



Owner's Manual

LS 500 / LS 350



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## For your information

### Main Owner's Manual

Please note that this manual applies to all models and explains all equipment, including options. Therefore, you may find some explanations for equipment not installed on your vehicle.

All specifications provided in this manual are current at the time of printing. However, because of the Lexus policy of continual product improvement, we reserve the right to make changes at any time without notice.

Depending on specifications, the vehicle shown in the illustrations may differ from your vehicle in terms of color and equipment.

### Noise from under vehicle after turning off the engine (for Korea)

Approximately five hours after the engine is turned off, you may hear sound coming from under the vehicle for several minutes. This is the sound of a fuel evaporation leakage check and, it does not indicate a malfunction.

### Accessories, spare parts and modification of your Lexus

A wide variety of non-genuine spare parts and accessories for Lexus vehicles are currently available in the market. Using these spare parts and accessories which are not genuine

Lexus products may adversely affect the safety of your vehicle, even though these parts may be approved by certain authorities in your country. Toyota Motor Corporation therefore cannot accept any liability or guarantee spare parts and accessories which are not genuine Lexus products, nor for replacement or installation involving such parts.

This vehicle should not be modified with non-genuine Lexus products. Modification with non-genuine Lexus products could affect its performance, safety or durability, and may even violate governmental regulations. In addition, damage or performance problems resulting from the modification may not be covered under warranty.

### Installation of an RF-transmitter system

The installation of an RF-transmitter system in your vehicle could affect electronic systems such as:

- Multiport fuel injection system/sequential multiport fuel injection system
- Lexus Safety System + A
- Lexus Safety System +
- Cruise control system
- Anti-lock brake system
- Vehicle dynamics integrated management
- SRS airbag system

- Seat belt pretensioner system

Be sure to check with your Lexus dealer for precautionary measures or special instructions regarding installation of an RF-transmitter system.

Further information regarding frequency bands, power levels, antenna positions and installation provisions for the installation of RF-transmitters, is available on request at your Lexus dealer.

### Vehicle data recording

The vehicle is equipped with sophisticated computers that will record certain data, such as:

- Engine speed / Electric motor speed (traction motor speed)
- Accelerator status
- Brake status
- Vehicle speed
- Operation status of the driving assist systems
- Images from the cameras

Your vehicle is equipped with cameras. Contact your Lexus dealer for the location of recording cameras.

The recorded data varies according to the vehicle grade level and options with which it is equipped.

These computers do not record conversations or sounds, and only record images outside of the vehicle in certain situations.

- Data usage

Lexus may use the data recorded in this computer to diagnose malfunctions, con-

duct research and development, and improve quality.

Lexus will not disclose the recorded data to a third party except:

- With the consent of the vehicle owner or with the consent of the lessee if the vehicle is leased
- In response to an official request by the police, a court of law or a government agency
- For use by Lexus in a lawsuit
- For research purposes where the data is not tied to a specific vehicle or vehicle owner

### Event data recorder (except for Korea)

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an airbag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. However, data may not be recorded depending on the severity and type of a crash.

The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,

- How fast the vehicle was traveling.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur.

NOTE: EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

- Disclosure of the EDR data

Lexus will not disclose the data recorded in an EDR to a third party except when:

- An agreement from the vehicle's owner (or the lessee for a leased vehicle) is obtained
- In response to an official request by the police, a court of law or a government agency
- For use by Lexus in a lawsuit

However, if necessary, Lexus may:

- Use the data for research on vehicle safety performance
- Disclose the data to a third party for research purposes without disclosing

information about the specific vehicle or vehicle owner

### Event data recorder (for Korea)

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an airbag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. However, data may not be recorded depending on the severity and type of a crash.

The EDR in this vehicle is designed to record such data as:

- How various safety systems in your vehicle (e.g., the airbags, seat belts and ABS) were operating;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.

The EDR can help provide a better understanding of the circumstances in which crashes and injuries occur.

NOTE: EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, personal data

acquired during a defect investigation could be used to manage crash records. A person provided by the Minister of Land Infrastructure and Transport could extract and analyze EDR data for official purpose.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

- Disclosure of the EDR data

Lexus will not disclose the data recorded in an EDR to a third party except when:

- An agreement from the vehicle's owner (or the lessee for a leased vehicle) is obtained
- In response to an official request by the police, a court of law or a government agency
- For use by Lexus in a lawsuit

However, if necessary, Lexus may:

- Use the data for research on vehicle safety performance
- Disclose the data to a third party for research purposes without disclosing information about the specific vehicle or vehicle owner

### Scrapping of your Lexus

The SRS airbag, seat belt pretensioner devices and Pop Up Hood system in your Lexus contain explosive chemicals. If the vehicle is scrapped with the

airbags, seat belt pretensioners and Pop Up Hood micro gas generators left as they are, this may cause an accident such as fire. Be sure to have the systems of the SRS airbag, seat belt pretensioner and Pop Up Hood micro gas generators removed and disposed of by a qualified service shop or by your Lexus dealer before you scrap your vehicle.

#### WARNING

##### ■ General precautions while driving

**Driving under the influence:** Never drive your vehicle when under the influence of alcohol or drugs that have impaired your ability to operate your vehicle. Alcohol and certain drugs delay reaction time, impair judgment and reduce coordination, which could lead to an accident that could result in death or serious injury.

**Defensive driving:** Always drive defensively. Anticipate mistakes that other drivers or pedestrians might make and be ready to avoid accidents.

**Driver distraction:** Always give your full attention to driving. Anything that distracts the driver, such as adjusting controls, talking on a cellular phone or reading can result in a collision with resulting death or serious injury to you, your occupants or others.

##### ■ General precaution regarding children's safety

Never leave children unattended in the vehicle, and never allow children to have or use the key.

Children may be able to start the vehicle or shift the vehicle into neutral. There is also a danger that children may injure themselves by playing with the windows, the moon roof, or other features of the vehicle. In addition, heat build-up or extremely cold temperatures inside the vehicle can be fatal to children.

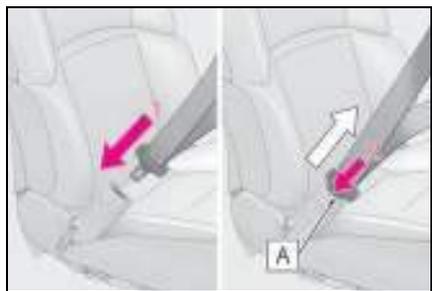
**Reading this manual**

Explains symbols used in this manual.

