding the brake pedal down too long or too frequently, which will cause the brakes to overheat and result in reduced brake efficiency.
- Always block the wheels on both vehicle and trailer when parking. Apply the parking brake firmly.
- Parking on a steep slope is not recommended. You really should not park your vehicle, with a trailer attached, on a hill.
If something goes wrong, such as the trailer/ caravan hitch becoming disengaged, people can be injured and both the vehicle and trailer can be damaged.
- If someone removing the blocks stands directly behind the trailer, he could be injured. If your brakes or the hitch slipped, the trailer could roll backward. Make sure anyone removing blocks from your wheels stands to one side.
- Take note of trailer manufacturer's instructions.

Driving on hill

Reduce speed and shift to a lower gear before you start down a long or steep downgrade. If you don't shift down, you might have to use your brakes so much that they would get hot and no longer work well.

On a long uphill grade, shift down and reduce your speed to a level which minimizes the possibility of engine and transmission overheating.

Notice

- **When towing a trailer on steep hill (over 12%), pay particular attention to the engine coolant temperature gauge to ensure the engine does not overheat. If the gauge reaches to the "H" mark, stop your vehicle at a safe place and allow the engine to idle until it cools down. When the engine has cooled sufficiently, you may proceed.**
- **To avoid the engine and transmission overheating, you must check the driving speed depending on trailer weight and uphill grade.**

Parking on hills

You really should not park your vehicle, with a trailer attached, on a hill. If something goes wrong, your rig could start to move. People can be injured, and both your vehicle and the trailer can be damaged.

But if you ever have to park your rig on a hill, here's how to do it:

- 1 Apply your regular brakes, but don't shift into PARK (P) for automatic transmission yet, or into a gear for a manual transmission.
- 2 Have someone place chocks under the trailer wheels.
- 3 When the wheel chocks are in place release the regular brakes until the chocks absorb the load.
- 4 Reapply the regular brakes. Then apply your parking brake, and then shift to PARK (P) for automatic transmission, or First or Reverse gear for a manual transmission.
- 5 Release the regular brakes.

When you are ready to leave after parking on a hill

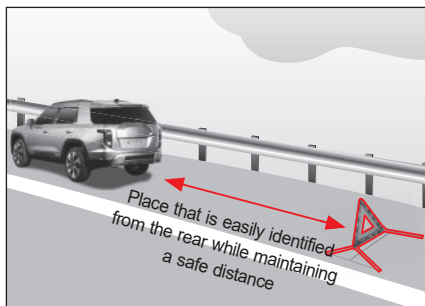
- 1 Apply your regular brakes and hold the pedal down while you:
 - Start your engine
 - Shift into a gear and
 - Release the parking brake.
- 2 Let up on the brake pedal.
- 3 Drive slowly until the trailer is clear of the chocks.
- 4 Stop and have someone pick up and store the chocks.

Maintenance when towing trailer

Your vehicle will need service more often when you're towing a trailer. See the maintenance Schedule for more on this. Things that are especially important in trailer operation are engine oil, brake pads & discs, automatic transmission fluid. Each of these is covered in this manual and the index will help you find them quickly. If you want to tow a trailer, it's a good idea to review these sections before you start your trip.

Check periodically to see that all hitch nuts and bolts are tight.

When the vehicle has stopped due to a failure



If the vehicle malfunctions and has stopped while driving, do not panic and take an action according to the following order.

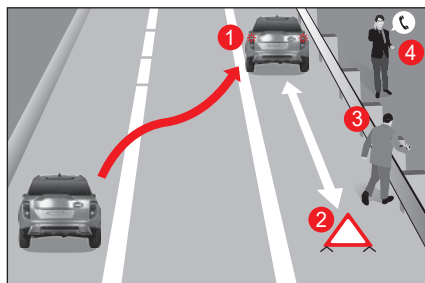
- 1 Turn on the hazard warning lamp of the vehicle.
- 2 Move your vehicle to the right shoulder of the road or a safe location.
- 3 Place a warning triangle.
The position that is easily identified by a driver in an approaching vehicle while maintaining a safe distance (100 m during daytime, 200 m in the rear during night time) is an appropriate area to place the warning triangle.
Place a road flare additionally at night.
- 4 Evacuate all occupants to a safe place.
- 5 Request an emergency rescue service or vehicle towing.

In the event of an accident

If an accident has occurred while driving, do not panic and take an action according to the following order.

- 1 Turn on the hazard warning lamp of the vehicle.
- 2 Move your vehicle to the right shoulder of the road or a safe location.
- 3 Place a warning triangle.
The position that is easily identified by a driver in an approaching vehicle while maintaining a safe distance (100 m during daytime, 200 m in the rear during night time) is an appropriate area to place the warning triangle.
Place a road flare additionally at night.
- 4 Evacuate all occupants to a safe place.
- 5 If anyone is injured, give aid and call an ambulance.
- 6 Contact the nearest police station and when a police officer arrives, follow his/her instructions.
- 7 Even in case of a minor accident, be sure to visit a hospital and see the doctor.

Tips when an accident or a malfunction occurs on the expressway



When you stop the vehicle on the expressway due to an accident or a malfunction, take an action according to the following order in order to prevent a secondary accident.

- 1 Turn on the hazard warning lamp promptly and move the vehicle to the shoulder of the road (1).
- 2 Place a warning triangle on the rear side of the vehicle (2). (Place a road flare additionally at night)
- 3 The driver and any occupants should be evacuated to a safe area such as behind the guardrail (3).
- 4 If you need help, contact the police, fire department, or highway department.

In the event of a fire

When a fire has occurred in the vehicle, do not panic and take an action according to the following order.

- 1 Turn on the hazard warning lamp of the vehicle.
- 2 Stop the vehicle at a safe place immediately and stop the engine.
- 3 Extinguish the fire using an extinguisher.
- 4 If you cannot extinguish the fire, report it to a police station or a fire station.
At this time, do not approach the vehicle and maintain a safe distance with the vehicle.



Warning

- When a vehicle accident occurs, the fuel may leak, causing a fire. Stop the engine immediately and keep any inflammables away from the vehicle.



Placing an extinguisher in the vehicle

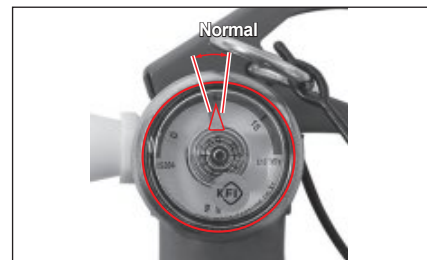
Place an extinguisher in the vehicle since it is needed for early fire extinguishing when a fire occurs.

How to use the extinguisher



- 1 Remove the safety pin (1) from the extinguisher with the wind at your back.
- 2 Face the extinguisher nozzle (2) towards the place where the fire occurs.
- 3 Hold the handle (3) and spray to the place where the fire occurs, using a sweeping motion.

Checking and maintaining the extinguisher



- Check at least once a month if the needle on the pressure gauge of the extinguisher is in the normal range.
If there is a pressure loss or other abnormalities, have the extinguisher serviced immediately.
- The lifetime of the extinguisher is approximately 5 years when it is maintained under normal conditions.
After 5 years have passed, it should be inspected and confirmed by a fire fighting equipment company every 2 years.
- After using the extinguisher, be sure to release the chemical (ABC powder) from the inside of the extinguisher completely and refill with an ABC powder fire extinguishing agent.
If it is left unattended for a long period of time, the contents may become hardened and it cannot be used. Shake the extinguisher periodically.

In the event of a heavy snow

When there is a heavy snow, do not panic and refer to the following tips for actions.

- Always listen to the radio and use the expressway information call number.
- Drive slowly on a curved road, an uphill road or a bridge.
- Avoid parking or leaving the vehicle on the shoulder of the road that cause inconvenience for snow removal operations.
- Be sure to leave your contact information when you leave the vehicle unavoidably.
- Drive slowly while securing a safe distance between vehicles.
- Avoid using the brake and stop the vehicle while reducing the vehicle speed using the engine brake.
- Remove snow near the vehicle frequently to prevent the exhaust pipe (muffler) from being blocked.

Precautions in case of rain

If your vehicle is flooded, immediately turn off the engine, evacuate to a safe place, and contact the fire department or other emergency services for appropriate measures.

6. Periodic Checking and Maintenance

You can check the necessary periodic check and maintenance methods in detail for safe and pleasant vehicle driving.

Scheduled maintenance services - gasoline engine

* Use only approved KGM genuine parts.

Maintenance service and record retention are the owner's responsibility. You should retain evidence that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service chart.

Maintenance item Maintenance interval		Kilometers (miles) or time in months, whichever comes first								
		x1000 km	15	30	45	60	75	90	105	120
		x1000 miles	10	20	30	40	50	60	70	80
		Months	12	24	36	48	60	72	84	96

Engine control system

Drive belt		I	I	I	I	I	I	I	I
Engine oil & engine oil filter (1)* (3)* (Initial check: 7500 km)		R**	R	R	R	R	R	R	R
		Shorten the service interval under severe conditions							
Cooling system hose & connections		I	I	I	I	I	I	I	I
Engine coolant (3)*		Change every 200000 km or 5 years. And, inspect replenish if necessary.							
Fuel filter (2)*		Inspect every 30000 km (if using poor quality of fuel, replace every 50000 km)							
Fuel line & connections		I	I	I	I	I	I	I	I
Air cleaner (2)*		I	R	I	R	I	R	I	R
		Shorten the service interval under severe conditions							
Ignition timing		I	I	I	I	I	I	I	I
Spark plugs	G15DTF	Change every 60000 km							
Charcoal canister & vapor lines		-	I	-	I	-	I	-	I

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

** - In order to secure engine long life and effective break-in, first oil (factory filled) would be recommended to drain within 10000 km.

(1)* If vehicle is operated under severe condition: Shorten the service interval.

- Frequent stop-and-go traffic, extended idling, short driving distance below 6 km, driving distance below 16 km when the outside temperature remains below freezing

- Driving in a hilly or mountainous terrain, sandy, or dusty area

- High load driving such as trailer towing

- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)

(2)* If vehicle is operated under severe condition, pollutant area or off-road driving, driving in dusty condition or sandy condition, frequently inspect the air cleaner, if necessary, change the air cleaner.

(3)* Refer to "Recommended fluids and lubricants".

Maintenance item	Maintenance interval	Kilometers (miles) or time in months, whichever comes first								
		x1000 km	15	30	45	60	75	90	105	120
		x1000 miles	10	20	30	40	50	60	70	80
		Months	12	24	36	48	60	72	84	96

Chassis and body

Exhaust pipes & mountings	I	I	I	I	I	I	I	I	I
Brake / Clutch fluid (3)*	Change every 2 years (inspect frequently)								
Parking brake (4)*	I	I	I	I	I	I	I	I	I
Brake pads (Front & Rear) (4)*	Inspect and change (inspect frequently)								
Brake line & connections (including booster)	I	I	I	I	I	I	I	I	I
Manual transaxle oil (5)*	Inspect and replenish every 60000 km (or 3 years) (Severe driving condition: Change every 120000 km)								
Clutch & brake pedal free play	I	I	I	I	I	I	I	I	I
Power transfer unit oil (6)*	I	I	I	R	I	I	I	I	R
Rear axle oil	Inspect every 15000 km, change every 100000 km (Frequent check of oil leak)								
Automatic transaxle fluid (6)*	Change every 100000 km under severe condition								
Check play/tightness for lower bolt/nut and ball joint grease leak on chassis and body (6)*	Check frequently and adjust or replace if necessary								

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to "Recommended fluids and lubricants".

(4)* More frequent maintenance is required if the vehicle is operated under any of the following conditions:

- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain, or
- When doing frequent trailer towing, or
- Uses such as found in taxi, police or delivery service.

(5)* Inspect and replenish every 60000 km (or 3 years)

Normal driving condition: Fill for Life

(Severe driving condition: Change every 120000 km)

(6)* If vehicle is operated under severe condition: Shorten the service interval.

- Towing a trailer or off-road driving (Inspect the leak of fluid at any time, occasionally)
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)
- Frequent stop-and-go traffic, extended idling, short driving distance
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- Driving frequently at high speed over 170 km/hour
- Driving frequently in area where heavy traffic under the ambient temperature above 32°C

Maintenance item Maintenance interval		Kilometers (miles) or time in months, whichever comes first								
		x1000 km	15	30	45	60	75	90	105	120
		x1000 miles	10	20	30	40	50	60	70	80
		Months	12	24	36	48	60	72	84	96

Chassis and body

Tire condition & inflation pressure	Check frequently and adjust or replace if necessary								
Wheel alignment (7)*	Inspect when abnormal condition is noted								
Steering wheel & linkage	I	I	I	I	I	I	I	I	I
Outer ball joint inspection and replacement	I	I	I	I	I	R	I	I	I
Drive shaft boots (8)*	I	I	I	I	I	I	I	I	I
Seat belts, buckles & anchors	I	I	I	I	I	I	I	I	I
Lubricate locks, hinges & bonnet latch	Check frequently and adjust or replace if necessary								
Wheel bearing grease	I	I	I	I	I	I	I	I	I
Propeller shaft grease - Front / Rear (9)*	I	I	I	I	I	I	I	I	I
Air conditioner filter (10)*	R	R	R	R	R	R	R	R	R
	Shorten the service interval under severe conditions								

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R- Replace or change.

(7)* If necessary, rotate and balance wheels.

(8)* After completion of off-road operation, the drive shaft boots should be inspected.

(9)* Inspect propeller shaft grease every 5000 km or 3 months if the vehicle is mainly driven under severe condition.

- In off-road or dusty road, or
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain.

(10)* Severe Conditions in Air Conditioner Filter

- Pollutant area or off-road driving, extended air conditioner or heater operation

Scheduled maintenance services (under severe condition) - gasoline engine

* Use only approved KGM genuine parts.

Maintenance service and record retention are the owner's responsibility. You should retain evidence that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service chart.

Maintenance item	Maintenance interval	Kilometers (miles) or time in months, whichever comes first								
		x1000 km	7.5	15	22.5	30	37.5	45	52.5	60
		Months	6	12	18	24	30	36	42	48

Engine control system

Drive belt	I	I	I	I	I	I	I	I	I
Engine oil & engine oil filter (1)* (3)*	R**	R	R	R	R	R	R	R	R
Cooling system hose & connections	I	I	I	I	I	I	I	I	I
Engine coolant (3)*	Change every 100000 km or 3 years. And, inspect replenish if necessary.								
Fuel filter (2)*	Inspect every 15000 km (if using poor quality of fuel, replace every 30000 km)								
Fuel line & connections	I	I	I	I	I	I	I	I	I
Air cleaner (2)*	I	R	I	R	I	R	I	R	I
Ignition timing	I	I	I	I	I	I	I	I	I
Spark plugs	G15DTF	Change every 40000 km							
Charcoal canister & vapor lines	-	I	-	I	-	I	-	I	-

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

** - In order to secure engine long life and effective break-in, first oil (factory filled) would be recommended to drain within 7500 km.

(1)* If vehicle is operated under severe condition:

Shorten the service interval.

- Frequent stop-and-go traffic, extended idling, short driving distance below 6 km, driving distance below 16 km when the outside temperature remains below freezing

- Driving in a hilly or mountainous terrain, sandy, or dusty area

- High load driving such as trailer towing

- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)

(2)* If vehicle is operated under severe condition, pollutant area or off-road driving, driving in dusty condition or sandy condition, frequently inspect the air cleaner, if necessary, change the air cleaner.

(3)* Refer to "Recommended fluids and lubricants".

Maintenance item	Maintenance interval	Kilometers (miles) or time in months, whichever comes first								
		x1000 km	7.5	15	22.5	30	37.5	45	52.5	60
		Months	6	12	18	24	30	36	42	48

Chassis and body

Exhaust pipes & mountings	I	I	I	I	I	I	I	I	I
Brake / Clutch fluid (3)*	Change every 1 years (inspect frequently)								
Parking brake (4)*	I	I	I	I	I	I	I	I	I
Brake pads (Front & Rear) (4)*	Inspect and change (inspect frequently)								
Brake line & connections (including booster)	I	I	I	I	I	I	I	I	I
Manual transaxle oil (5)*				I					I
Clutch & brake pedal free play	I	I	I	I	I	I	I	I	I
Power transfer unit oil (6)*	I	I	I	I	I	I	I	I	R
Rear axle oil	Inspect every 7500 km, change every 50000 km (Frequent check of oil leak)								
Automatic transaxle fluid (6)*	Change every 100000 km under severe condition								
Check play/tightness for lower bolt/nut and ball joint grease leak on chassis and body (6)*	Check frequently and adjust or replace if necessary (change every 100000 km only ball joint)								

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to "Recommended fluids and lubricants".

(4)* More frequent maintenance is required if the vehicle is operated under any of the following conditions:

- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain, or
- When doing frequent trailer towing, or
- Uses such as found in taxi, police or delivery service.