**Symbols in this manual**

Symbols	Meanings
	<b>WARNING:</b> Explains something that, if not obeyed, could cause death or serious injury to people.
	<b>NOTICE:</b> Explains something that, if not obeyed, could cause damage to or a malfunction in the vehicle or its equipment.
	Indicates operating or working procedures. Follow the steps in numerical order.

**Symbols in illustrations**



Symbols	Meanings
	Indicates the action (pushing, turning, etc.) used to operate switches and other devices.
	Indicates the outcome of an operation (e.g. a lid opens).



Symbols	Meanings
	Indicates the component or position being explained.
	Means <b>Do not</b> , <b>Do not do this</b> , or <b>Do not let this happen</b> .

## How to search

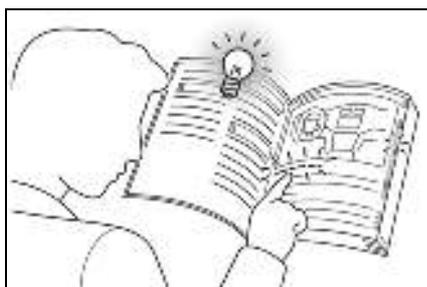
### ■ Searching by name

- Alphabetical index: →P.591



### ■ Searching by installation position

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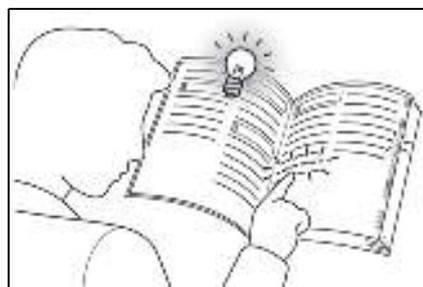
### ■ Searching by symptom or sound

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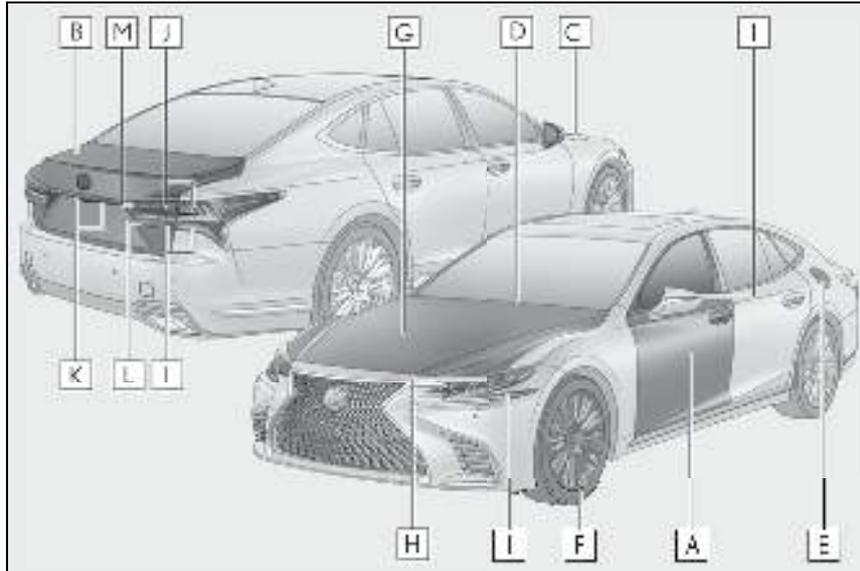
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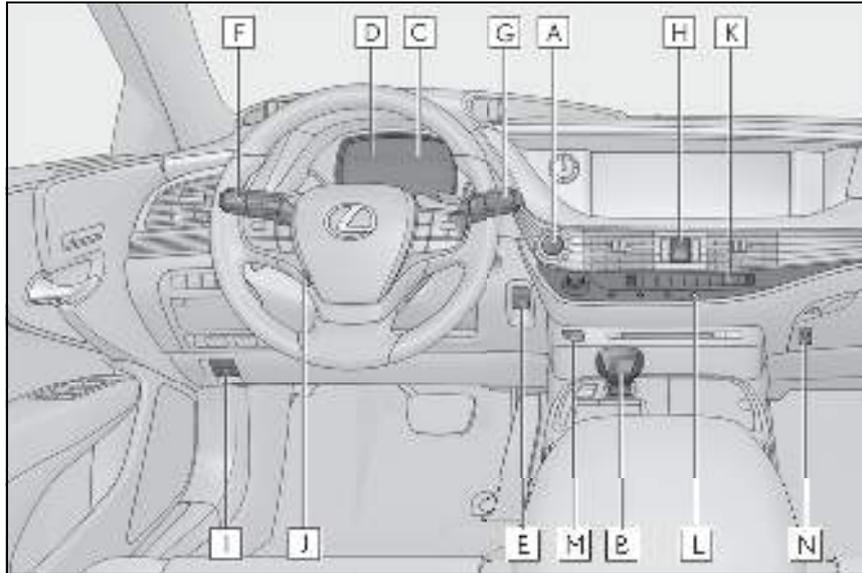
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\*: If equipped

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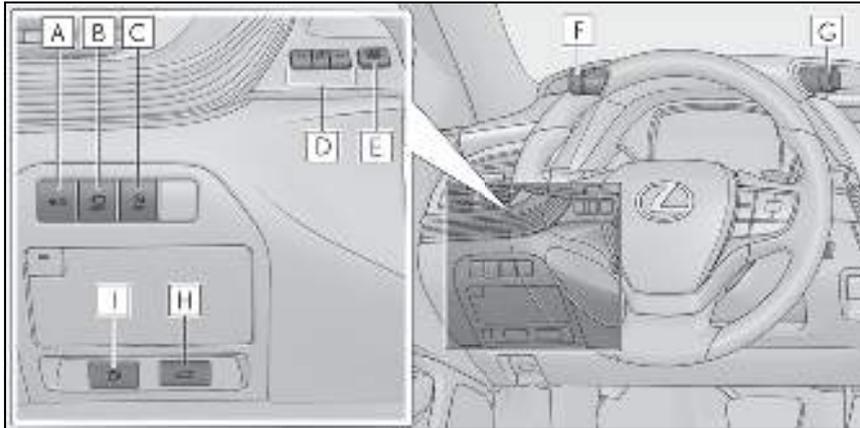
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<sup>\*1</sup>: If equipped

<sup>\*2</sup>: Refer to "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".