(5)* Inspect and replenish every 30000 km (or 2 years)

Normal driving condition: Fill for Life

(Severe driving condition: Change every 120000 km)

(6)* If vehicle is operated under severe condition: Shorten the service interval.

- Towing a trailer or off-road driving (Inspect the leak of fluid at any time, occasionally)
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)
- Frequent stop-and-go traffic, extended idling, short driving distance
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- Driving frequently at high speed over 170 km/hour
- Driving frequently in area where heavy traffic under the ambient temperature above 32°C

Maintenance item	Maintenance interval	Kilometers (miles) or time in months, whichever comes first								
		x1000 km	7.5	15	22.5	30	37.5	45	52.5	60
		Months	6	12	18	24	30	36	42	48

Chassis and body

Tire condition & inflation pressure (7)*	Check frequently and adjust or replace if necessary								
Wheel alignment (7)*	Inspect when abnormal condition is noted								
Steering wheel & linkage	I	I	I	I	I	I	I	I	I
Outer ball joint inspection and replacement	I	I	I	I	I	I	R	I	I
Drive shaft boots (8)*	I	I	I	I	I	I	I	I	I
Seat belts, buckles & anchors	I	I	I	I	I	I	I	I	I
Lubricate locks, hinges & bonnet latch	Check frequently and adjust or replace if necessary								
Wheel bearing grease	I	I	I	I	I	I	I	I	I
Propeller shaft grease - Front / Rear (9)*	I	I	I	I	I	I	I	I	I
Air conditioner filter (10)*	R	R	R	R	R	R	R	R	R

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(7)* If necessary, rotate and balance wheels.

(8)* After completion of off-road operation, the drive shaft boots should be inspected.

(9)* Inspect propeller shaft grease every 5000 km or 3 months if the vehicle is mainly driven under severe condition.

- In off-road or dusty road, or
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain.

(10)* Severe Conditions in Air Conditioner Filter

- Pollutant area or off-road driving, extended air conditioner or heater operation

Scheduled maintenance services - HEV

* Use only approved KGM genuine parts.

Maintenance service and record retention are the owner's responsibility. You should retain evidence that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service chart.

Maintenance item \ Maintenance interval		Kilometers (miles) or time in months, whichever comes first								
		x1000 km	10	20	30	40	50	60	70	80
		x1000 miles	6	12	18	24	30	36	42	48
		Months	12	24	36	48	60	72	84	96

Engine control system

Engine oil & engine oil filter (1)* (3)* (Initial check: 5000 km)	R**	R	R	R	R	R	R	R
	Shorten the service interval under severe conditions							
Cooling system hose & connections	I	I	I	I	I	I	I	I
Engine coolant (3)*	Change every 200000 km or 5 years. And, inspect replenish if necessary.							
High-voltage system coolant	Change every 200000 km or 5 years. And, inspect replenish if necessary.							
Fuel filter (2)*	Inspect every 30000 km (if using poor quality of fuel, replace every 50000 km)							
Fuel line & connections	I	I	I	I	I	I	I	I
Air cleaner (2)* (Initial check: 5000 km)	I	I	R	I	I	R	I	I
	Shorten the service interval under severe conditions							
Spark plugs	G15DTF	Change every 60000 km						

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R- Replace or change.

** - In order to secure engine long life and effective break-in, first oil (factory filled) would be recommended to drain within 10000 km.

(1)* If vehicle is operated under severe condition: Shorten the service interval.

- Frequent stop-and-go traffic, extended idling, short driving distance below 6 km, driving distance below 16 km when the outside temperature remains below freezing

- Driving in a hilly or mountainous terrain, sandy, or dusty area
- High load driving such as trailer towing
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)

(2)* If vehicle is operated under severe condition, pollutant area or off-road driving, driving in dusty condition or sandy condition, frequently inspect the air cleaner, if necessary, change the air cleaner.

(3)* Refer to "Recommended fluids and lubricants".

Maintenance item \ Maintenance interval		Kilometers (miles) or time in months, whichever comes first								
		x1000 km	10	20	30	40	50	60	70	80
		x1000 miles	6	12	18	24	30	36	42	48
		Months	12	24	36	48	60	72	84	96

Chassis and body

Exhaust pipes & mountings	I	I	I	I	I	I	I	I	I
Brake (3)*	Change every 2 years (inspect frequently)								
Parking brake (4)*	I	I	I	I	I	I	I	I	I
Brake pads (Front & Rear) (4)*	Inspect and change (inspect frequently)								
Brake line & connections (including booster)	I	I	I	I	I	I	I	I	I
Brake pedal free play	I	I	I	I	I	I	I	I	I
Hybrid transmission oil filter (6)*	Change every 60000 km under severe condition								
Check play/tightness for lower bolt/nut and ball joint grease leak on chassis and body (6)*	Check frequently and adjust or replace if necessary								

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R- Replace or change.

(3)* Refer to "Recommended fluids and lubricants".

(4)* More frequent maintenance is required if the vehicle is operated under any of the following conditions:

- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain, or
- When doing frequent trailer towing, or
- Uses such as found in taxi, police or delivery service.

(5)* Inspect and replenish every 60000 km (or 3 years)

Normal driving condition: Fill for Life

(Severe driving condition: Change every 120000 km)

(6)* If vehicle is operated under severe condition: Shorten the service interval.

- Towing a trailer or off-road driving (Inspect the leak of fluid at any time, occasionally)
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)
- Frequent stop-and-go traffic, extended idling, short driving distance
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- Driving frequently at high speed over 170 km/hour
- Driving frequently in area where heavy traffic under the ambient temperature above 32°C

Maintenance item	Maintenance interval	Kilometers (miles) or time in months, whichever comes first								
		x1000 km	10	20	30	40	50	60	70	80
		x1000 miles	6	12	18	24	30	36	42	48
		Months	12	24	36	48	60	72	84	96

Chassis and body

Tire condition & inflation pressure	Check frequently and adjust or replace if necessary								
Wheel alignment (7)*	Inspect when abnormal condition is noted								
Steering wheel & linkage	I	I	I	I	I	I	I	I	I
Inspection and replacement (ball joint, nut, boot, grease leakage and free-play/tightness)	I	I	I	I	I	I	I	I	I
Drive shaft boots (8)*	I	I	I	I	I	I	I	I	I
Seat belts, buckles & anchors	I	I	I	I	I	I	I	I	I
Lubricate locks, hinges & bonnet latch	Check frequently and adjust or replace if necessary								
Wheel bearing grease	I	I	I	I	I	I	I	I	I
Propeller shaft grease - Front / Rear (9)*	I	I	I	I	I	I	I	I	I
Air conditioner filter (10)*	R	R	R	R	R	R	R	R	R
	Shorten the service interval under severe conditions								

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R- Replace or change.

(7)* If necessary, rotate and balance wheels.

(8)* After completion of off-road operation, the drive shaft boots should be inspected.

(9)* Inspect propeller shaft grease every 5000 km or 3 months if the vehicle is mainly driven under severe condition.

- In off-road or dusty road, or
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain.

(10)* Severe Conditions in Air Conditioner Filter

- Pollutant area or off-road driving, extended air conditioner or heater operation

Scheduled maintenance services (under severe condition) - HEV

* Use only approved KGM genuine parts.

Maintenance service and record retention are the owner's responsibility. You should retain evidence that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service chart.

Maintenance item	Maintenance interval	Kilometers (miles) or time in months, whichever comes first								
		x1000 km	5	10	15	20	25	30	35	40
		Months	6	12	18	24	30	36	42	48

Engine control system

Engine oil & engine oil filter (1)* (3)*	R**	R	R	R	R	R	R	R	R
Cooling system hose & connections	I	I	I	I	I	I	I	I	I
Engine coolant (3)*	Change every 100000 km or 3 years. And, inspect replenish if necessary.								
High-voltage system coolant	Change every 100000 km or 3 years. And, inspect replenish if necessary.								
Fuel filter (2)*	Inspect every 15000 km (if using poor quality of fuel, replace every 30000 km)								
Fuel line & connections	I	I	I	I	I	I	I	I	I
Air cleaner (2)*	I	I	R	I	I	R	I	I	I
Spark plugs	G15DTF	Change every 40000 km							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R- Replace or change.

** - In order to secure engine long life and effective break-in, first oil (factory filled) would be recommended to drain within 5000 km.

(1)* If vehicle is operated under severe condition:

Shorten the service interval.

- Frequent stop-and-go traffic, extended idling, short driving distance below 6 km, driving distance below 16 km when the outside temperature remains below freezing

- Driving in a hilly or mountainous terrain, sandy, or dusty area

- High load driving such as trailer towing

- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)

(2)* If vehicle is operated under severe condition, pollutant area or off-road driving, driving in dusty condition or sandy condition, frequently inspect the air cleaner, if necessary, change the air cleaner.

(3)* Refer to "Recommended fluids and lubricants".

Maintenance item	Maintenance interval	Kilometers (miles) or time in months, whichever comes first								
		x1000 km	5	10	15	20	25	30	35	40
		Months	6	12	18	24	30	36	42	48

Chassis and body

Exhaust pipes & mountings	I	I	I	I	I	I	I	I	I
Brake (3)*	Change every 1 years (inspect frequently)								
Parking brake (4)*	I	I	I	I	I	I	I	I	I
Brake pads (Front & Rear) (4)*	Inspect and change (inspect frequently)								
Brake line & connections (including booster)	I	I	I	I	I	I	I	I	I
Brake pedal free play	I	I	I	I	I	I	I	I	I
Hybrid transmission oil filter (6)*	Change every 30000 km under severe condition								
Check play/tightness for lower bolt/nut and ball joint grease leak on chassis and body (6)*	Check frequently and adjust or replace if necessary (change every 100000 km only ball joint)								

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R- Replace or change.

(3)* Refer to "Recommended fluids and lubricants".

(4)* More frequent maintenance is required if the vehicle is operated under any of the following conditions:

- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain, or
- When doing frequent trailer towing, or
- Uses such as found in taxi, police or delivery service.

(5)* Inspect and replenish every 30000 km (or 2 years)

Normal driving condition: Fill for Life

(Severe driving condition: Change every 120000 km)

(6)* If vehicle is operated under severe condition: Shorten the service interval.

- Towing a trailer or off-road driving (Inspect the leak of fluid at any time, occasionally)
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)
- Frequent stop-and-go traffic, extended idling, short driving distance
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- Driving frequently at high speed over 170 km/hour
- Driving frequently in area where heavy traffic under the ambient temperature above 32°C

Maintenance item	Maintenance interval	Kilometers (miles) or time in months, whichever comes first								
		x1000 km	5	10	15	20	25	30	35	40
		Months	6	12	18	24	30	36	42	48

Chassis and body

Tire condition & inflation pressure (7)*	Check frequently and adjust or replace if necessary								
Wheel alignment (7)*	Inspect when abnormal condition is noted								
Steering wheel & linkage	I	I	I	I	I	I	I	I	I
Inspection and replacement (ball joint, nut, boot, grease leakage and free-play/tightness)	I	I	I	I	I	I	I	I	I
Drive shaft boots (8)*	I	I	I	I	I	I	I	I	I
Seat belts, buckles & anchors	I	I	I	I	I	I	I	I	I
Lubricate locks, hinges & bonnet latch	Check frequently and adjust or replace if necessary								
Wheel bearing grease	I	I	I	I	I	I	I	I	I
Propeller shaft grease - Front / Rear (9)*	I	I	I	I	I	I	I	I	I
Air conditioner filter (10)*	R	R	R	R	R	R	R	R	R

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R- Replace or change.

(7)* If necessary, rotate and balance wheels.

(8)* After completion of off-road operation, the drive shaft boots should be inspected.

(9)* Inspect propeller shaft grease every 5000 km or 3 months if the vehicle is mainly driven under severe condition.

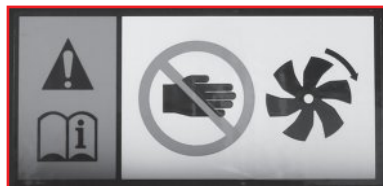
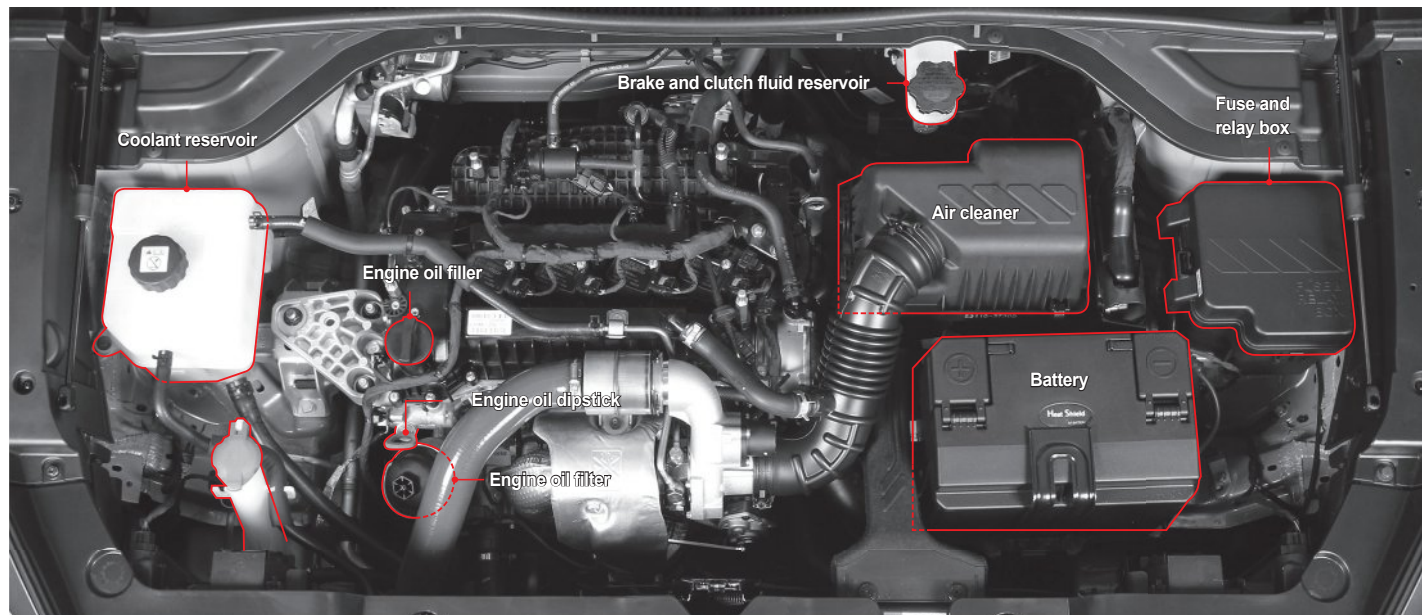
- In off-road or dusty road, or
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain.

(10)* Severe Conditions in Air Conditioner Filter

- Pollutant area or off-road driving, extended air conditioner or heater operation

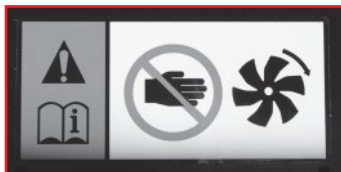
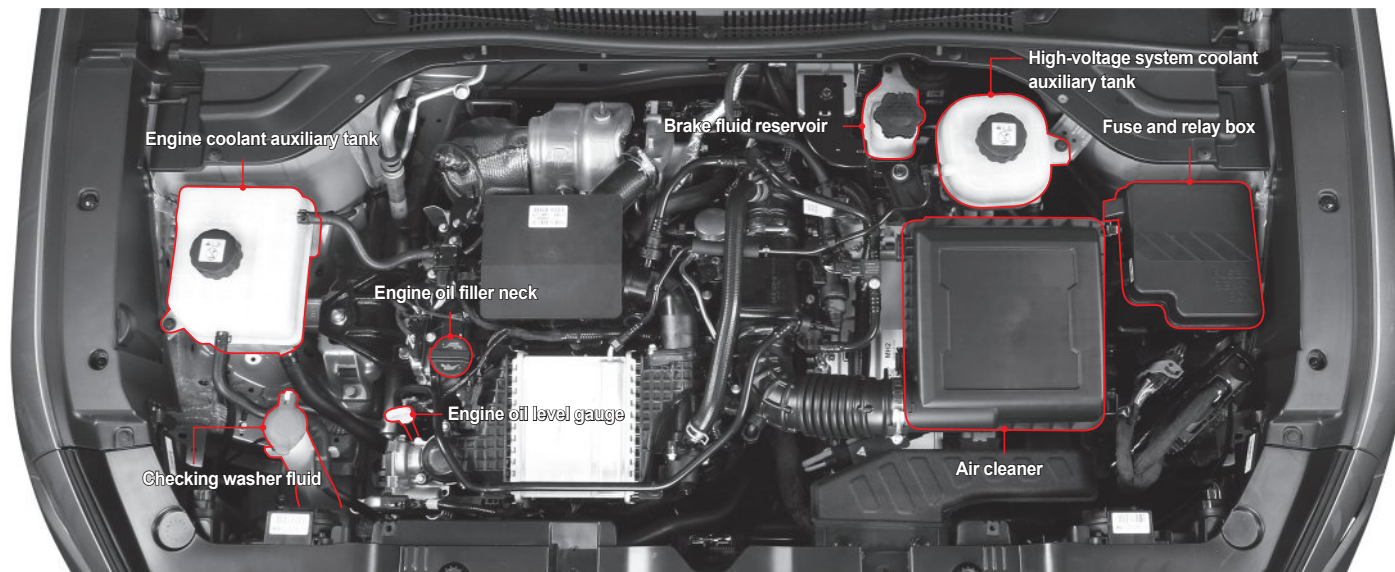
Checking the engine room

G15DTF



Warning

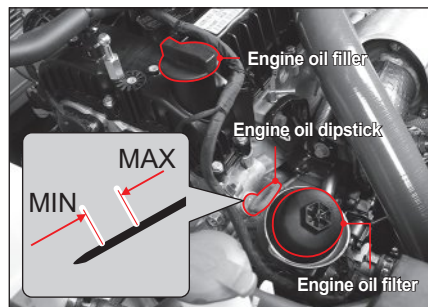
- After driving the vehicle, the systems including the engine, radiator, exhaust manifold, catalyst converter and exhaust pipe (muffler) are very hot, so caution should be taken when checking the engine room. Turn off and cool down the engine properly before checking in order to prevent a burn.
- There is a risk of serious injury from rotating parts such as the engine cooling fan when checking and working on the engine compartment. In addition, the cooling fan may rotate regardless of whether the engine is started or not.