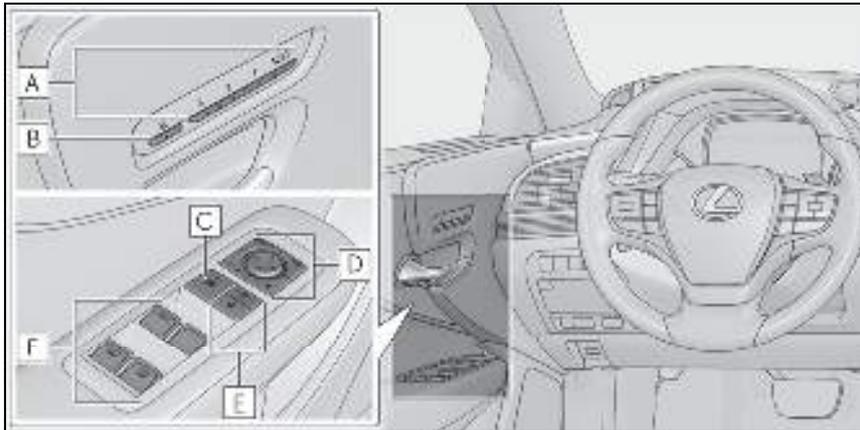
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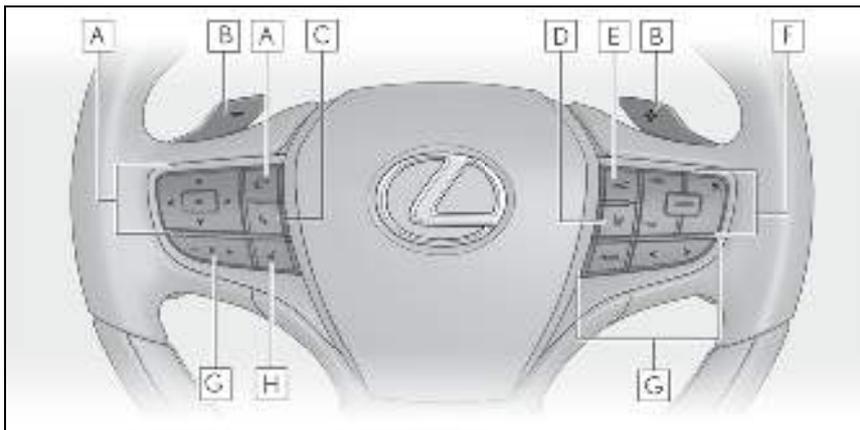
<sup>\*1</sup>: If equipped

<sup>\*2</sup>: Refer to "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".



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\*: If equipped

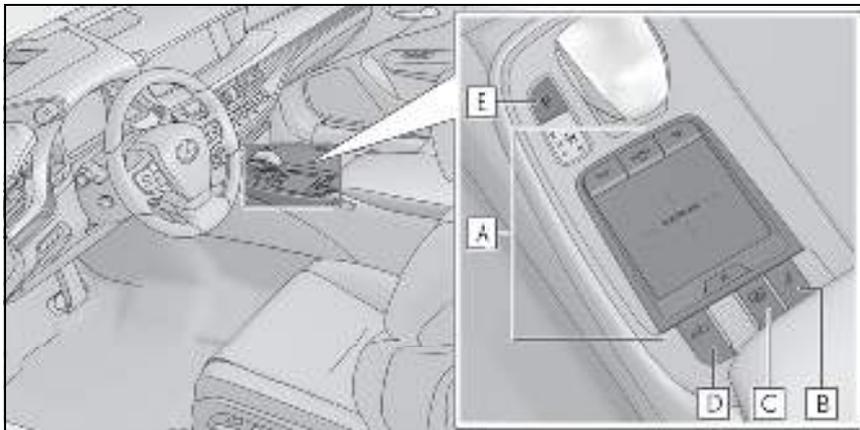


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<sup>\*1</sup>: Refer to "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".

<sup>\*2</sup>: If equipped

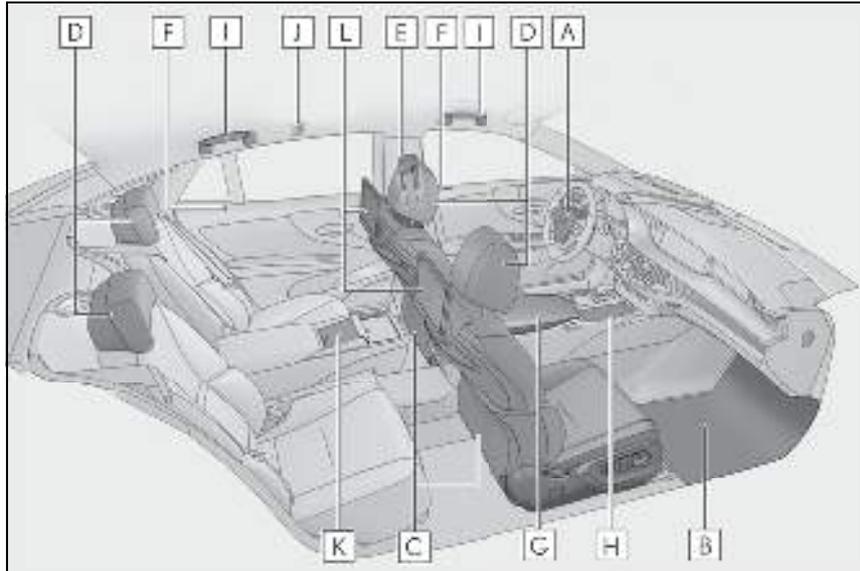


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<b>C</b>	Rear sunshade switch <sup>*2</sup> .....	P.438
<b>D</b>	Vehicle height adjustment switch <sup>*2</sup> .....	P.376
<b>E</b>	P position switch .....	P.218

\*1: Refer to "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".

\*2: If equipped

### ■ Interior (Left-hand drive vehicles)

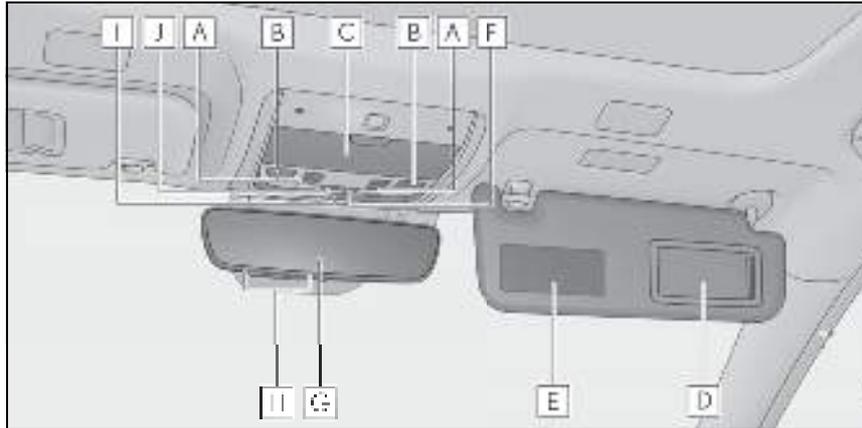


<b>A</b>	SRS airbags.....	P.39
<b>B</b>	Floor mats.....	P.32
<b>C</b>	Front seats.....	P.163
<b>D</b>	Head restraints.....	P.180
<b>E</b>	Seat belts.....	P.34
<b>F</b>	Inside lock buttons.....	P.141
<b>G</b>	Console box.....	P.426
<b>H</b>	Cup holders.....	P.425
<b>I</b>	Assist grips.....	P.433
<b>J</b>	Coat hooks.....	P.434
<b>K</b>	Rear Multi Operation Panel <sup>*1</sup> .....	P.396
<b>L</b>	Rear seat entertainment system <sup>*1,2</sup>	

<sup>\*1</sup>: If equipped

<sup>\*2</sup>: Refer to "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".

### ■ Ceiling (Left-hand drive vehicles)



<b>A</b> Moon roof switches <sup>*1</sup> .....	P.192
Panoramic moon roof switches <sup>*1</sup> .....	P.194
<b>B</b> Personal lights .....	P.421
<b>C</b> Auxiliary box .....	P.427
<b>D</b> Vanity mirrors .....	P.436
<b>E</b> Sun visors <sup>*2,3</sup> .....	P.436
<b>F</b> Door-linked interior light switch .....	P.421
<b>G</b> Inside rear view mirror .....	P.185
<b>H</b> Garage door opener buttons <sup>*1</sup> .....	P.440
<b>I</b> Interior light .....	P.420
<b>J</b> Intrusion sensor and tilt sensor cancel switch <sup>*1</sup> .....	P.102

<sup>\*1</sup>: If equipped

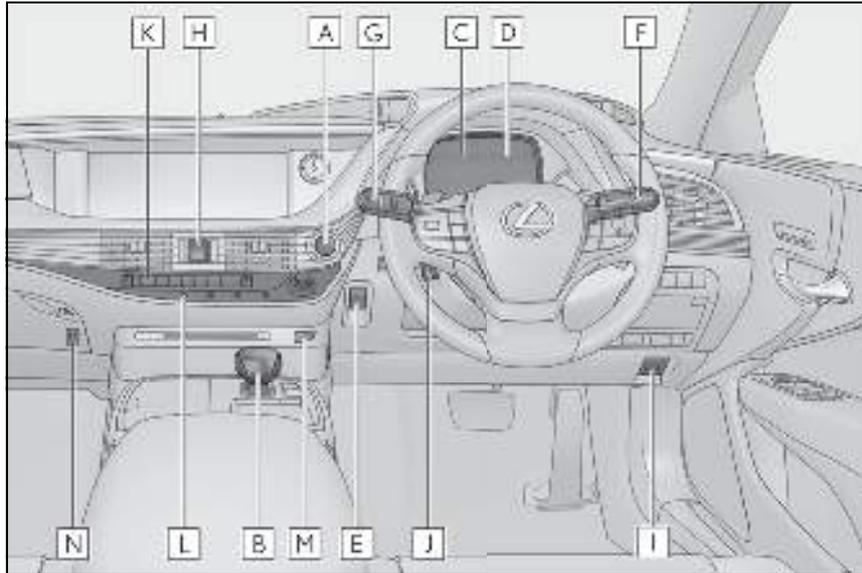
<sup>\*2</sup>: Except for Taiwan and Korea: NEVER use a rearward facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it, DEATH or SERIOUS INJURY to the CHILD can occur. (→P.60)



\*3. For Taiwan: DO NOT carry baby, infant and children on the front passenger seat. Except for the front passenger seat, 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. (→P.62)



### ■ Instrument panel (Right-hand drive vehicles)



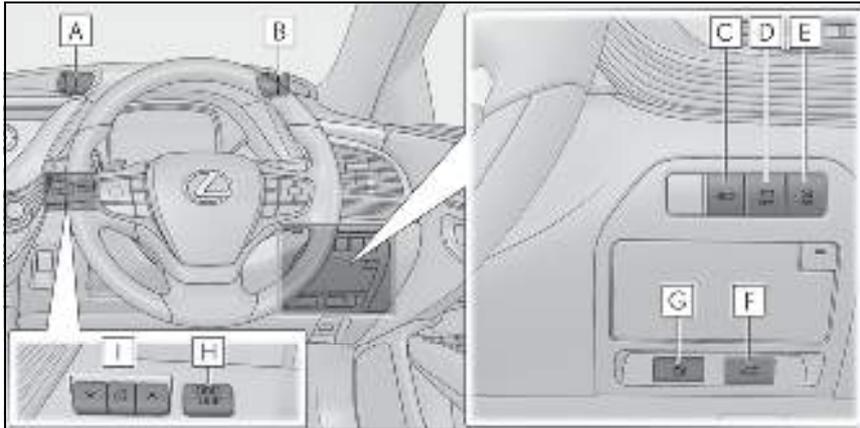
<b>A</b>	<b>Engine switch</b> .....	<b>P.212</b>
	Starting the engine/changing the modes.....	P.212
	Emergency stop of the engine.....	P.512
	When the engine will not start.....	P.535
	Warning messages.....	P.530
<b>B</b>	<b>Shift lever</b> .....	<b>P.215</b>
	Changing the shift position.....	P.217
	Precautions for towing.....	P.515
<b>C</b>	<b>Meters</b> .....	<b>P.111, 114</b>
	Reading the meters/adjusting the instrument panel light.....	P.111, 113, 114, 117
	Warning lights/indicator lights.....	P.106
	When a warning light turns on.....	P.521
<b>D</b>	<b>Multi-information display</b> .....	<b>P.118</b>
	Display.....	P.118
	When a warning message is displayed.....	P.530

<b>E</b>	<b>Parking brake switch</b> .....	<b>P.223</b>
	Applying/releasing the parking brake.....	P.223
	Precautions for winter season.....	P.387
	Warning buzzer/messages.....	P.530
<b>F</b>	<b>Turn signal lever</b> .....	<b>P.222</b>
	<b>Headlight switch</b> .....	<b>P.227</b>
	Headlights/front position lights/tail lights/license plate lights/daytime running lights.....	P.227
	AHS (Adaptive High-beam System)* <sup>1</sup> .....	P.230
	AHB (Automatic High Beam)* <sup>1</sup> .....	P.234
	Multi Weather Lights.....	P.236
	Rear fog lights.....	P.237
<b>G</b>	<b>Windshield wiper and washer switch</b> .....	<b>P.238</b>
	Usage.....	P.238
	Adding washer fluid.....	P.479
	Warning messages.....	P.530
<b>H</b>	<b>Emergency flasher switch</b> .....	<b>P.512</b>
<b>I</b>	<b>Hood lock release lever</b> .....	<b>P.468</b>
<b>J</b>	<b>Tilt and telescopic steering control switch</b> .....	<b>P.184</b>
	Adjustment.....	P.184
	Driving position memory.....	P.175
<b>K</b>	<b>Air conditioning system</b> .....	<b>P.401</b>
	Usage.....	P.401
	Rear window defogger.....	P.401
<b>L</b>	<b>Audio system</b> * <sup>2</sup>	
<b>M</b>	<b>Brake hold switch</b> .....	<b>P.225</b>
<b>N</b>	<b>Trunk opener main switch</b> .....	<b>P.149</b>

\*<sup>1</sup>: If equipped

\*<sup>2</sup>: Refer to "Navigation and Multimedia System Owner's Manual".