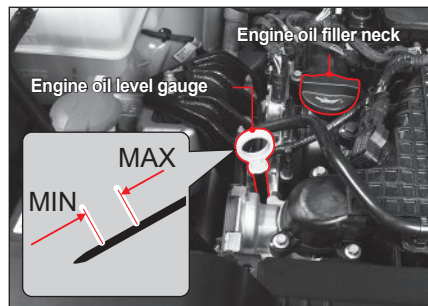
Warning

- Do not put your hand in the rotating part of the engine compartment cooling fan. This can lead to serious injuries.
- Do not disassemble high-voltage components. Also, do not remove the cover or connector at will. High-voltage electric shock can cause death.
- After driving, be careful when checking the engine compartment as devices such as the drive motor, engine, radiator, exhaust manifold, catalytic converter, and exhaust pipe (muffler) are very hot. To prevent burns, turn the ignition off and allow it to cool before inspection.

G15DTF



HEV



Level Check

Park the vehicle on a level ground and apply the parking brake.

Stop the engine and wait for more than 5 minutes.

- 1 Pull out the dipstick and wipe it out with a clean cloth. Reinsert it all the way.
- 2 Pull out it again and check the oil level.
- 3 The oil level should be between the maximum (Max) mark and minimum (Min) mark on the oil dipstick. Oil should be replenished before the level goes below the minimum mark.

Replenishment

- 1 If the level gets to the lower point, open the filter cap on top of the cylinder block and add the genuine oil without exceeding the level of the upper mark.
- 2 Recheck the oil level after 5 minutes.



Caution

- Regularly check the engine oil level and add KGM genuine engine oil if necessary.
- Clean the dipstick with clean cloth so that any foreign materials cannot get into the engine.
- The oil should not go above the upper mark on the dipstick.
- The engine oil may be consumed more if the engine is new.



Warning

- Operating vehicle with insufficient amount of oil can damage the engine. Make sure the engine oil level is correct and add oil if necessary.

Function of engine oil

Engine oil's major function is to lubricate and cool the parts inside of the engine, which enables engine to work properly.

Consumption of Engine Oil

The consumption of engine oil is depending on the viscosity and quality of the oil, and the driving habit. More oil may be required under the following conditions;

- When the Vehicle is New

A new engine usually consumes more oil because its pistons, piston ring and cylinder walls are not yet adjusted with an optimal condition.

Oil Consumption : Max. 0.5 Liter per 1000 km

Accordingly, it is necessary for the driver to check frequently the oil level and to replenish oil if needed. KGM recommends that the oil level be checked every time you refuel the vehicle or you drive the long distance until the first 5000 km.

- When driving at High Engine Speeds

As long as you keep the followings with sufficient care in your first running the vehicle, it will guarantee you to get excellent and comfortable performance for a long with your vehicle.

- Remember to check the engine oil level and shorten the cycle to refuel the engine oil under severe driving conditions.

- Avoid subjecting to engine to heavy loads by driving at full throttle, especially be careful when the outside temperature remains below freezing for the first 1000 km.
- Do not use the trailing in the first 1000 km driving

* What's Severe Driving Condition?

- Driving at the high engine speed or at high-speed
- Driving for consecutive two hours at high speed
- Driving the rough road, off-road, dirt-laden road, and muddy roads
- Driving in areas where salt or other corrosive materials are being used
- Repeated driving in short-distance
- Driving with the excessive idling
- High load driving such as trailing

Engine care

Observe the followings to keep the engine in good condition:

- Check the engine oil level frequently under severe driving condition and add some if necessary. The change interval should be shortened as well.
- Do not run a new engine at high speed until its driving distance gets 1000 km. Be extra careful when the engine is cold.
- After installing a new engine, do not tow another vehicle or a trailer until its driving distance gets 1000 km.

Change interval

- The engine oil filter element should be changed at the same time with the engine oil.
- Use only the KGM genuine engine oil and filter.

Engine oil

Refer to Section "SCHEDULED MAINTENANCE SERVICES".

Engine oil filter

Service Interval
Same interval with the engine oil



Caution

- The service interval may be reduced if your vehicle is driven in rough conditions.
- Change the engine oil based on the driving distance or period, whichever comes first.

Specification and capacity

Service interval		
Specifi- cation	Gasoline	Quality class: KGM genuine engine oil (Approved by ACEA C2 SAE 0W/30)
Capacity	G15DTF	4.5 ℓ



Warning

- Use only KGM genuine engine oil and filters. Use of nonrecommended products could cause damage to the engine.

Warnings and cautions when checking



Caution

- Regularly check the engine oil level and add the KGM genuine engine oil if necessary.



Warning

- Clean the dipstick with a clean cloth so that any foreign materials cannot get into the engine.
- Use only the KGM genuine engine oil.
- The oil should not go above the upper mark on the dipstick.
- Operating with insufficient or too much amount of oil can damage the engine.

SAE viscosity classes

The SAE classes (viscosity) should be selected in accordance with the average seasonal air temperature.

Applying the SAE classes exactly on the basis of the outside air temperatures would necessitate frequently changing the engine oil. The temperature limits for the SAE classes should therefore be regarded as reference temperatures and the actual air temperature may be higher or lower for a short period of time.

* How to check engine oil specification

Example:

0W, 5W, 10W, 15W, 20W, 25W **20, 30, 40, 50, 60**

Winter oil viscosity
(W: Winter)

Summer oil viscosity

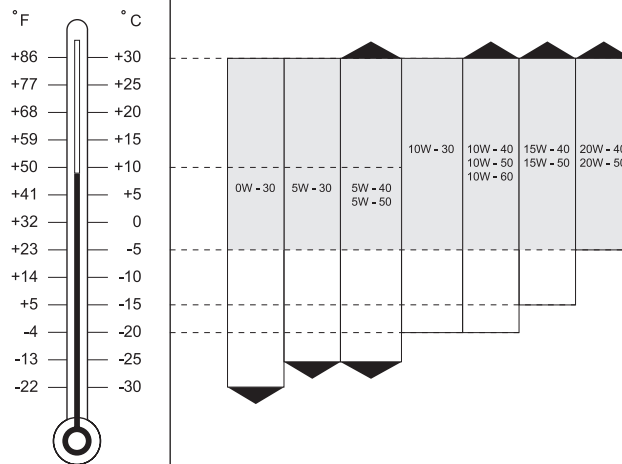
- The numerical, for example SAE 10W, relates to viscosity at particular temperature and the alphabet "W" indicates the oil's suitability for colder temperature.
- For summer oil viscosity, higher numbers mean higher viscosities.

Notice

- No separate washer fluid reservoir for the rear window is provided. The washer fluid is supplied from the washer fluid reservoir for the windshield.

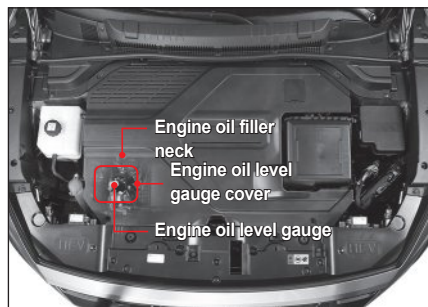
Engine

The viscosity should be selected according to outside temperature. Do not switch to a different viscosity in the event of brief temperature fluctuations.



Engine oil inspection and replacement

G15D HEV



Functions

Engine oil lubricates and cools the major parts inside the engine.

Engine oil plays a very important role in ensuring that the engine runs smoothly.

Consumption

Engine oil performs lubrication and cooling functions for the internal components of the engine and is consumed for various reasons. This oil consumption is affected by the oil viscosity and quality, as well as the way the vehicle is driven.

In particular, more engine oil is consumed when the engine is new or operating at high engine speeds.

If it is a new engine, the piston, piston ring and cylinder are not yet optimized, so more engine oil is consumed.

Therefore, for the first 5,000 km of driving, check the engine oil level whenever you refuel or before going on a long trip and top it up if necessary.

How to keep your engine in good shape

Observe the followings to keep the engine in good condition:

- Under severe operating conditions, check the engine oil level frequently and top up if necessary. Also, replace the engine oil at an earlier replacement cycle.
- In the case of a new engine, do not drive at high engine speeds for the first 1,000 km of driving. Take extra care if the engine is cold.
- In the case of a new engine, do not tow other vehicles or trailers for the first 1,000 km of driving.

Warning

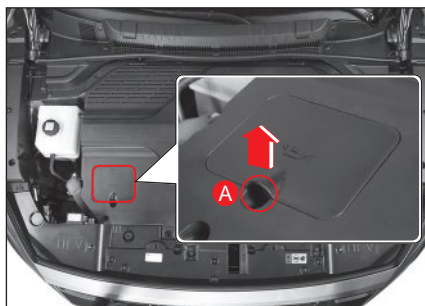
- **If you drive with insufficient engine oil, the engine will seize and cause major damage. Be sure to check the engine oil level and add oil if necessary.**
- **Engine oil can be consumed while the vehicle is in motion, so check it regularly to improve engine durability and add more if necessary.**

Check engine oil

Engine oil has a significant impact on engine performance, so please check the oil level frequently.

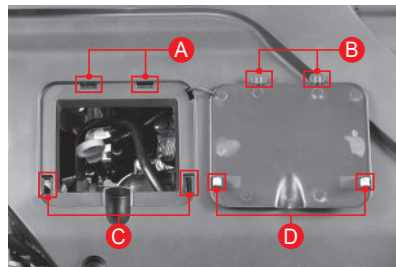
Perform an engine oil inspection on a level surface at least five minutes after turning the engine off.

- 1 Remove the cover by pulling it up using the engine oil level gauge cover groove (A).



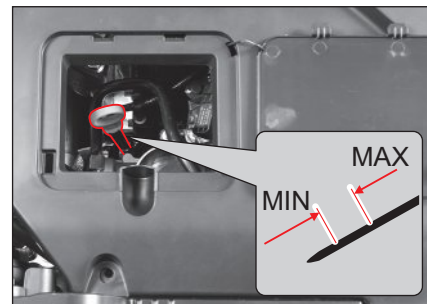
Notice

- When the engine oil level gauge cover is installed



First insert the cover catch (B) into the cover groove (A), and then fit the cover clip part (D) into the clip groove (C).

- 2 Pull out the engine oil level gauge, clean it, and then put it back on the tube.



- 3 Check the oil level by pulling out the engine oil level gauge again.
The oil level should be between the maximum (MAX) and minimum (MIN) scale.
- 4 If it is close to or below the minimum mark, remove the engine compartment beauty cover and add oil.



Caution

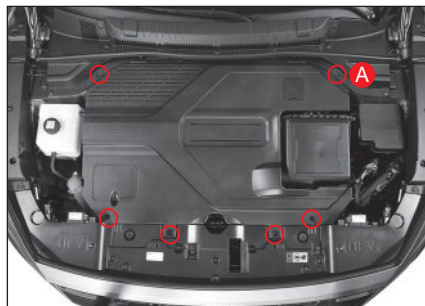
- Be sure to wipe the engine oil level gauge with a clean cloth to prevent foreign matter from entering.
- If the oil level gauge reading is above the maximum (MAX) during the oil level check, please be sure to have your vehicle inspected and serviced at our nearest authorized service center.

Notice

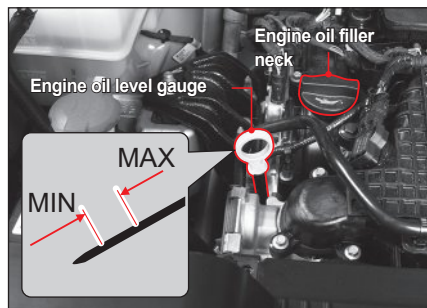
- When the vehicle is first delivered or when driving for the first time after an engine replacement, the engine oil may be consumed more than usual.

Replenishment

- 1 When refilling engine oil, remove the engine compartment beauty cover (A) by loosening the 6 bolts that secure it.



- 2 Open the oil filler cap on the upper part of the engine and refill it with our genuine engine oil.



- 3 After five minutes, check again to make sure the oil level is at the proper level.



Caution

- When topping up oil, do not fill the engine oil level gauge beyond the MAX mark.
- When refilling or changing the oil, be careful not to spill it on the body or engine compartment. If it gets on the vehicle body, wipe it off immediately.

Engine oil and filter change interval

Category	Gasoline
Engine oil	Replace every 10,000 km or every 12 months (replenish immediately after inspection if insufficient)
Engine oil filter	Same interval with engine oil



Caution

- If the vehicle has been operated under harsh conditions, please replace the oil earlier than the recommended time and manage the engine oil and consumables by referring to the '6-5 Page "Scheduled maintenance services (under severe condition) - gasoline engine"'.
- Please change the engine oil based on the distance traveled or the period of use, whichever comes first.

Specification and capacity

	Gasoline
Specifications	• KG MOBILITY genuine parts • API SP 0W16
Capacity	Approx. 4.0ℓ

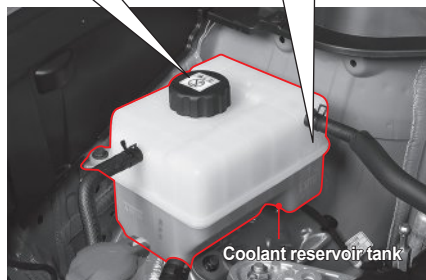
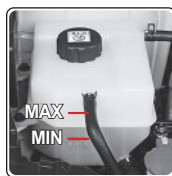


Warning

- Be sure to use our genuine parts for engine oil and filters. Using similar products or non-genuine parts on the market can cause the viscosity or composition of the oil to be incompatible or the filter to not perform properly, which can shorten the life of the engine and cause engine seizure.

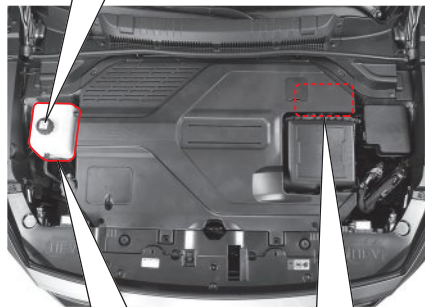
Engine coolant

G15DTF

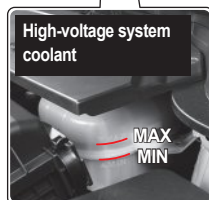


Coolant reservoir tank

HEV



Engine Coolant



High-voltage system coolant

Level Check

Park the vehicle on level ground and apply the parking brake.

Stop the engine and wait until it cools.

- 1 The coolant level should be between the MAX and MIN mark on the coolant reservoir.
- 2 Check the coolant level. If the level is below the "MIN" mark, immediately add coolant.

Service Interval

- Replacement: Every 5 years or every 200000 km

Gasoline Engine (G15DTF)	7.0ℓ	KGM genuine coolant Anti-Freeze SYC-1025, Anti-Freeze:Water = 50:50 ORGANIC ACID TYPE, COLOR:BLUE
G15DTF (HEV)	7.0ℓ	
High-voltage system coolant	6.2ℓ	

- Check: Everyday, before driving off
- Replenishment: Replenish as necessary



Warning

-  Do not remove the coolant reservoir cap when the engine and the radiator are hot. The cooling system may spray hot coolant if the cap is removed, causing serious injuries.
- Use only the KGM genuine coolant.

Replenishment

Use only the 50/50 mixture of soft water and antifreeze as specified.