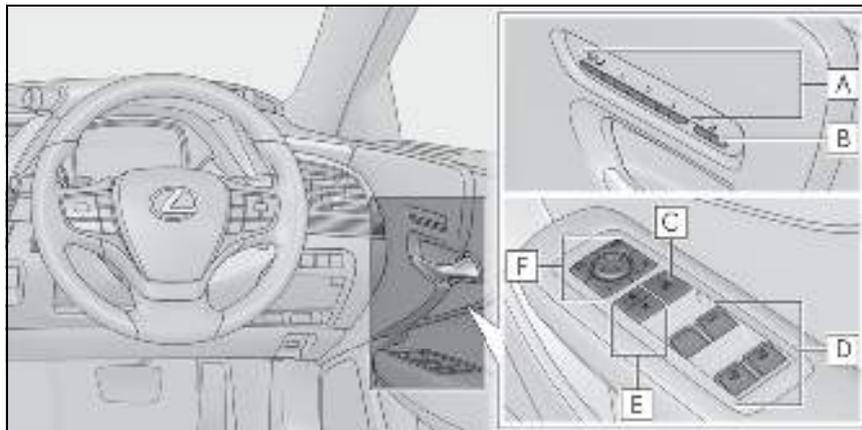
### ■ Switches (Right-hand drive vehicles)



- A** Driving mode select switch ..... P.374
- B** VSC OFF switch ..... P.381  
Snow mode switch ..... P.219
- C** HUD (Head-up display) switch<sup>\*1</sup> ..... P.126
- D** Camera switch<sup>\*2</sup>
- E** Stop & Start cancel switch ..... P.329
- F** Trunk opener switch ..... P.149
- G** Fuel filler door opener switch ..... P.243
- H** "ODO TRIP" switch ..... P.112, 117
- I** Instrument panel light control switches ..... P.113, 117

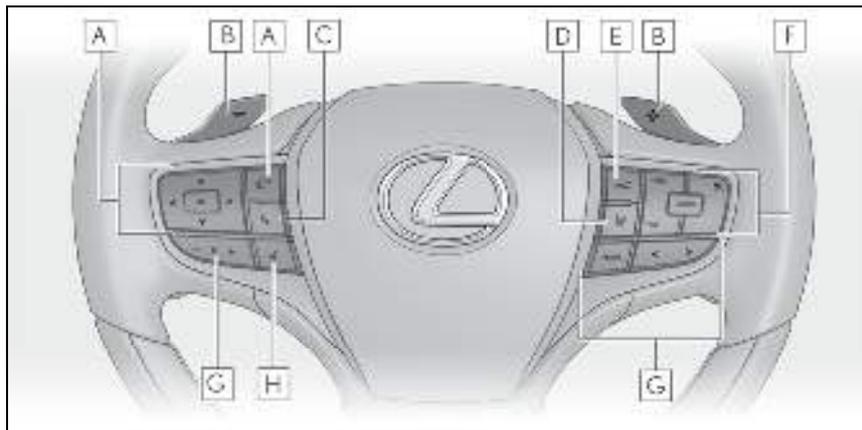
<sup>\*1</sup>: If equipped

<sup>\*2</sup>: Refer to "Navigation and Multimedia System Owner's Manual".



- A** Position memory buttons.....P.175
- B** Mode change button.....P.165
- C** Window lock switch.....P.191
- D** Power window switches ..... P.189  
Rear door sunshade switches \* .....P.436
- E** Door lock switches .....P.141
- F** Outside rear view mirror switches .....P.186

\*: If equipped

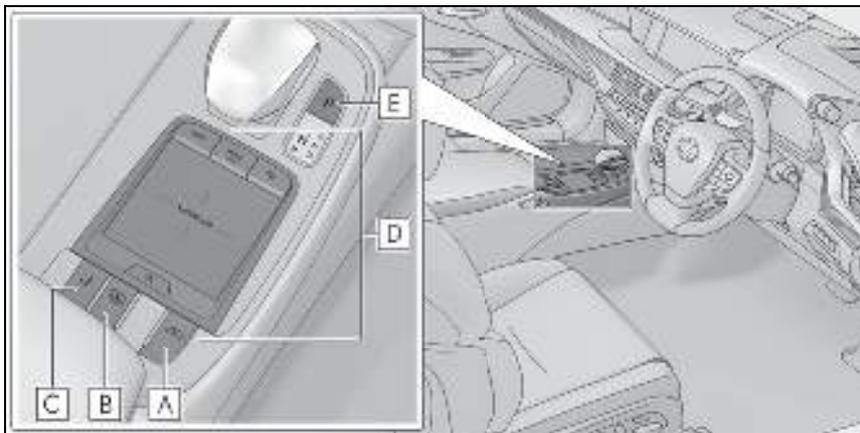


- A** Meter control switches .....P.119

- B** Paddle shift switches ..... P.220, 220
- C** Phone switch <sup>\*1</sup>
- D** LTA (Lane Tracing Assist) switch <sup>\*2</sup> ..... P.283  
 LDA (Lane Departure Alert with steering control) switch <sup>\*2</sup> ..... P.293
- E** Vehicle-to-vehicle distance switch <sup>\*2</sup> .....P.315
- F** Cruise control switches  
 Dynamic radar cruise control <sup>\*2</sup> .....P.312  
 Cruise control <sup>\*2</sup> ..... P.320
- G** Audio remote control switches <sup>\*1</sup>
- H** Talk switch <sup>\*1</sup>

<sup>\*1</sup>: Refer to "Navigation and Multimedia System Owner's Manual".