- 1 Open the coolant reservoir tank cap slowly when the engine is cold. At this time, you can hear a "hissing" sound.
- 2 When there is no more "hissing" sound, remove the cap from the reservoir tank.
- 3 Add the 50:50 mixture of water and antifreeze to the coolant reservoir tank.
- 4 If no unusual things happen, tighten the coolant reservoir cap.



Caution

- Avoid any direct contact of the coolant to the painted body of the vehicle.

Notice

- The engine compartment cover must be removed to refill the high-voltage system coolant.



Caution

- An incorrect coolant mixture can result in severe malfunction or engine damage.
- Check the antifreeze mixture ratio after adding or replacing the coolant.
- When refilling the coolant, be careful not to get coolant on the surface of the vehicle. The vehicle's paint surface may be damaged.

Notice

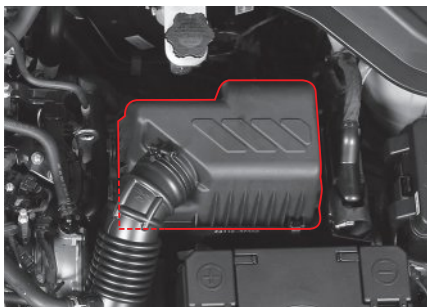
- If in doubt about the mix ratio, a 50% water and 50% antifreeze mix is the easiest to mix together as it will be the same quantity of each. It is suitable to use for most temperature ranges of -36°C (-33°F) and higher.
- The antifreeze mixture ratio at the time of vehicle delivery is 45%.



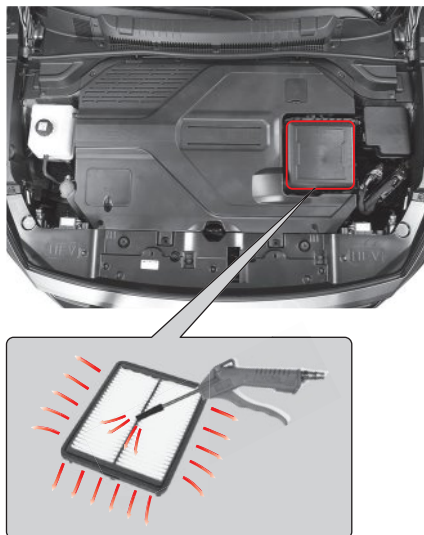
Warning

- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze, which would reduce the effectiveness of the solution.
- When the coolant level is too low, the engine can overheat. If the coolant temperature gauge in the instrument cluster goes up abnormally, immediately check the coolant level.
- Use only the KGM genuine coolant. If different types of coolants or unapproved coolants are used to refill, chemical reactions can be caused and block the flow of the coolant. This may cause the engine to overheat or burning inside the engine.
- Scalding hot coolant and steam could be blown out under pressure, which could cause serious injury. Never remove the coolant reservoir tank cap when the engine and radiator are hot.
- If the coolant is insufficient, it may cause performance degradation and fire risk due to overheating of the drive motor and engine, performance degradation due to overheating of the drive system, and reduced indoor heater performance. Regularly check the coolant level, and if the temperature gauge on the instrument panel rises abnormally while driving, inspect the coolant level.

G15DTF



HEV



Cleaning

Refer to Section "SCHEDULED MAINTENANCE SERVICES".

Blow the compressed air through the element in the opposite direction to normal air flow to clean the element.

! Caution

- If you blow the compressed air to normal air flow, the engine will be damaged due to foreign materials entering.
- Be careful with the direction of the compressed air on the air cleaner.

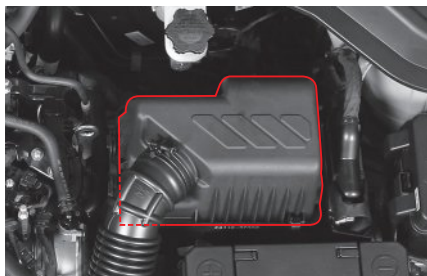
! Caution

If vehicle is operated under severe condition

- Pollutant area or off-road driving
 - Driving in dusty condition or sandy condition
- frequently inspect the air cleaner, if necessary, change the air cleaner.

! Warning

- Do not drive your vehicle with an improperly installed air cleaner element or without it. It may damage the engine or may cause a fire.
- Do not let any object enter the housing when cleaning the air cleaner. It may damage the engine or may cause an engine to stall.



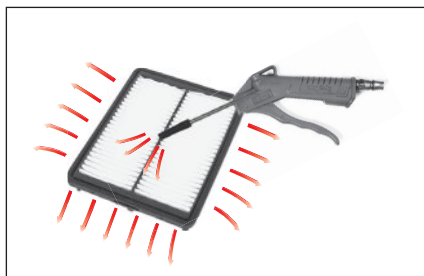
If the vehicle is operated in very dusty or sandy areas, replace more often than at the usual recommended intervals. If it is dirty, shake the element to remove dust. Clean the inside of the air cleaner housing and cover with a damp cloth.

Clean the air cleaner element by blowing compressed air through it in the opposite direction to normal air flow.



Warning

- Engine can be damaged.
- Do not operate the vehicle without air cleaner element.



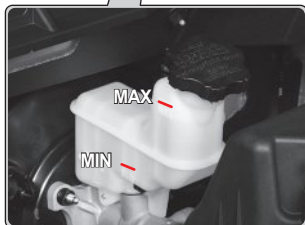
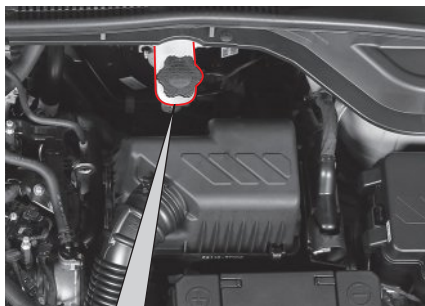
Blow the compressed air through the element in the opposite direction to normal air flow to clean the element as shown above.

Change

- 1 Open the clamp and remove the cover.
- 2 Replace the air cleaner element with a new one. Make sure that the element is correctly installed in the air cleaner housing.
- 3 Close the cover and close the clamp.

Brake and clutch fluid (with M/T)

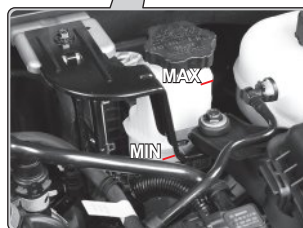
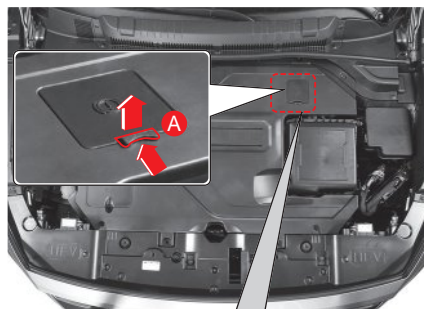
G15DTF



HEV

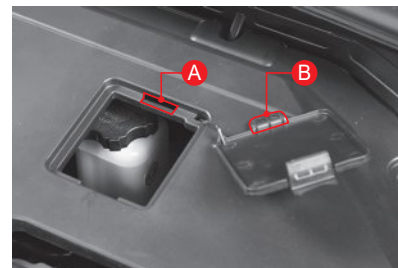
Check brake fluid

- 1 Press the brake fluid inspection cover lock release protrusion (A) in the direction of the arrow while pulling it upward to remove the cover.



Notice

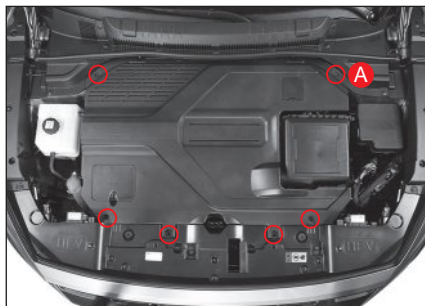
- When installing the brake fluid check cover



First insert the cover catch (B) into the cover groove (A), and then fit the cover.

Refilling brake fluid

- 1 When refilling brake fluid, remove the engine compartment beauty cover (A) by loosening the 6 bolts that secure it.



- 2 Open the brake fluid reservoir tank cap (A).



Specification and Replacement

Specification	DOT 4
Service interval	Every 2 years

Level Check and Replenishment

- The fluid level should be between the “MAX” and “MIN” levels on the reservoir.
- Check the level on a level surface. If it drops to or below the MIN mark, refill the tank with the specified fluid. Only use the specified fluid.



Caution

- Be careful not to let any foreign materials enter the tank when adding the fluid.
- Do not add the fluid above the “MAX” level.
- Do not allow the fluid to make contact with the body paintwork.
- After adding the fluid, tighten the cap securely.
- If frequent refills are required, have the system checked by a KGM Dealer or KGM Authorized Service Center.



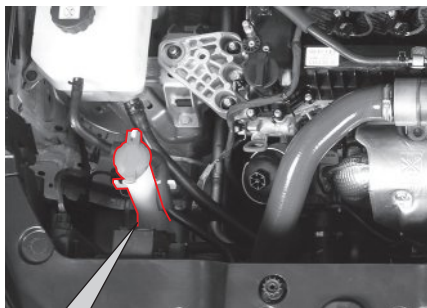
Warning

- Use only the KGM genuine brake fluid.
- Do not allow the fluid to make contact with skin or eyes. If contact happens, rinse affected areas immediately with plenty of water. If irritation persists, consult a doctor.
- The fluid gradually decreases according to brake pad wear. A sudden drop of the fluid level may indicate a leak in the system. In this case, have the system checked by a KGM Dealer or KGM Authorized Service Center.

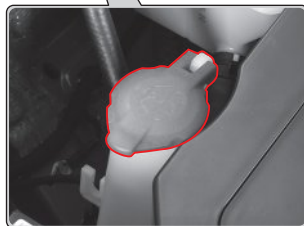
Washer fluid

Top up washer fluid

G15DTF



HEV



Frequently check the washer fluid level and add the specified product as needed.

In winter, use only the specified washer liquid for winter season.



Caution

- If you use plain water as washer fluid, it will freeze during the winter and damage the washer fluid reservoir and motor. Use only the specified washer fluid.
- If you operate the washer switch without washer fluid, the motor could be damaged due to overloads. Therefore, if there is no washer fluid, do not operate the washer motor.
- Operating the wipers on a dry surface on the windshield or rear window without any washer fluid may cause damage to the glass. Operate the wipers after sufficiently spraying the washer fluid.
- Avoid any spills of washer fluid on the engine or body paint of your vehicle during replenishment. If washer fluid spills onto your hand or other body part, wash it away under a clean water flow.
- There is no independent washer reservoir for the tailgate window. The front washer reservoir is also for the tailgate window.



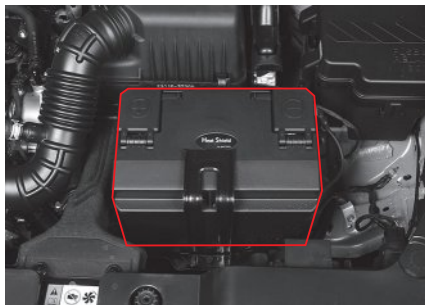
Warning

- The washer fluid includes flammable materials to prevent freezing. It could cause a fire when directly contacted with flames. When checking the washer fluid, avoid the flames near the washer fluid tank.
- If engine oil or antifreeze is used as the washer fluid, it will decrease your visibility through the windshield and may cause an accident.

Notice

- There is no separate washer fluid tank for the rear window; washer fluid is supplied from the front windshield washer fluid tank.

G15DTF



When the battery charge warning light () on the instrument cluster comes on, the battery is not normally charging. If the warning light comes on while driving, turn off all unnecessary electrical devices and have the system checked by a KGM Dealer or KGM Authorized Service Center.

Battery Maintenance

- Make sure the terminal connections are securely tightened.
- If the terminals are corroded, clean them with a wire brush or sand paper.
- The battery terminal should be disconnected only when the ignition key is removed from the key cylinder. Disconnecting the terminal with the key in the "ON" or "ACC" position may cause a sudden change in voltage and damage various electrical systems.
- Check the battery for any cracks, damages or leaks. Replace it if necessary. To remove any battery fluid on the battery surface, wear rubber gloves and wipe the fluid out with a wet-soapy cloth.

Specification

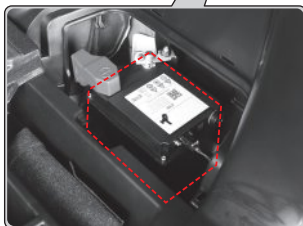
	Non-ISG	ISG
Specification	MF / 12V - 60AH	AGM / 12V - 70AH
Capacity	60AH	70AH



Caution

- If you disconnect the battery terminal when the engine is running, electrical systems could be damaged.
- To remove the battery cable, disconnect the negative cable first and be careful on the battery terminal polarity when you connect the cables. The negative and the positive should not be confused.
- The polarity of the battery, i.e. the connections for positive and negative cables, must not be interchanged. Never short-circuit the battery.
- When the ambient temperature is too low, the battery capacity will drop and can be frozen.
- Keep the battery electrolyte at its specified level. If the electrolyte level is higher than the MAX level, it can overflow during battery charging and if the electrolyte is overcharged, the battery can explode.
- Only use a battery with the approved voltage and capacity. Otherwise, an incompatible battery can catch fire.

HEV



If the charging warning light (⚡) turns on while driving, there is an abnormality in the vehicle's charging system, including the battery. In this case, immediately have the vehicle checked and serviced at the nearest authorized service center.



Warning

- Be sure to have your low voltage (12 V) battery replacement and related work be performed at our nearest authorized service center.

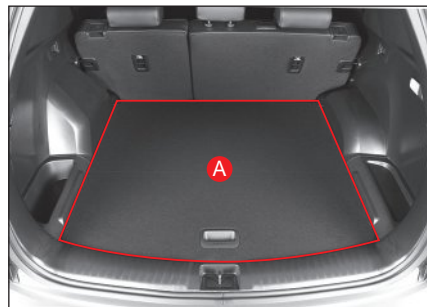
Low-voltage (12V) battery specifications and capacity

Specifications	LFP / 12V - 22 Ah
Capacity	22 Ah

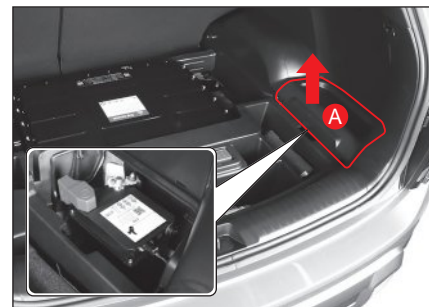
How to check

The inspection method is as follows:

- 1 Remove the luggage board (A).



- 2 Pull the low-voltage (12V) battery cover (A) at the bottom right of the luggage compartment in the direction of the arrow to remove it.



- Make sure the terminal connections are securely tightened.
- If the battery terminals are corroded, clean them with a wire brush or sand papers.
- Check for cracks, damage, or battery fluid leakage on the surface of the battery, and replace the battery if necessary.
- If the battery fluid gets on the surface of the battery, wear rubber gloves and wipe it off with a cloth soaked in soapy water.

- 3 Assemble in reverse order.



Warning

- The battery has acid that can burn you. And its gas can explode. You can get serious injuries if you are not careful. Keep naked flames, sparks and smoking items away from the battery.
- Loosely connected batter terminals can set up sparks. These sparks can cause a fire with flammable gas. Therefore, tightly connect the terminals.
- At night, if you need to check the engine room, do not use a lighter, but only use a battery-powered flashlight.
- Because the battery electrolyte is very strong acid, avoid any direct contact of the battery electrolyte on your skin or vehicle's body. If the acid contacts your skin, thoroughly wash your skin with fresh water and see your doctor. Do the same on your vehicle.
- Wear eye protection when working with a battery. If working in a closed area, keep good ventilation.



Warning

- Do not use a hybrid vehicle to jump-start another vehicle.
- The low-voltage battery of a hybrid vehicle may be damaged.



Warning

- Always use the battery with correct voltage for the vehicle. Otherwise, there is a risk of fire.
- Observe the indications on the battery.



Always read the safety instructions in the User Manual before working on the battery.



The battery cell always contains highly flammable hydrogen gas which may explode if ignited. Be sure to keep it away from a cigarette, a spark or other flames.



Wear a protective goggle when charging the battery or performing any work. In addition, ensure adequate ventilation of the enclosed space.



The battery electrolyte solution contains a highly corrosive sulfuric acid. Be careful not to contact it with skin, eyes, clothes or paint. In particular, keep out of the children's reach.



When in contact with the skin, wash off the contact area; In case of eye contact, flush with running water for at least 15 minutes, and seek medical help immediately.



The hydrogen gas in the battery is highly flammable and may explode if ignited.



Do not throw out used battery as this pollutes the environment and is hazardous to our health. For environmental protection, used, properly dispose of used battery at designated disposal sites only.

- To check the battery and engine compartment in the night, always use flash light and never use the lighter or etc.

Spark plugs - Gasoline engine



Spark plugs should be inspected periodically for carbon deposits. When carbon accumulates on a spark plug, a strong spark may not be produced.