<sup>\*2</sup>: If equipped

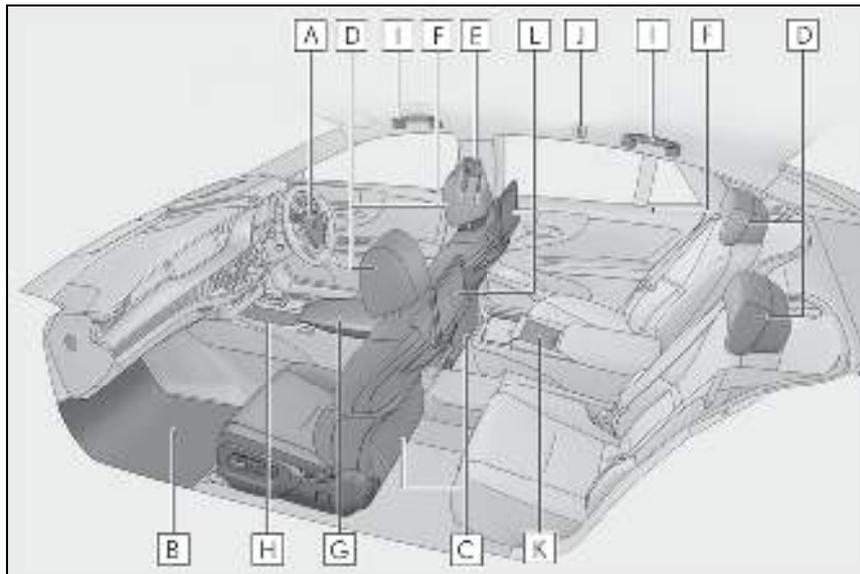


- A** Vehicle height adjustment switch ..... P.376
- B** Rear sunshade switch <sup>\*1</sup> ..... P.438
- C** Seat switch ..... P.164
- D** Remote Touch <sup>\*2</sup> ..... P.392
- E** P position switch ..... P.218

<sup>\*1</sup>: If equipped

<sup>\*2</sup>: Refer to "Navigation and Multimedia System Owner's Manual".

### ■ Interior (Right-hand drive vehicles)

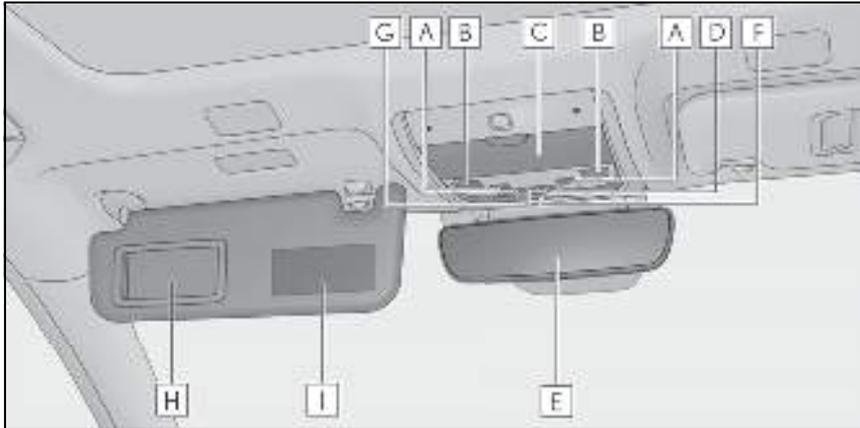


<b>A</b>	SRS airbags.....	P.39
<b>B</b>	Floor mats.....	P.32
<b>C</b>	Front seats.....	P.163
<b>D</b>	Head restraints.....	P.180
<b>E</b>	Seat belts.....	P.34
<b>F</b>	Inside lock buttons.....	P.141
<b>G</b>	Console box.....	P.426
<b>H</b>	Cup holders.....	P.425
<b>I</b>	Assist grips.....	P.433
<b>J</b>	Coat hooks.....	P.434
<b>K</b>	Rear Multi Operation Panel <sup>*1</sup> .....	P.396
<b>L</b>	Rear seat entertainment system <sup>*1,2</sup>	

<sup>\*1</sup>: If equipped

<sup>\*2</sup>: Refer to "Navigation and Multimedia System Owner's Manual".

### ■ Ceiling (Right-hand drive vehicles)



- A** Moon roof switches .....P.192
- B** Personal lights .....P.421
- C** Auxiliary box ..... P.427
- D** Door-linked interior light ..... P.421
- E** Inside rear view mirror ..... P.185
- F** Interior light ..... P.420
- G** Intrusion sensor and tilt sensor cancel switch ..... P.102
- H** Vanity mirrors .....P.436
- I** Sun visors \* .....P.436

\* : 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. (→P.60)



## For safety and security

1

31

### 1-1. For safe use

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- For safe driving.....33
- Seat belts .....34
- SRS airbags .....39
- Pop Up Hood .....47
- Front passenger occupant classification system .....50
- Exhaust gas precautions .....54

### 1-2. Child safety

- Airbag manual on-off system .....55
- Riding with children .....56
- Child restraint systems (except for Korea).....57
- Child restraint systems (for Korea).....87

### 1-3. Theft deterrent system

- Engine immobilizer system.....97
- Alarm .....100

1

For safety and security

### Before driving

Observe the following before starting off in the vehicle to ensure safety of driving.

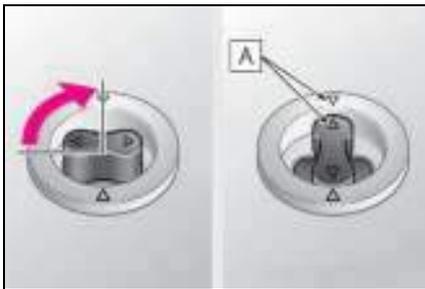
### Installing floor mats

Use only floor mats designed specifically for vehicles of the same model and model year as your vehicle. Fix them securely in place onto the carpet.

- 1 Insert the retaining hooks (clips) into the floor mat eyelets.



- 2 Turn the upper knob of each retaining hook (clip) to secure the floor mats in place.



Always align the  marks **A**.

The shape of the retaining hooks (clips) may differ from that shown in the illustra-

tion.

### ⚠ WARNING

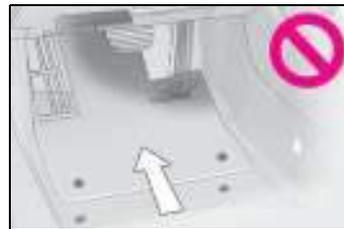
Observe the following precautions. Failure to do so may cause the driver's floor mat to slip, possibly interfering with the pedals while driving. An unexpectedly high speed may result or it may become difficult to stop the vehicle. This could lead to an accident, resulting in death or serious injury.