Do not clean the electrodes with a fine wire brush and carefully scrape the carbon off the insulator with a small file. The spark plugs should then be blown clean with compressed air and the upper insulator wiped clean. Do not adjust the spark plug gap.

Service Interval

Replacement	Change every 60,000 km		
Specification	G15DTF	FM	RER6WYPB
		Gap	0.7 ~ 0.8 mm
	HEV	TORCH	LD8RCIP
		Gap	0.6 ~ 0.7 mm



Caution

- When replacing the spark plugs, disconnect the negative terminal of the battery and turn off all the switches.
- It is recommended that the engine be cool or cold when changing the spark plugs (you could burn yourself).
- Do not use non-recommended spark plugs.
- Do not allow contaminants to enter spark plug hole.



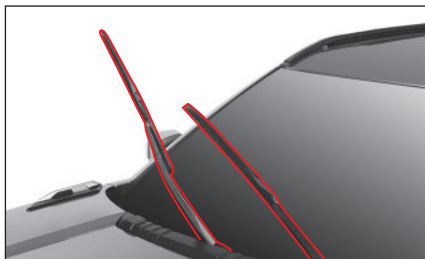
Warning

- Spark plugs may be very hot. Be careful not to burn yourself.

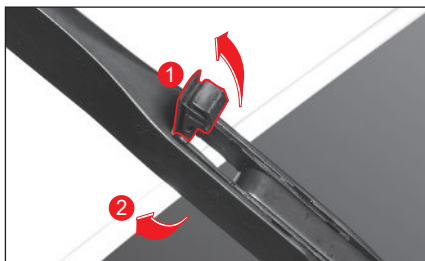
Checking the wipers and replacing the blade

Replacing the blade of windshield wiper

- 1 Lift the wiper arm up with the engine turned off.



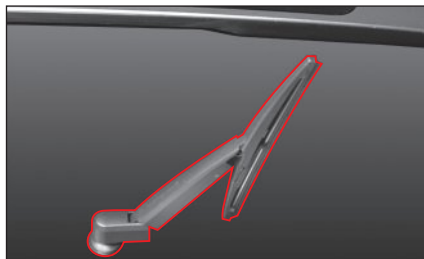
- 2 Press the wiper blade retainer (1) and pull the wiper blade out in the arrow direction (2).



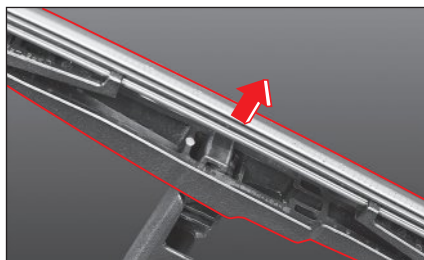
- 3 Insert a new wiper blade.
- 4 Put the wiper arm down.

Replacing the blade of rear window wiper

- 1 Lift the wiper arm up with the engine turned off.



- 2 With the wiper blade lifted to its side, remove it by pulling it in the arrow direction.



- 3 Insert a new wiper blade until a clicking sound occurs.
- 4 Put the wiper arm down.

Specifications of wiper blade

Windshield wiper		Rear window wiper
Driver seat side	Front passenger seat side	
600mm	450mm	
24 "	18 "	10 "

Warning

- If there is a problem in wiper operation, it can be a fatal obstacle to safe driving when it rains or snows. Never drive the vehicle on a snowy day or a rainy day if the wiper does not operate.
- Holding the wiper arm or placing your hand near the operating part when the wiper is operating may cause an injury.



Caution

- Do not open the engine hood with the wiper lifted up. Doing so may damage the engine hood and the wiper.
- Do not operate the wiper when the windshield is dry.
- Do not wipe the windshield or the rear window with a towel stained with oil or wax. If the windshield or the rear window is stained with oil or wax, an abnormal noise may occur when you operate the wiper or light is reflected at night, making you unable to see the front well.
- When you check the wipers, be sure to lift the driver seat side wiper arm up first and then lift the front passenger seat side wiper arm up.
- When you lift the driver seat side wiper arm up, it may interfere with the front passenger seat side wiper arm, but that is normal.

Checking and replacing fuses and relays

If an electrical system does not operate normally, check the relevant fuse first. If the fuse is blown, replace it with a fuse of the same capacity.



Warning

- Not using a bulb or using a bulb with the capacity that does not meet the specifications or modifying the HID bulb or LED lamp wiring arbitrarily may cause the fuse disconnection, malfunction or damage other wiring-related devices.



Caution

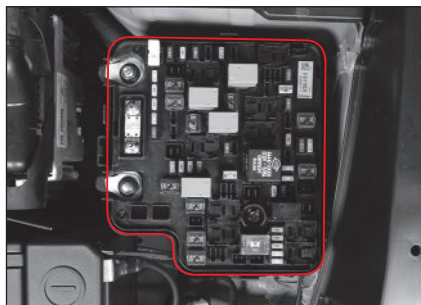
- Removing a fuse while the electricity is being supplied may damage the relevant electrical system. Be sure to replace a fuse after turning off all electrical systems and the engine.
- Replace the fuse with a new one of the same capacity that meets the specifications.
- If the replaced fuse is blown continuously, have your vehicle checked and serviced at a KGM Authorized Service Center.

Notice

- Refer to the label attached to the fuse and relay box cover for the capacity and name of fuse.

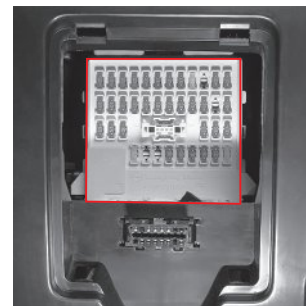
Engine compartment fuse and relay box

Open the engine hood and lift the fuse box cover up with the locking lever (1) in front of the engine room compartment fuse box cover pressed.



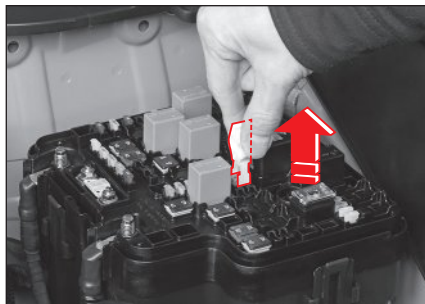
Interior fuse box

Open the driver seat door and open the interior fuse box by inserting your finger on the groove of the interior fuse box cover (1) and pulling it.

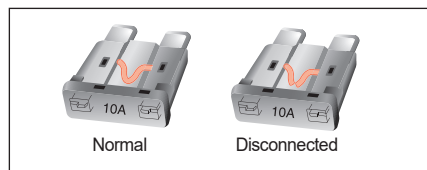
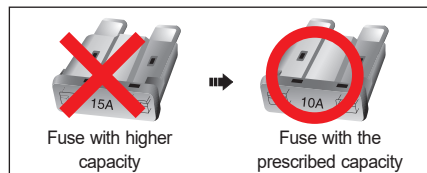


Checking and replacing fuses

- 1 Turn off all electrical systems and the engine.
- 2 Open the cover of the engine compartment fuse box cover or the interior fuse box.
- 3 Check the relevant fuse by referring to the block diagram of the fuses shown inside of the fuse box cover.
- 4 Pull out the relevant fuse by using the fuse puller.
The fuse puller is provided in the engine compartment fuse box.



- 5 Check visually whether the fuse is blown or not.
- 6 If the fuse is normal, insert it back to its original position.
- 7 If the fuse is blown, check the capacity indicated on top of the fuse and replace it with a new fuse of the same capacity.



Warning

- Using steel wire, copper wire or aluminum foil instead of the fuse may cause a fire due to the overload of the electrical system. Always use a fuse with the prescribed capacity.
- Never use a fuse with a capacity higher than the prescribed capacity indicated on the fuse and relay box since a fuse with higher capacity may damage electrical systems or cause a fire.
- When the fuse is disconnected, use a normal fuse with the prescribed capacity.

Notice

- Spare fuses for each capacity are provided in the fuse and relay box. If you use a spare fuse, replenish with a new one immediately. The capacity is indicated on top of the fuse.

Checking and replacing the lamps

Specifications of lamps and checking

Specifications and quantity of lamps and bulbs

Classification			Quantity	Specifications
Exterior lamp (front side of the vehicle)	Head lamp	High beam	-	LED
		Low beam	-	LED
		Sidelight/daytime running light (DRL)	-	LED
		Turn signal	-	LED
	Front fog light		-	LED
	Side repeater		-	LED
Exterior lamp (rear side of the vehicle)	Rear lamp	Stop lamp	-	LED
		Tail light/Stop lamp	-	LED
		Backup lamp	2	W16W
		Turn signal	2	PY21W
	License plate lamp		2	W5W
	High mounted stop lamp		-	LED
	Rear fog lamp		-	LED

Classification			Quantity	Specifications
Interior lamp	Front room lamp	LED	-	LED
		Bulb	2	10W
	Center room lamp	LED	-	LED
		Bulb	2	8W
	Luggage room lamp	LED	-	LED
		Bulb	1	5W
	Sun visor lamp	LED	-	LED
		Bulb	2	5W
	Glove box lamp		1	5W
	Mood lamp (passenger side dashboard)		-	LED
	Mood lamp (driver side dashboard)		-	LED
	Mood lamp (front door)		-	LED
	Mood lamp (upper side of center console)*		-	LED
	Mood lamp (bottom of center console)*		-	LED

Checking the lamps

Operate the ON/OFF switch of various lamps to see if the lamp turns on or off normally.

If the lamp does not turn on, check the lamp in the following order and replace the relevant part if it is abnormal.

- Fuse
- Bulb

If the fuse and the bulb are normal, have your vehicle checked and serviced at a KGM Authorized Service Center.

Headlamp desiccant*

A consumable desiccant is included in the headlamp (high beam/ low beam / turn signal / side lamp and daytime running lamp) to mitigate fogging due to moisture. An inside fogging problem lasts for a longer period of time, have the system checked and serviced by a KGM Authorized Service Center.

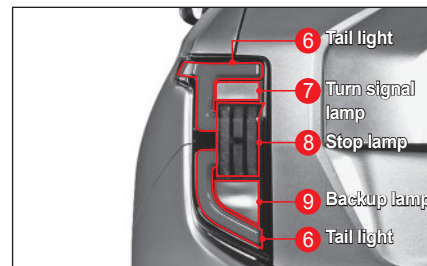
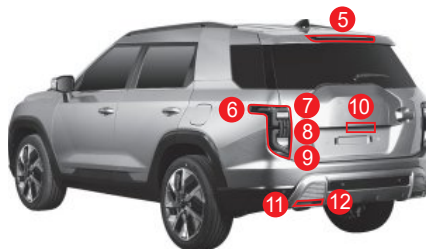
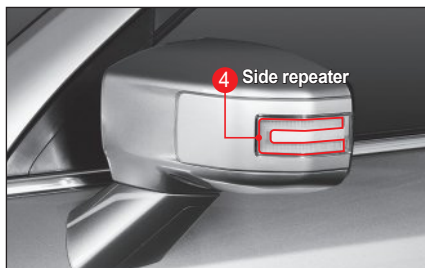
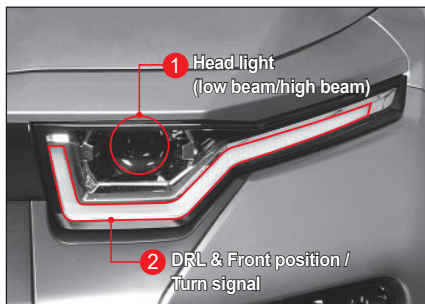


Caution

- Only use a bulb with the prescribed capacity when replacing the lamp.
- Be sure to disconnect the negative (-) battery cable or turn off the engine before replacing the lamp.
- Removing the lamp cover forcibly may damage the lamp cover so that it may not be used again, so caution should be taken when removing the lamp cover.
- Before replacing a bulb, be sure to turn off the relevant lamp and the engine.
- Do not touch the bulb with your hands during or right after bulb operation since there is a possibility of a burn.
- Holding the glass part of the bulb with your hand may leave a fingerprint, dust or moisture on the bulb, reducing its life or exploding it. In such case, wipe the glass part with a soft cloth.
- Be sure to have the aiming angle of the head lamp adjusted by a KGM Authorized Service Center.
- The internal surface of the head light and braking light lamp may be fogged temporarily under conditions such as rain or car washing. This is dew condensation according to a temperature difference between the inside and the outside of the lamp and it is not a functional problem. However, if water enters into the lamp or a large water drop occurs inside the lamp, contact a KGM Authorized Service Center.

- To replace an exterior lamp bulb, visit a KGM Authorized Service Center.
- Only use appropriate tools and bulb of specified capacity when replacing different lamps. If you do not have a bulb available or are not familiar with how to replace it, please visit our nearest KGM Authorized Service Center for service.
- Be sure to replace it with a new lamp (same capacity and color) that fits the lamp type. Failure to do so may result in a blown fuse or lamps malfunction and damage (open circuit / short circuit / fire) to other wiring related devices.
- Fingerprint, dust, or moisture stuck to bulb may shorten a bulb life or cause a bulb bursting. In this case, wipe the bulb glass with a soft cloth.
- If the inside of the lamp is damp, it is removed by driving the vehicle after the lamp is turned on, and the level of moisture removal may vary depending on the conditions of the lamp (size / position / environment, etc.). If moisture is not constantly removed, have your vehicle checked and serviced at a nearest KGM Authorized Service Center.

Position of exterior lights and lamps



Replacing exterior lamps

All lamps except for the following lamps should be checked and replaced at a nearby KGM Authorized Service Center.

- Rear turn signal lamp
- Backup lamp



Warning

- Replacing with a lamp that does not meet the specifications may cause the disconnection of a fuse, malfunction or a fire.
- Before replacing the lamp, park the vehicle at a safe place, turn off the engine and disconnect the negative (-) battery cable. (After connecting the battery again, reset some functions of the vehicle.)
- Do not touch the bulb with your hands during or right after bulb operation since there is a possibility of a burn.



Caution

- When you install the lamp again after replacing it, install the socket firmly to the hole by turning it clockwise.
- Be sure to use genuine parts for the lamp.
- Do not install an additional lamp or LED for the lamps installed previously on the vehicle.

Replacement of headlamp desiccant

If the headlamp condensation problem persists, please replace the desiccants.



Headlamp absorbent*

A consumable desiccant is included in the headlamp (high beam/ low beam / turn signal / side lamp and daytime running lamp) to mitigate fogging due to moisture. An inside fogging problem lasts for a longer period of time, have the system checked and serviced by a KGM Authorized Service Center.

To replace license plate lamp

- 1 Unscrew the license plate mounting screws.



- 2 Remove the license plate assembly.



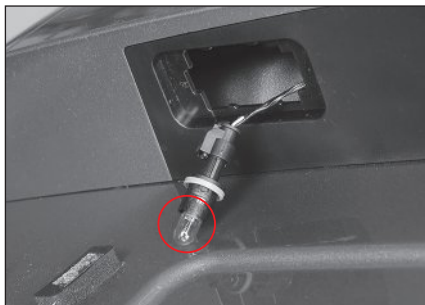
Caution

- Be careful not to damage the vehicle body and the rear combination assembly.

- 3 Turn the license plate assembly clockwise to remove the bulb socket.

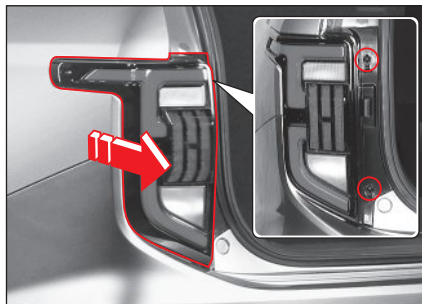


- 4 Remove the license plate from the socket and replace it with new one with right specifications.



- 5 Once replacement is completed, assemble the lamp in reverse order of removal.

To Replace Rear Combination Lamp

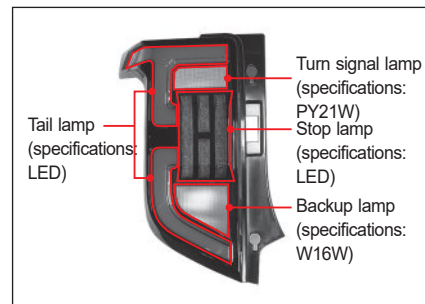


- 1 Disconnect the battery (-) terminal and remove the two mounting screws for the rear combination lamp. Pull the lamp assembly in the direction indicated by the arrow in the picture to disconnect the connector and detach the lamp.

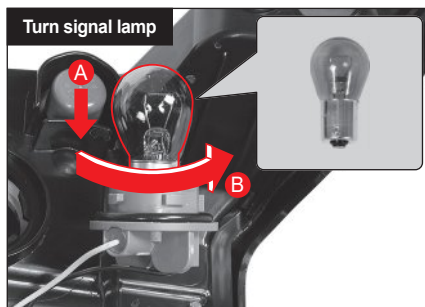


Caution

- Be careful not to damage the painted surface of the vehicle body or rear combination assembly when removing it.

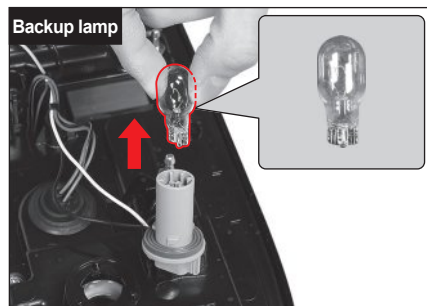


- 2 Turn the turn signal lamp socket counterclockwise to remove the it.



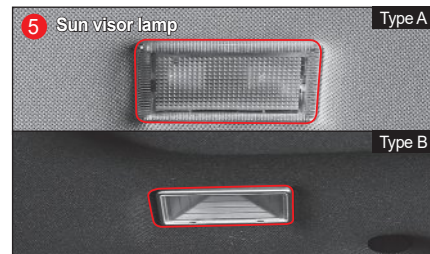
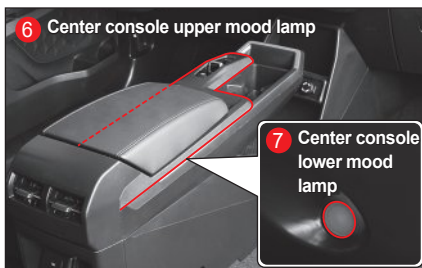
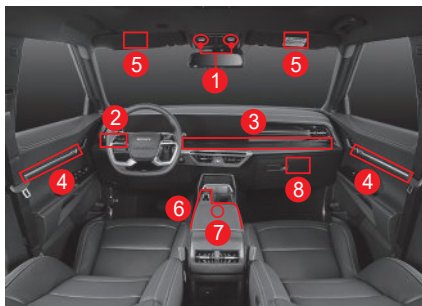
- 3 Remove the lamp from the removed socket by rotating the lamp in the direction of the arrow (B) while pressing it in the direction of the arrow (A).
- 4 Install in the reverse order of removal.

- 5 Turn the backup lamp socket counterclockwise to remove the it.



- 6 Pull out the lamp in the direction of the arrow from the removed socket.
- 7 Install in the reverse order of removal.

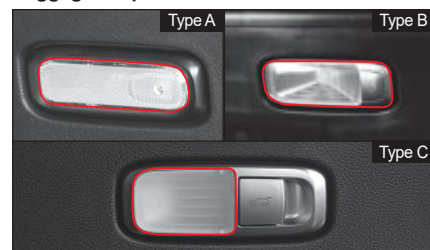
Position of interior lamps



Rear room lamp



Luggage lamp



Replacing the interior lamps

Rear room lamp (Bulb)



- 1 Turn the room lamp switch OFF, and remove the cover using a flat bladed screwdriver.

Caution

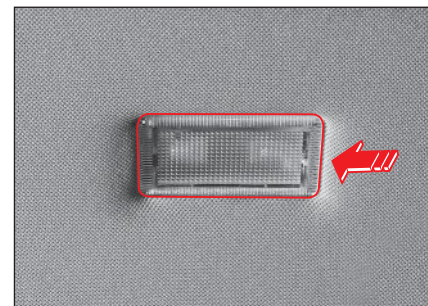
- When removing the cover, make sure to remove the front part of the cover first (marked with arrows). If you remove the rear part of the cover first, the cover may be damaged.



- 2 Remove the lamp by pulling it down (arrow direction) and replace it with a new one.
- 3 Fit the cover.

Replacing the sun visor/mirror lamp (Bulb)

- 1 Turn off the engine and remove the lamp cover using a flat bladed screwdriver.

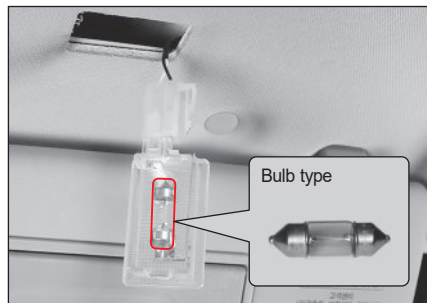


Caution

- Be sure to remove the lamp cover from the part marked with an arrow first. Removing it from the part on the opposite side first may damage the connector and the cover.

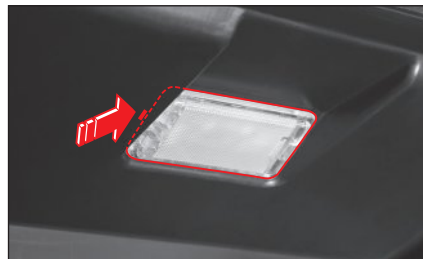
- 2 Remove the lamp and replace it with a new one.

At this time, avoid leaving a fingerprint or a foreign material on the surface of the bulb.

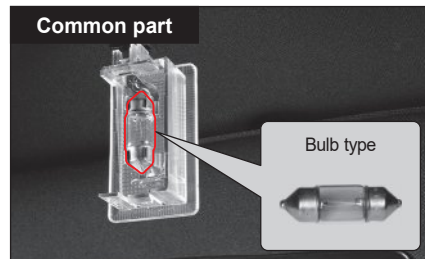


- 3 After replacing it, install the cover again.

Glove Box Lamp



- 1 Disconnect the negative battery cable and remove the cover using a flat bladed screwdriver.



- 2 Remove the lamp.
3 Replace the bulb with a new one. Keep the surface of the bulb free of finger print for foreign matter.
4 Fit the cover.

Caution

- When removing the cover (sun visor lamp, glovebox lamp, driver/passenger lamp), remove the part with arrow mark first. Otherwise, the cover and connectors can be damaged.

Replacing the A/C filter

In any of the following cases, replace the A/C filter even if the replacement interval has not come near.

- If an unpleasant smell comes out when you operate the A/C after it is not operated for a long period of time
- If the cooling and heating performance or air blowing performance is lowered



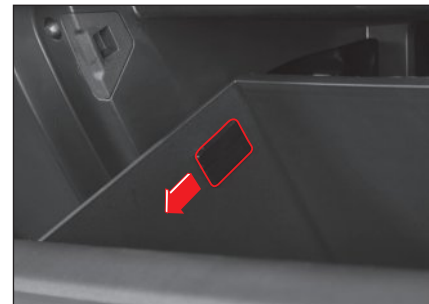
Caution

- Replace the A/C filter every 15,000 km. However, if the vehicle is driven on a road where the air is heavily polluted, an unpaved road or the A/C and the heater are used excessively, replace the A/C filter earlier than the replacement interval.
- If the A/C filter is contaminated, the cooling performance may be lowered and an unpleasant smell may occur when you operate the A/C.
- Be careful not to switch the installation direction when replacing the A/C filter.

- 1 Open the glove box by pulling the glove box opening lever.



- 2 Pull the fixing holder on the left side and the right side of the glove box in the arrow direction.



Caution

- Do not pull the fixing holder of the glove box forcibly. Doing so may cause the fixing holder to deform, and the fixing status of the glove box may be loose when it is installed again.

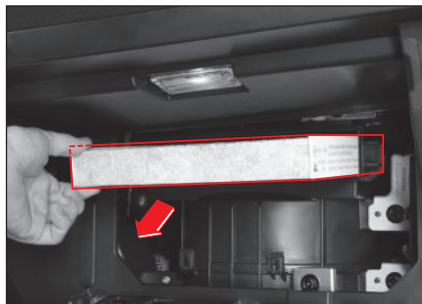
- 3 Separate the glove box damper clip from the bottom right side of the glove box.



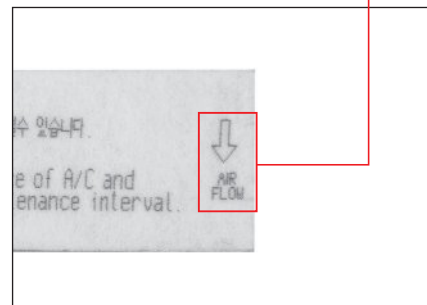
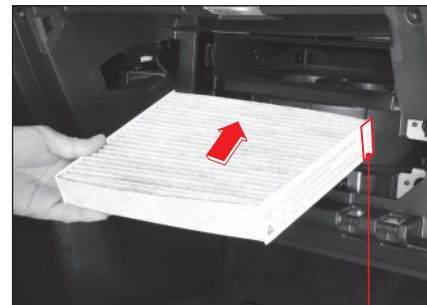
- 4 Remove the A/C filter cover by pressing the right side of the A/C filter cover.



- 5 Remove the A/C filter.



- 6 Replace it with a new one.
Install it with the "AIR FLOW arrow" facing down.

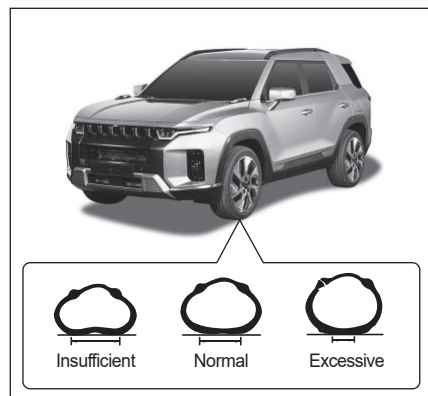


- 7 After replacing it, install it in the reverse order of A/C filter removal.

Checking the tires and wheels

Checking the tire pressure

Check the tire pressure before driving the vehicle or when the tires are cooled down completely.



Caution

- If the tire pressure is higher or lower than the prescribed value, the riding comfort or steering stability are lowered and the tires are easily damaged and uneven tire wear occurs. Be sure to adjust the tire pressure to the prescribed value.

Prescribed tire inflation pressure

Classification	Type	Wheel	Tire pressure
Driving tire	225/60R17	6.5JX17	34 psi, (2.3 bar)
	225/60R18	6.5JX18	
	235/55R18	7.5JX18	
	245/45R20	8.0JX20	

Notice

- The prescribed tire inflation pressure is measured when the tire has been cooled down properly at room temperature. If you need to drive the vehicle on an expressway for a long period of time, increase the tire inflation pressure by 4~5psi from the prescribed value on the table.

Wheel alignment status and the balance between tires and wheels

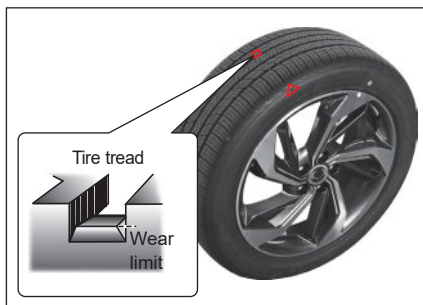
If the wheels are not aligned as prescribed, it leads to uneven or accelerated wear of the tires and causes the vehicle to lead to one side while driving.

If the tires and wheels are not balanced, it may lead to vehicle vibration or uneven wear of tires.

In such case, have your vehicle checked and maintained at a KGM Authorized Service Center.

Checking the status of tire wear

Check the status of tire wear on the contact surface of the tire along the marked part. Replace the tire before the tire tread goes down below the wear limit.

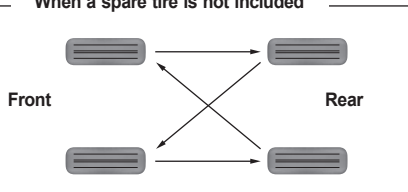


Warning

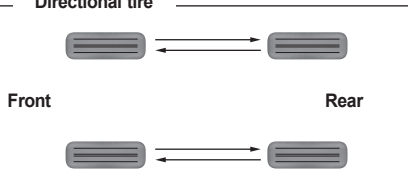
- Check the tire for damage or the status of tire wear frequently and replace if necessary.
- If the tire is worn excessively, the braking distance may increase or the steering wheel may become heavier. Also, the tire may be blown, resulting in an accident.

Rotating the tire positions

When a spare tire is not included



Directional tire



☞ Refer to "When you have rotated the tires" (p.2-33)



Warning

- Be sure to replace a tire at a KGM Authorized Service Center or a professional tire shop.
- Be sure to install the same manufacturer's tires with the same specifications, not mixing different types of tires.

Snow tire

Use snow tires in order to drive the vehicle safely on a snowy road or an icy road during winter.

The snow tires should be installed on all 4 wheels.



Warning

- If the snow tires for driving on a snowy road and an icy road are not installed, drive the vehicle as slowly as possible.
- The snow tire with the driving direction arrow on its side wall should be installed according to the driving direction.
- The snow tire is manufactured in consideration of the characteristics of road surface during winter. However, it is an auxiliary aid, so be sure to install the snow chains on a snowy road and an icy road and drive the vehicle as slowly as possible for safe driving.
- Replace the snow tires with ordinary tires when the winter has passed. Store the snow tires in a cool place with no direct sunlight and be careful not to allow them to come into contact with oil, grease or fuel.

Tire chain

- Install the tire chains on the rear wheels for a 2-wheel drive vehicle and install the tire chains on both the front and rear wheels for a 4-wheel drive vehicle. If it is impossible, be sure to install the tire chains on the rear wheels.
- In case of a vehicle equipped with aluminum wheels, the wheels may be damaged if the tire chains are used. Therefore, use snow tires instead of the tire chains. If it is impossible, use the wire-type tire chains.
- When the tire chains are installed, drive the vehicle at a prescribed speed recommended by the chain manufacturer or at a speed of 30 km/h or less.
- If you hear a sound of the tire chain hitting the vehicle body, stop the vehicle immediately, check the installation status of the tire chains and tighten the tire chains if necessary.
- Take the tire chains off immediately on a normal road to prevent the chains from being damaged.
- Do not use the tire chains on a normal road, use only on a snowy road or an icy road.



Warning

- After driving the vehicle with the tire chains installed for a certain distance (0.5~1 km), check the installation status of the tire chains and for any damage to the vehicle body. If the tire chains are loose, tighten them again.
- Be sure to use a tire chain that meets the specifications and install it correctly. If the tire chain does not meet the specifications or is installed incorrectly, the vehicle may be damaged or a serious problem in the steerability and safety of the vehicle may occur.

Cautions for checking the tires and wheels



Caution

- Be sure to use the same manufacturer's tire with the same specifications for all tires in order to maintain the characteristic of the vehicle safely.
- Be sure to check the status of tire wear and the tire pressure before driving the vehicle.
- The tire pressure and tightening status of tire wheel nuts should be checked frequently. Be sure to check the vehicle condition, tire pressure and the tightening status of tire wheel nuts before driving the vehicle for a long distance.
- Only use the same manufacturer's tires that meet the specifications. If the tire that does not meet the specifications when installed, you cannot operate the steering wheel normally, the fuel consumption may increase and the driving system or braking system of the vehicle may become abnormal. In addition, the vibration of the steering wheel and uneven tire wear may occur when you drive the vehicle at a high speed.
- Installing a tire that does not meet the specifications or a retreaded tire voids the warranty repair.

- Check the tires and wheels always before driving the vehicle. If the wheels are damaged, the tire pressure may decrease and the tires may be damaged.
- If a tire has been impacted by a stone or any other objects while driving, have your vehicle checked and serviced at a KGM Authorized Service Center immediately.
- Do not mix the tires and wheels installed when the vehicle was shipped with other tires and wheels. Doing so may affect the driving stability of the vehicle, causing an accident.
- Check the status of the emergency tire service kit. Always check the operation status of the compressor and the preparation of sealant.
- Be sure to check and add the tire pressure before driving the vehicle for a long period of time or at a high speed. Driving the vehicle at a high speed with low tire pressure may cause the tires to burst due to the standing wave effect, resulting in a risk such as a rollover.

Vehicle management during winter

Various unfit elements for driving occur on a road in winter, so make sure to prepare in advance in order to respond properly.

Starting the engine and driving the vehicle

During winter, the resistance of the power train in the engine (motor) increases and the performance of the battery and the starting motor is lowered so that the engine may not be started smoothly. Start the engine in a proper way.

After starting the engine, allow enough time to warm it up before driving the vehicle. It will increase the engine's life expectancy and ensure smooth driving.



Caution

- **Replace the engine (motor) oil and the fuel filter according to their replacement intervals. A decrease in flowability and the clogging of the fuel filter and the oil filter due to the contamination of engine oil may become an obstacle to starting the engine in winter.**
- **Do not add additives such as white kerosene or alcohol besides the genuine fuel arbitrarily in order to improve the startability. Doing so may damage the engine and relevant parts or cause excessive exhaust gas emission due to inadequate lubrication of important parts inside of the fuel system and different characteristics such as flash point.**
- **Be sure to preheat a diesel-powered vehicle before starting the engine.**

Managing the engine (motor) oil

This vehicle is shipped after it is filled with 4-season engine oil. If the replacement interval has not come, you do not need to change the engine oil.

Managing the engine coolant

Be sure to check the concentration of coolant before the temperature begins to drop.

Normal concentration of coolant is a mixture of water and antifreeze at the ratio of 50:50.

If only water has been added to the vehicle without antifreeze when replenishing the coolant, the coolant may freeze, damaging the engine and the cooling system seriously when the temperature drops below 0°C.