#### ■ When installing the driver's floor mat

- Do not use floor mats designed for other models or different model year vehicles, even if they are Lexus Genuine floor mats.
- Only use floor mats designed for the driver's seat.
- Always install the floor mat securely using the retaining hooks (clips) provided.
- Do not use two or more floor mats on top of each other.
- Do not place the floor mat bottom-side up or upside-down.

#### ■ Before driving

- Check that the floor mat is securely fixed in the correct place with all the provided retaining hooks (clips). Be especially careful to perform this check after cleaning the floor.

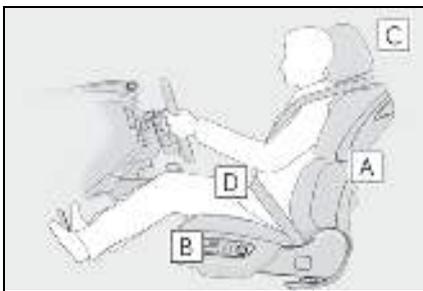


- With the engine stopped and the shift position in P, fully depress each pedal to the floor to make sure it does not interfere with the floor mat.

### For safe driving

For safe driving, adjust the seat and mirror to an appropriate position before driving.

### Correct driving posture



- A** Adjust the angle of the seatback so that you are sitting straight up and so that you do not have to lean forward to steer. (→P.163)
- B** Adjust the seat so that you can depress the pedals fully and so that your arms bend slightly at the elbow when gripping the steering wheel. (→P.163)
- C** Lock the head restraint in place with the center of the head restraint closest to the top of your ears. (→P.180)
- D** Wear the seat belt correctly. (→P.34)

### ⚠ WARNING

#### ■ For safe driving

Observe the following precautions. Failure to do so may result in death or serious injury.

- Do not adjust the position of the driver's seat while driving. Doing so could cause the driver to lose control of the vehicle.
- Do not place a cushion between the driver or passenger and the seatback. A cushion may prevent correct posture from being achieved, and reduce the effectiveness of the seat belt and head restraint.
- Do not place anything under the front seats. Objects placed under the front seats may become jammed in the seat tracks and stop the seat from locking in place. This may lead to an accident and the adjustment mechanism may also be damaged.
- Always observe the legal speed limit when driving on public roads.
- When driving over long distances, take regular breaks before you start to feel tired. Also, if you feel tired or sleepy while driving, do not force yourself to continue driving and take a break immediately.

### Correct use of the seat belts

Make sure that all occupants are wearing their seat belts before driving the vehicle. (→P.34)

Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belt. (→P.57, 87)

### Adjusting the mirrors

Make sure that you can see backward clearly by adjusting the inside and outside rear view mirrors properly.

(→P.185, 186)

## Seat belts

**Make sure that all occupants are wearing their seat belts before driving the vehicle.**

### WARNING

Observe the following precautions to reduce the risk of injury in the event of sudden braking, sudden swerving or an accident. Failure to do so may cause death or serious injury.

#### ■ Wearing a seat belt

- Ensure that all passengers wear a seat belt.
- Always wear a seat belt properly.
- Each seat belt should be used by one person only. Do not use a seat belt for more than one person at once, including children.
- Lexus recommends that children be seated in the rear seat and always use a seat belt and/or an appropriate child restraint system.
- To achieve a proper seating position, do not recline the seat more than necessary. The seat belt is most effective when the occupants are sitting up straight and well back in the seats.
- Do not wear the shoulder belt under your arm.
- Always wear your seat belt low and snug across your hips.

**⚠ WARNING****■ Pregnant women**

Obtain medical advice and wear the seat belt in the proper way. (→P.35)

Women who are pregnant should position the lap belt as low as possible over the hips in the same manner as other occupants, extending the shoulder belt completely over the shoulder and avoiding belt contact with the rounding of the abdominal area.

If the seat belt is not worn properly, not only the pregnant woman, but also the fetus could suffer death or serious injury as a result of sudden braking or a collision.

**■ People suffering illness**

Obtain medical advice and wear the seat belt in the proper way. (→P.35)

**■ When children are in the vehicle**

→P.83, 93

**■ Seat belt damage and wear**

- Do not damage the seat belts by allowing the belt, plate, or buckle to be jammed in the door.

- Inspect the seat belt system periodically. Check for cuts, fraying, and loose parts. Do not use a damaged seat belt until it is replaced. Damaged seat belts cannot protect an occupant from death or serious injury.

- Ensure that the belt and plate are locked and the belt is not twisted. If the seat belt does not function correctly, immediately contact your Lexus dealer.

- Replace the seat assembly, including the belts, if your vehicle has been involved in a serious accident, even if there is no obvious damage.

- Do not attempt to install, remove, modify, disassemble or dispose of the seat belts. Have any necessary repairs carried out by your Lexus dealer. Inappropriate handling may lead to incorrect operation.

**Correct use of the seat belts**

- Extend the shoulder belt so that it comes fully over the shoulder, but does not come into contact with the neck or slide off the shoulder.



- Position the lap belt as low as possible over the hips.
- Adjust the position of the seatback. Sit up straight and well back in the seat.

- Do not twist the seat belt.

■ Child seat belt usage

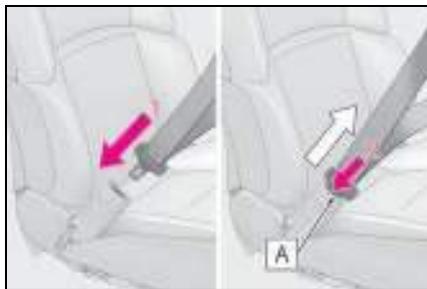
The seat belts of your vehicle were principally designed for persons of adult size.

- Use a child restraint system appropriate for the child, until the child becomes large enough to properly wear the vehicle's seat belt. (→P.57, 87)
- When the child becomes large enough to properly wear the vehicle's seat belt, follow the instructions regarding seat belt usage. (→P.34)

■ Seat belt regulations

If seat belt regulations exist in the country where you reside, please contact your Lexus dealer for seat belt replacement or installation.

**Fastening and releasing the seat belt**



- 1 To fasten the seat belt, push the plate into the buckle until a click sound is heard.
- 2 To release the seat belt, press the release button **A**.

If the seat belt cannot be pulled out of the retractor, firmly pull the belt and release it.

■ Emergency locking retractor (ELR)

The retractor will lock the belt during a sudden stop or on impact. It may also lock if you

lean forward too quickly. A slow, easy motion will allow the belt to extend so that you can move around fully.

**Easy Access Buckle (front seats)\***

The front seat belt buckles move outward automatically for easier access.

- ▶ When entering the vehicle

When a front door is opened, the seat belt buckle for the corresponding seat will move outward automatically. The buckle will retract automatically after the plate is inserted and locked to the buckle.