Caution

- **When adding or replacing the coolant, be sure to use a mixture of water and antifreeze at the ratio of 50:50.**
- **Use only the KGM genuine antifreeze for the coolant.**

Notice

- **This vehicle is shipped after it is filled with 4-season antifreeze.**

Managing washer fluid

Use only genuine washer fluid that does not freeze in cold weather.

If the washer fluid freezes due to the use of a non-standard washer fluid it may damage the washer motor and interfere with safe driving.

Installing a snow tire

It is recommended to replace the tires with snow tires during winter in order to prevent the vehicle from slipping on a snowy road or an icy road.



Caution

- Drive the vehicle at a lower speed than usual if the snow tires are installed.
- Install the tire chains in a correct way. Failure to do so may damage the wheel house or the vehicle body.

Managing the A/C

If the A/C is not used for a long period of time, the lubrication inside the A/C is not carried out. As a result, the packing inside of the A/C may be hardened that may lead to refrigerant leak and malfunction due to rusting.

It is recommended to operate the A/C for 5 to 10 minutes once a week regardless of season in order to maintain the performance of the A/C continuously.



Caution

- Do not remove the refrigerant in winter even if the A/C is not used.

Other maintenance

- Prepare sand bags, snow chains, shovel, gloves and old clothes in the vehicle in advance in preparation for driving the vehicle in the countryside or heavy snow.
- Do not drive too fast, accelerate or brake or steer the vehicle suddenly on a snowy road or an icy road.
- When you drive the vehicle on a snowy road or an icy road, keep a safe distance twice as long as usual from a preceding vehicle and downshift to use the engine brake effect properly when you stop the vehicle.
- Do not operate the wiper when it is frozen. Doing so may overload, damaging the wiper motor.
- When you drive the vehicle on a snow-covered road, a large amount of snow may build up under the wheel house, making it difficult for you to operate the steering wheel, so check and remove it frequently.
- When you have passed a road where calcium chloride is sprayed, wash your vehicle as soon as possible to prevent the bottom part of the vehicle from being corroded.

- If you park the vehicle in a snowy place, the brake system may freeze, reducing the braking force while driving. In such case, depress the brake pedal frequently while driving the vehicle at a low speed, restoring the braking force, and then drive the vehicle normally.
- Do not start off in the vehicle forcibly while the parking brake is frozen. Doing so may damage the vehicle. Be sure to start off in the vehicle after the parking brake has melted.
- The remaining level of the high voltage (drive) battery may gradually decrease even if the vehicle is not driven.
- Storing the vehicle at high (40°C) or low (-30°C) temperatures can degrade the high voltage (drive) battery capacity.
- Even with the same charge, the range or power may vary depending on driving conditions (such as outside temperature).
- Driving at high speeds or uphill can result in higher power consumption from the high-voltage (drive) battery than normal, resulting in a shorter range.
- Using the heating and cooling functions uses high-voltage (drive) battery power, resulting in a shorter driving range. Maintain an optimal temperature when using the heating and cooling features.
- Natural degradation of the high-voltage (power) battery occurs over the age of the vehicle, which reduces the range.

- If the charge and range continue to decrease, visit our nearest authorized service center for inspection and maintenance.
- If the vehicle is not used for an extended period, start the engine approximately once every three months to charge the high-voltage (drive) battery and prevent it from discharging. Also, if the charge is low, charge it immediately and store the vehicle.
- Depending on the state of charge of the high-voltage (drive) battery (ambient temperature, battery temperature, etc.), the charge power value shown on the charge indicator may be lower.

Cautions for parking during winter

- When the temperature falls down below zero, the parking brake may not be released due to the freezing of EPB-related devices.
- When you park the vehicle on a flat and safe place in weather with below zero temperatures, use a chock on the wheels after parking instead of using the EPB.
- If the vehicle is parked/stopped while idling for a long time after starting the engine in cold weather, the water vapor in the exhaust gas condenses and accumulates inside the exhaust pipe. The accumulation of water inside the exhaust pipe can cause noise. However, it is discharged during medium- and high-speed driving.
- When you park the vehicle in weather with below zero temperatures, moisture remaining in the exhaust pipe might have frozen. This is a normal state of the vehicle. Do not depress the accelerator pedal or idle the engine for a long period of time in order to remove frozen moisture.

Warnings for self-maintenance

When the vehicle is checked and serviced by the driver, proper knowledge and special attention are necessary for preventing injury and damage to the vehicle.



Warning

- After driving the vehicle, the systems including the engine, radiator, exhaust manifold, catalyst converter and exhaust pipe (muffler) are very hot, so caution should be taken when checking the engine room. Turn off and cool down the engine properly before checking in order to prevent a burn.
- Be sure to turn off the engine, place the gear shift lever in the P (parking) position and apply the parking brake when checking the vehicle.
- Be sure to turn off the engine when checking the vehicle in a garage or a poorly ventilated space.
- Do not smoke when checking the battery, fuel-related parts or the washer fluid. Do not check the battery, fuel-related parts or the washer fluid in a place where flames or sparks occur easily.
- Do not connect or disconnect the battery when the START/STOP switch is in the ON position.
- When you connect battery cables, be careful not to switch the positive and negative cables.

- The battery cables and the wires in the vehicle transfer high current and voltage. Be careful of a short circuit.
- Keep the used oils, coolant and other fluids out of children's reach. (Ask a professional company for disposal.)
- The cooling fan may spin even if the engine is not running. Separate the negative battery cable when you check the vehicle near the cooling fan or the radiator.
- Check the level of various oils and coolant daily. Driving the vehicle with insufficient oils or coolant may damage the vehicle which is not subject to warranty repair.
- Be sure to use genuine parts for replacing consumable parts.
- When you add any oil or coolant, be careful for the oil or coolant not to come into contact with your body, clothes or the painted surface of the vehicle. If it comes into contact with your body, wash it off immediately and consult your doctor.
- Adding more oil or coolant than the prescribed level may damage the systems. Always add a proper amount of oil or coolant.
- When you inject or add any oil or fluid, do not allow foreign materials such as moisture or dust to enter. Failure to do so may lower the vehicle performance and make normal functions inoperable, causing an accident while driving.

- When a long period of time has passed even if the mileage is low, the level of oils or coolant may become low. Check it frequently and add it if necessary.
- Used oils, coolant and other solutions and containers should not be discarded with household waste. Discard oils, coolant and other solutions according to a legitimate disposal procedure.

Index

You can conveniently find important functions or terms from the content of this owner's manual in alphabetical order.

+/- (manual) position	4-113
2-row parking  Refer to	
Double parking	
(2-row parking)	4-151
4D Driving  Refer to No	
Drugged, Drunk, Distracted and	
Drowsy (4D) Driving	1-40
4WD CHECK warning lamp	4-45
4WD LOCK ON indicator	4-45
4WD System	4-123

A

ACC position	4-7
ACC status (START/STOP	
switch)	4-2
Adaptive Cruise Control	4-181
Adaptive Cruise Control	
(ACC)	4-181
Adaptive cruise control switch....	4-181
Adjusting the angle of the	
backrest	3-9, 3-11, 3-12
Adjusting the angle of the head	
light	3-48
Adjusting the headrest	3-7, 3-13
Adjusting the height/length of	
the steering wheel	3-85

Adjusting the operation speed	
of the windshield wiper	3-64
Adjusting the power seat	3-8
Adjusting the seat manually	3-11
AEBS  Refer to Autonomous	
Emergency Braking System	
(AEBS)	4-152
Air bag	2-20
Collision detection sensor	2-21
Air bag control module	2-21
Air bag warning label	2-20
Air bag warning lamp	2-20, 4-32
Air conditioner	3-69
Android device	3-87
An infant or a small child must	
be seated in the rear seat with	
protective gear	1-41
Antenna (GPS, radio, DMB)	3-90
Anti-Lock Brake System	
(ABS)	4-131
Anti-Lock Brake System (ABS)	
warning light	4-35, 4-132
Anti-pinch protection function of	
the power tailgate	3-36
Anti-theft and warning system	2-35
Around View Monitoring (AVM)	
system	4-148

Front camera	4-148
Rear camera	4-148
AUTO Approach	3-53
Auto Defogger System (ADS)	3-78
Auto door lock function at the	
time of driving	3-3
Auto door unlock function at	
the time of collision	3-3
AUTO HOLD	4-141
AUTO HOLD indicator/warning	
light	4-36
AUTO HOLD  Refer to	
AUTO HOLD	4-141
Auto light	3-46, 3-54
Automatic transmission selector lever	
How to move shift lever to target gear	
position	4-110
Autonomous Emergency	
Braking System (AEBS)	4-152
Autonomous Emergency	
Braking System (AEBS) OFF	
indicator	4-39
Autonomous Emergency	
Braking System (AEBS)	
warning light	4-39
Auto ventilation	3-79
Average fuel economy (display	
of the instrument cluster)	4-53

Average speed (display of the	
instrument cluster)	4-53
AVM system  Refer to the	
Around View Monitoring (AVM)	
system	4-148
AV/Navigation	3-88
AV screen (display of the	
instrument cluster)	4-56

B

Basic Terms Related to Hybrid	
Vehicles	1-6
Be Careful not to Have a Part	
of Your Body Caught When	
Using the Power Window	1-42
Blind spot collision assist (BSA)	
system	4-207
Blind spot detection (BSD) system	
RCTW System	4-208
Blind Spot Detection (BSD)	
system	4-206
Bluetooth	3-87
Bluetooth hands-free	3-89
Brake system	4-129
ABS (Anti-Lock Brake	
System)	4-131
Electronic Brake-Force Distribution	
(EBD)	4-132

Foot brake.....	4-130	Cautions for Polishing the Vehicle.....	1-51	Checking and replacing the brake discs.....	4-131	Coming home light.....	3-53
What is the fade phenomenon?.....	4-130	Cautions for the Depletion of Battery when Connecting Uninterruptible Power Supply to the Black Box System.....	1-49	Checking and replacing the brake pads.....	4-131	Console.....	3-98
What is the vapor lock phenomenon?.....	4-130	Cautions for the Protection of the Environment.....	1-5	Checking and replacing the lamps.....	6-41	Crossing an Intersection or Railroad Crossing.....	1-46
Brake system warning lamp (EBD system).....	4-35, 4-132	Replacing exterior lamps.....	6-44	Replacing the interior lamps.....	6-48	Crossing a Railroad Crossing or Intersection.....	1-46
Breaking in a New Vehicle Correctly.....	1-49	Cautions for using smart key / REKES key.....	4-16	Checking Before Driving.....	1-34	Cruise control system.....	4-175
BSD system  Refer to the Blind Spot Detection (BSD) system.....	4-206	Cautions for Using the Vehicle Key.....	1-53	Checking the engine room.....	6-14	Cup holder.....	3-96
C		Cautions for Vehicle Ventilation.....	1-47	Checking the status of tire wear.....	6-53	D	
Card holder.....	3-93	Cautions for Window Tinting.....	1-52	Checking the tire pressure.....	6-52	Daytime Running Light (DRL).....	3-50
Care and Cleaning of the Interior.....	1-52	Cell phone cradle.....	3-96	Checking the tires and wheels.....	6-52	Deactivating the cruise control system.....	4-179
Car play.....	3-87	Centering Lane Keeping Assist (CLKA).....	4-169	Checking the wheels  Refer to 'Checking the tires and wheels'.....	6-52	Delayed Accelerator Pedal Response  Refer to System Protection Function (Delayed Accelerator Pedal Response).....	1-48
Cases where the air bag does not inflate.....	2-24	Centering lane keeping assist (CLKA) indicator / warning lamp.....	4-40	Checking the wipers and replacing the blade.....	6-37	DESCRIPTION OF HYBRID VEHICLES.....	1-6
Cautions for Attaching Accessories.....	1-47	Certification Label.....	1-27	Child restraint for an infant or a small child.....	2-11	Do Not Drive with the Doors or Tailgate Open.....	1-42
Cautions for parking during winter.....	6-58	Change of specifications (options) and functions according to a change of design.....	3	Child restraint  Refer to 'Child restraint for an infant or a small child'.....	2-11	Do Not Drive With the Tailgate or Doors Open.....	1-42
Cautions for parking the vehicle on a downhill road.....	4-140	Charge warning light.....	4-33	Child safety door lock.....	3-5	Do Not Hold a Part of Your Body Out of the Sunroof or Window.....	1-42
Cautions for parking the vehicle on a uphill road.....	4-140	Check for Any Vehicles or Person Passing by When Getting Out.....	1-43	Cleaning and Maintaining Glass.....	1-52	Do Not Hold a Part of Your Body Out of the Window or Sunroof.....	1-42
		Checking and replacing fuses and relays.....	6-39	Collision detection sensor.....	2-21		
				COMFORT mode indicator.....	4-42		

Do Not Load Hazardous Materials.....	1-47	Safety mode of the automatic transmission.....	4-119	Driving on the Expressway	1-46	Electronic Parking Brake (EPB) warning light.....	4-36
Do not Stop the Engine While Driving	1-44	What is automatic shift point?	4-118	Driving on Unpaved and Mountain Roads	1-44	Electronic stability control system (ESP)	4-134
Do not use vehicle components for other purposes.....	3	What is the creep phenomenon?	4-118	Driving Position	1-38	Electronic stability control system (ESP) OFF indicator	4-38
Do Not Warm Up the Engine or Check the Vehicle in a Sealed Space	1-46	What is the engine brake?	4-118	Driving settings of adaptive cruise adaptive control (ACC)....	4-183	Electronic stability control system (ESP) ON indicator/warning light.....	4-38
Door.....	3-2	What is the kick down function?	4-119	Driving time (display of the instrument cluster).....	4-53	Emergency key.....	4-18
Auto door lock function at the time of driving	3-3	Driving information after departure (display of the instrument cluster).....	4-54	DRL ☞ Refer to 'Daytime Running Light (DRL)'.....	3-50	Emergency measures in case of emergency.....	1-23
Auto door unlock function at the time of collision	3-3	Driving Information Display	4-26			Double parking.....	1-23
Child safety door lock.....	3-5	Driving on a Downhill Road and Hillside Road	1-45	E		To change P (park) position	1-23
Door handle switch.....	4-14	Driving on a Hillside Road and Downhill Road.....	1-45	EBD ☞ Refer to Electronic Brake-Force Distribution (EBD).....	4-132	Emergency measures in the event of emergency.....	5-1
Door map pocket.....	3-98	Driving on a Muddy or Sandy Road.....	1-44	ECM room mirror.....	3-67	In the event of a fire	5-33
Door open warning light	4-46	Driving on an Icy and Snowy Road.....	1-44	ECO indicator	4-43	In the event of a heavy snow.....	5-34
Double-Parking (Second Row Parking).....	4-151	Driving on a River or a Road with a Pool of Water.....	1-45	Electric power steering warning light.....	4-34	In the event of an accident.....	5-32
Drive mode switch.....	4-121, 4-122	Driving on a Road with a Pool of Water or a River.....	1-45	Electronic Brake-Force Distribution (EBD).....	4-132	When a tire is flat	5-11
Driver Attention Alert (DAW) Failure Warning Lamp.....	4-47	Driving on a Sandy or Muddy Road.....	1-44	Electronic Parking Brake (EPB).....	4-138	When the engine check indicator turns on.....	5-10
Driver Attention Alert (DAW) Warning Lamp	4-47	Driving on a Snowy or Icy Road.....	1-44	Electronic Parking Brake (EPB) auto unlock.....	4-139	When the engine is overheated so that the warning light turns on	5-9
Driver seat window safety function.....	3-21	Driving on Mountains and Unpaved Roads.....	1-44	Electronic Parking Brake (EPB) emergency mode.....	4-139	When the vehicle has stopped due to a failure.....	5-31
Driving a vehicle equipped with an automatic transmission	4-117					When you need to have your vehicle towed.....	5-24

Engine check indicator	4-36
Engine Check Indicator	1-53, 1-55, 1-56
Engine compartment fuse and relay box.....	6-39
Engine compartment hood open warning light.....	4-46
Engine hood	3-42
Engine hood open lever.....	3-42
Engine Number	1-27
Engine oil inspection and replacement.....	6-20
Engine oil pressure warning light	4-32
Engine overheat warning lamp	4-33
Engine Warm-up	1-43
EPB  Refer to 'Electronic Parking Brake (EPB)'	4-138
ESP  Refer to 'Electronic stability control system (ESP)' ...	4-134
ESS  Refer to Emergency Stop Signal (ESS).....	4-133
EV operation mode indicator lamp.....	4-50
Extinguisher.....	1-48, 5-33

F

Fastening the seat belt by a pregnant woman.....	2-9
Foot brake	4-130
Front auto washer	3-64
Front camera	4-148
Front Camera Module (FCM).....	4-160
Front fog lamp ON indicator.....	4-41
Front fog light	3-46
Front obstacle detection sensor.....	4-143
Front obstacle detection warning ON/OFF switch	4-143
Front passenger walk-in button....	3-12
Front/rear obstacle detection system	4-143
Front obstacle detection sensor	4-143
Rear obstacle detection sensor	4-143
Front room lamp (overhead console).....	3-57
Front storage bin	3-97
Front windshield and washer fluid linkage	3-64
Fuel gauge (display of the instrument cluster).....	4-28

Fuel inlet.....	3-43
Functions for each shift position	4-111
D (drive) position	4-112
N (neutral) position	4-112
P (park) position	4-111
R (reverse) position	4-111

G

Gear shift lever  Refer to automatic gear shift lever	4-106
Glass heater	3-76
Glove box	3-97
Glove box lamp	3-60
Grip handle/coat hanger.....	3-94
Guide to high voltage shutdown	1-16

H

Hands OFF warning lamp	4-44
Hazard warning lamp	3-47, 4-42
HBA  Refer to 'High Beam Assist (HBA)'	3-51
HDC  Refer to Hill Descent Control (HDC).....	4-136
Headlamp angle indicator	4-50

Headlamp desiccant.....	6-42
Head light	3-46
Headlight  Refer to 'Headlight'	3-46
Heater	3-69
Heater & A/C Controls.....	3-72
Heating and ventilation  Refer to 'Seat ventilation and heating'	3-15
HEV high voltage warning lamp....	4-49
High beam.....	3-47
High Beam Assist (HBA).....	3-46, 3-51
High beam indicator	4-42
High mounted stop lamp	3-45, 6-43
High voltage battery	1-13
High-Voltage Battery Cooling	1-17
High voltage warning lamp.....	1-56
Hill Descent Control (HDC)	4-136
Hill Descent Control (HDC) ON indicator/warning light.....	4-40, 4-137
Horn.....	3-86
Horn  Refer to 'Horn'	3-86
How To Lock Doors In Emergency	3-4
How to set AEB Sensitivity.....	4-153
How To Use Engine Brake.....	4-115

HV battery fault warning light.....	4-49
HV battery level warning light.....	4-48
HYBRID operation mode indicator lamp.....	4-50
Hypervisor (HVC)	3-81

I

If a low-voltage (12V) battery is completely discharged.....	1-19, 5-6
Illumination ON indicator	4-41
Immobilizer system.....	2-35
Immobilizer system warning light.....	4-33
Importance of a periodic check.....	4
Indicator panel on instrument cluster	4-51
Average fuel consumption	4-53
Inflating a tire.....	5-18
Information Regarding the Installation of Accident Recording Devices and Provision of Information	1-2
Infotainment system	3-87
Installing a snow tire	6-57
Installing the towing hook.....	5-25
Instantaneous fuel economy (display of the instrument cluster).....	4-53

Instrument cluster	4-22
Trip computer information.....	4-53
Instrument cluster customization.....	4-59
Instrument cluster illumination brightness	4-105
Instrument cluster warning lights and indicators	4-32
Intelligent Speed Assistance (ISA)	4-196
Interior fuse box	6-39
Interior temperature sensor.....	3-69
In the event of a fire.....	5-33
In the event of a heavy snow.....	5-34
In the event of an accident	5-32
iPod	3-89
ISG (Idle Stop & Go) System.....	4-126
ISG indicator/warning lamp.....	4-44
ISG OFF indicator	4-44

K

Key cylinder (ignition key).....	4-7
Klaxon  Refer to 'Horn'.....	3-86
Korea Consumer Agency - Precautions for Potentially Hazardous Seat Belt related Goods	1-3

Korea Consumer Agency - Precautions for the reduction of non-crash incidents	1-4, 1-24
--	-----------

L

Lane Change Assist (LCA) system	4-207
Lane Keeping Assistance System (LKAS).....	4-164
LCA system  Refer to the 'Lane Change Collision Warning (LCA) system'	4-207
LDWS (Lane Departure Warning System).....	4-160
LDWS  Refer to LDWS (Lane Departure Warning System)	4-160
License plate lamp.....	3-45, 6-43
Lift mounting points	1-15
Lights and lamps	3-45
Turning off all lights	3-46
Light switch.....	3-46
Living home light.....	3-53
LKAS (LDWS) indicator / warning lamp.....	4-40
Load limiter.....	2-8
Long-term parking mode.....	1-49
Low fuel level warning light.....	4-38

Low voltage (12V) battery discharge protection mode....	1-18, 5-5
Luggage compartment	3-101
Luggage compartment.....	3-103
Luggage compartment hook	3-101
Luggage compartment side storage box.....	3-102
Luggage room lamp	3-58
Luggage upper cover	3-101

M

Main menu on the instrument cluster	4-51
Managing the A/C (winter)	6-57
Managing the engine coolant (winter).....	6-56
Managing the engine oil (winter).....	6-56
Managing washer fluid (winter)....	6-57
Manual tailgate.....	3-33
Master symbol (Supervision type).....	4-46
Message on the display of the instrument cluster	4-65
Mileage (display of the instrument cluster).....	4-53
Mirror	3-66
ECM room mirror.....	3-67

Outside rearview mirror control button	3-66
Mirror and lamp	3-93
Mood lamp*	3-59
Mood lamp setting	3-59

N

Navigation ⓘ Refer to 'AV/Navigation'	3-88
No Drugged, Drunk, Distracted and Drowsy (4D) Driving	1-40
Non-crash incident ⓘ Refer to Korea Consumer Agency - Precautions for the reduction of non-crash incidents	1-4, 1-24
No Sleeping in a Sealed Vehicle	1-41
No Sudden Maneuvering of the Steering Wheel	1-45, 1-46
No Sudden Starting, Acceleration, or Braking	1-44

O

OFF position (LOCK)	4-7
OFF status (START/STOP switch)	4-2
ON position	4-7

ON status (START/STOP switch)	4-2
Open/close with the tailgate switch in luggage compartment*	3-36
Opening the tailgate in the event of emergency	3-40
Operating smart audio and AV/navigation using the steering wheel	3-89
Outside rearview mirror auto folding/unfolding function	3-66
Outside rearview mirror control button	3-66
Over speed warning light	4-45
OVM ⓘ Refer to 'OVM tools'	5-2
OVM tools	5-2

P

Panic mode	4-13
Parking	
Cautions for parking during winter	6-58
Safe Parking and Stopping	1-43
When parking the vehicle on a downhill road	4-140
When parking the vehicle on a uphill road	4-140
Parking assist system	4-143

Front/rear obstacle detection system	4-143
Rear camera system	4-147
Parking brake ON indicator (Red)	4-34
Passing light ⓘ Refer to 'Turning on the high beam and low beam at the same time (passing light)'	3-47
Position of the gear shift lever (display of the instrument cluster)	4-30
Potentially hazardous seat belt related goods ⓘ Refer to the Korea Consumer Agency - Precautions for Potentially Hazardous Seat Belt related Goods	1-3
Power down warning light	4-48
Power socket	3-92
Power tailgate	3-34
Power window ⓘ Refer to 'Window (power window)'	3-20
Precautions for infants, children, old people, or pregnant women	1-41
Precautions for the Modification of the Vehicle and Structural Alteration	1-32
Prescribed tire inflation pressure	6-52

Pretensioner	2-8
Purpose and application conditions of the instruction manual	3

R

Rain sensing wiper	3-65
Rain sensor	3-65
RCTA system ⓘ Refer to Rear Cross Traffic Alert (RCTA) system	4-208
Ready indicator lamp	4-49
READY status (START/STOP switch)	4-2
Rear and side warning system	4-204
Blind Spot Detection (BSD) system	4-206
Lane Change Assist (LCA) system	4-207
Rear camera	4-148
Rear camera system	4-147
Rear cross traffic assist (RCTA) system	4-210
Rear fog lamp ON indicator	4-41
Rear lamp	3-45, 6-43
Rear obstacle detection sensor	4-143

Rear room lamp	3-58	Resetting the driving time (display of the instrument cluster).....	4-54	Ventilation and heating	3-15	Smart key warning light.....	4-33
Rear seat.....	3-13	Resetting the mileage (display of the instrument cluster)	4-54	Smart front seat heating control	3-16	Smart tailgate	3-38
Heating function (heater).....	3-17	Resetting the opening height of the power tailgate.....	3-36	Seatback reclining adjustment	3-13	Smart tailgate indicator	4-47
Rear seat backrest folding.....	3-14	Resetting the power tailgate	3-37	Seat backrest pocket.....	3-98	Snow tire	6-53
Seatback reclining adjustment.....	3-13	Resetting the sunroof.....	3-26	Seat belt	2-2	Special Cautions When Checking the Coolant.....	1-47
Rear seat door roller blind	3-94	Restarting the engine when it cannot be started	4-4, 4-8	Fastening the seat belt by a pregnant woman	2-9	Speed limit.....	4-200
Rear seat window lock function ...	2-22	Resuming the cruise control system (RESUME)	4-180	Load limiter	2-8	SPORT mode indicator	4-43
Rear storage box.....	3-97	Roof rack.....	3-104	Pretensioner.....	2-8	Starting the engine	4-3, 4-8
Rear window wiper washer fluid linkage function	3-65	Rotating the tire positions	6-53	Warnings.....	2-9	Restarting the engine when it cannot be started.....	4-4, 4-8
Regenerative braking system.....	4-115	S		Seat Belt		Starting the engine using the jump cable	5-4
Repairing a flat tire.....	5-13	Safe distance alert (SDA)	4-203	Wearing the Seat Belt Correctly.....	1-39	Starting the engine and driving the vehicle (winter).....	6-56
Repairing a flat tire  Refer to 'Repairing a flat tire'	5-13	Safe Parking and Stopping	1-43	Seat belt warning lamp	4-32	Starting the engine using the jump cable.....	5-4
Replacing A/C refrigerant/oil	3-70	Safety and Cautions for Driving... 1-40		Service kit for tire repair.....	5-12	Starting the engine with a depleted smart key or interference (in the event of emergency).....	4-19
Replacing exterior lamps.....	6-44	Safety exit warning (SEW) system	4-212	Setting the cruise control system driving speed	4-176	START position.....	4-7
Replacing the A/C filter	6-50	SBW (shift by wire)	4-109	SHB indicator	4-41	START/STOP switch	4-2
Replacing the interior lamps	6-48	SD card (navigation)	3-88	Side repeater.....	3-45, 6-43	ACC status.....	4-2
Replacing the smart key battery.....	4-20	Seat		Slots for multimedia.....	3-89	OFF status.....	4-2
Resetting the average fuel economy (display of the instrument cluster).....	4-53	Seat & adjustment switch / button / lever	3-6	Smart audio*.....	3-87	ON status.....	4-2
Resetting the average speed (display of the instrument cluster).....	4-54			Smart door auto lock (auto close).....	4-13	READY status.....	4-2
				Smart front seat heating control.....	3-16	Steering wheel.....	3-85
				Smart key	4-10	Horn	3-86
				Panic mode.....	4-13		

Steering wheel heater	3-85
Steering wheel heater indicator	
Heating.....	4-37
Stopping the engine	4-4, 4-9
Stopping the engine while driving	
(in the event of emergency)	4-5
Stopping the engine while	
driving (in the event of	
emergency).....	4-5
Stopping the smart tailgate	
function	3-39
Storage unit.....	3-96
Console.....	3-98
Cup holder	3-96
Door map pocket.....	3-98
Front storage bin	3-97
Glove box.....	3-97
Seat backrest pocket.....	3-98
Sunroof.....	3-23
Sunroof*.....	3-27
Sunroof open warning.....	3-25
Sunroof safety function	3-25
Sun visor	3-93
Sun visor/mirror lamp.....	3-58, 3-93
System Protection Function	
(Delayed Accelerator Pedal	
Response).....	1-48
System safety mode.....	4-5, 4-9

T	
Table of Vehicle Specifications	
.....	1-29, 1-30, 1-31
Tailgate	3-33
Anti-pinch protection function of the	
power tailgate	3-36
Manual tailgate	3-33
Opening the tailgate in the event of	
emergency	3-40
Power tailgate	3-34
Resetting the opening height of the	
power tailgate	3-36
Resetting the power tailgate.....	3-37
Smart tailgate.....	3-38
Stopping the smart tailgate	
function	3-39
Tail light	3-46
TBT (Turn By Turn) (display of	
the instrument cluster).....	4-56
Tips when an accident or a	
malfunction occurs on the	
expressway.....	5-32
Tire chain.....	6-54
Tire pressure monitoring	
system (TPMS).....	2-29
Display of the TPMS status on the	
instrument cluster	2-31
To Adjust Instrument Cluster	
Illumination Brightness	4-105

To set adaptive cruise control	
(ACC) operation sensitivity.....	4-183
Total mileage (display of the	
instrument cluster).....	4-28
To turn ignition off while driving	
(in case of emergency)	1-16
TPMS  Refer to the tire	
pressure monitoring system	
(TPMS).....	2-29
TPMS (Tire Pressure	
Monitoring System)	
Display of the TPMS status on the	
instrument cluster	4-55
TPMS warning light.....	4-39
Trip computer information	4-53
Turning on the high beam and	
low beam at the same time	
(passing light).....	3-47
Turn signal.....	3-46, 4-42

U

USB charging port.....	3-91
Use of Engine Brake.....	1-46
Use of regenerative braking	
and engine braking.....	1-46
Use of service centers and	
maintenance partners.....	4

Use of Service Centers and	
Maintenance Partners.....	1-49
Using a towing rope	5-26
Using a tow truck	5-24
Using Genuine Parts.....	1-49
Using the engine brake	4-118

V

Vehicle Identification.....	1-27
Vehicle Identification Number	
(VIN).....	1-27
Vehicle Management.....	1-49
Vehicle management during	
winter	6-56
Cautions for parking	6-58
Installing a snow tire.....	6-57
Managing the A/C.....	6-57
Managing the engine coolant	6-56
Managing the engine oil	6-56
Managing washer fluid.....	6-57
Starting the engine and driving the	
vehicle.....	6-56
Vehicle settings	4-59
Vehicle Specifications.....	1-28
Vehicle Washing.....	1-50
Cleaning and Maintaining Glass... 1-52	
Washing the Bumper	1-51
Washing Wheels	1-51

Ventilation and heating 	
Refer to 'Seat ventilation and heating'	3-15
Virtual engine sound system (VESS) warning lamp	4-48
Voice recognition function	3-89

W

Walk-in button 	Refer to 'Front passenger walk-in button' ..	3-12
Warm-up 	Refer to 'Engine Warm-up'	1-43
Warning horn 	Refer to 'Horn'	3-86
Warning lights and indicators		4-32
Warnings for self-maintenance		6-59
Warning triangle		5-2
Washer fluid		3-64
Washing the Bumper		1-51
Washing Wheels		1-51
Wearing the Seat Belt Correctly		1-39
What is safety unlock?		4-12
What is the creep phenomenon?		4-118
What is the engine brake?		4-118
What is the fade phenomenon?		1-47, 4-130
What is the kick down function?		4-119
What is the standing wave phenomenon?		1-36
What is the vapor lock phenomenon?		1-47, 4-130
What is wind buffeting?		3-22, 3-24
Wheel alignment status and the balance between tires and wheels		6-52
When 12V Battery Discharged		5-5
When a tire is flat		5-11
When a tire is flat 	Refer to 'When a tire is flat'	5-11
When a tow truck is unavailable (in case of emergency)		5-25
Installing the towing hook		5-25
Using a towing rope		5-26
When low tire pressure is detected		2-33
When the engine cannot be started due to depletion of the battery		5-4
When the engine check indicator turns on		5-10
When the engine is overheated so that the warning light turns on ..		5-9
When the vehicle has stopped due to a failure		5-31
When you have rotated the tires ..		2-33
Window (power window)		3-20
Driver seat window safety function		3-21
Rear seat window lock function		3-22
Windshield fog detection sensor		3-69
WINTER / SPORT indicator lamp		4-43
Wiper		3-64
Adjusting the operation speed of the windshield wiper		3-64
Front windshield and washer fluid linkage		3-64
Rain sensing wiper		3-65
Rear window wiper washer fluid linkage function		3-65
Wireless Phone Charger System*		3-99

MEMO

[illegible]

MEMO

Handwriting practice lines consisting of 15 horizontal dotted lines.

MEMO

Handwriting practice lines consisting of 15 horizontal dotted lines.

No.	PART NO.	CODE NO.	PRINTING DATE	MODEL	REMARKS
1	J140OM2506E	TR1-5OM0E-5F-300A	June. 01, 2025	J140	HEV,GUI

TORRES/HYBRID (LHD) OWNER'S MANUAL

ISSUED BY
EXPORT SERVICE TEAM
KG Mobility Corporation

455-12, Dongsak-ro, Pyeongtaek-si,
Gyeonggi-do, 17749, Korea

TELEPHONE : 82-80-500-5582
FACSIMILE : 82-31-610-3762

NOTE: *All rights reserved. Printed in KG Mobility Corporation.
No part of this book may be used or reproduced without the
written permission of Export Service Team.*