- ▶ When exiting the vehicle (driver's seat only)

If the engine switch is turned off when the driver's seat belt is fastened, the driver's seat belt buckle will move outward. The buckle will retract automatically when the driver's seat belt is released.

\* : If equipped

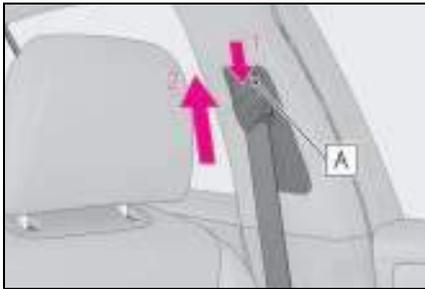
■ Easy Access Buckle

- When the seat belt buckle is in the outward position and not latched, if the front passenger's seat is not occupied and the vehicle is driven, the seat belt buckle will return to its original position.
- If an occupant exits the vehicle and leaves the front door open and then enters the vehicle again, the seat belt buckle will not operate until the door is closed and then opened again.

■ Customization

Some functions can be customized. (→P.568)

### Adjusting the seat belt shoulder anchor height (front seats)



- 1 Push the seat belt shoulder anchor down while pressing the release button **A**.
- 2 Push the seat belt shoulder anchor up.

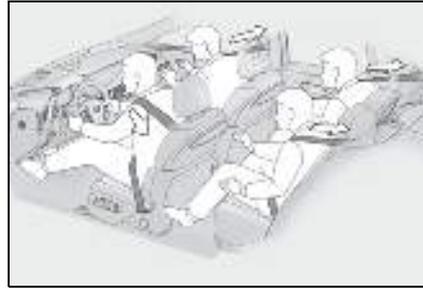
Move the height adjuster up and down as needed until you hear a click.

#### **WARNING**

##### ■ Adjustable shoulder anchor

Always make sure the shoulder belt is positioned across the center of your shoulder. The belt should be kept away from your neck, but not falling off your shoulder. Failure to do so could reduce the amount of protection in an accident and cause death or serious injuries in the event of a sudden stop, sudden swerve or accident.

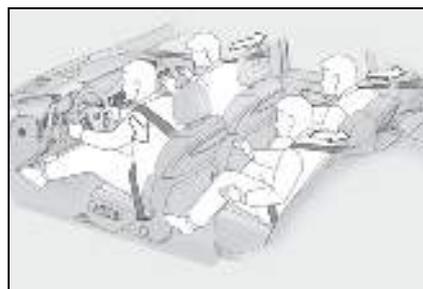
### Seat belt pretensioners (front and outboard rear seats) (except for Korea)



The pretensioners help the seat belts to quickly restrain the occupants by retracting the seat belts when the vehicle is subjected to certain types of severe frontal or side collision.

The pretensioners do not activate in the event of a minor frontal impact, a minor side impact, a rear impact or a vehicle rollover.

### Seat belt pretensioners (front and outboard rear seats) (for Korea)



The pretensioners help the seat belts to quickly restrain the occupants by retracting the seat belts when the vehicle is subjected to certain types of

severe frontal or side collision or a vehicle rollover.

The pretensioners do not activate in the event of a minor frontal impact, a minor side impact or a rear impact.

#### ■ Replacing the belt after the pretensioner has been activated

If the vehicle is involved in multiple collisions, the pretensioner will activate for the first collision, but will not activate for the second or subsequent collisions.

#### WARNING

##### ■ Seat belt pretensioners

Observe the following precautions to reduce the risk of injury in the event of sudden braking, sudden swerving or an accident.

Failure to do so may cause death or serious injury.

- Vehicles with front passenger occupant classification system: Do not place anything, such as a cushion, on the front passenger's seat. Doing so will disperse the passenger's weight, which prevents the sensor from detecting the passenger's weight properly. As a result, the seat belt pretensioner for the front passenger's seat may not activate in the event of a collision.
- If the pretensioner has activated, the SRS warning light will come on. In that case, the seat belt cannot be used again and must be replaced at your Lexus dealer.

#### Pre-collision seat belts with comfort function (front seats of vehicles with Lexus Safety System + A)

When the vehicle speed reaches

approximately 20 km/h (12 mph) or higher, the seat belts will retract slightly to remove any slack.

If the system determines that a collision is unavoidable, the front seat belts will retract before the collision. (→P.261)

#### ■ Pre-collision seat belts with comfort function

A motor sound may be heard when a front seat belt is released or a front door is opened. This does not indicate a malfunction.

#### ■ Customization

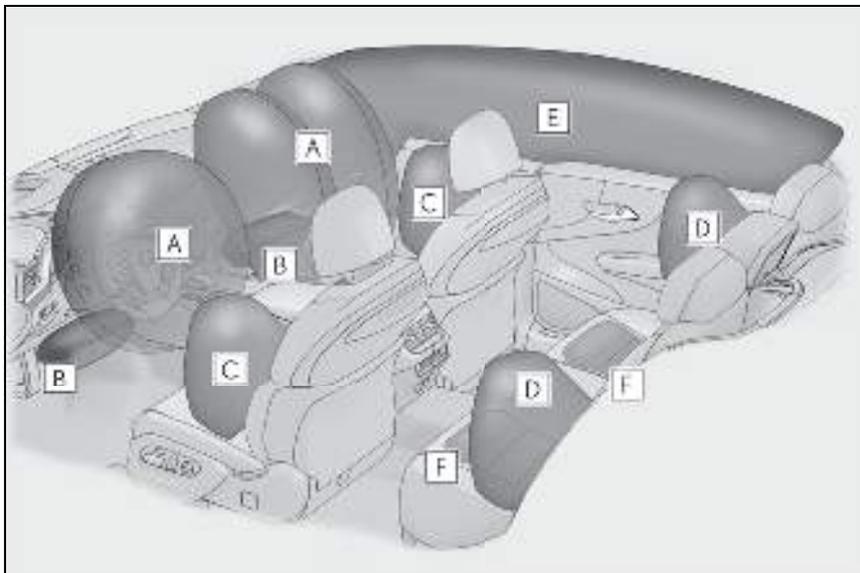
Some functions can be customized. (→P.568)

## SRS airbags

The SRS airbags inflate when the vehicle is subjected to certain types of severe impacts that may cause significant injury to the occupants. They work together with the seat belts to help reduce the risk of death or serious injury.

### SRS airbag system

#### ■ Location of the SRS airbags



#### ▶ SRS front airbags

**A** SRS driver airbag/front passenger airbag  
Can help protect the head and chest of the driver and front passenger from impact with interior components

**B** SRS knee airbags  
Can help provide driver and front passenger protection

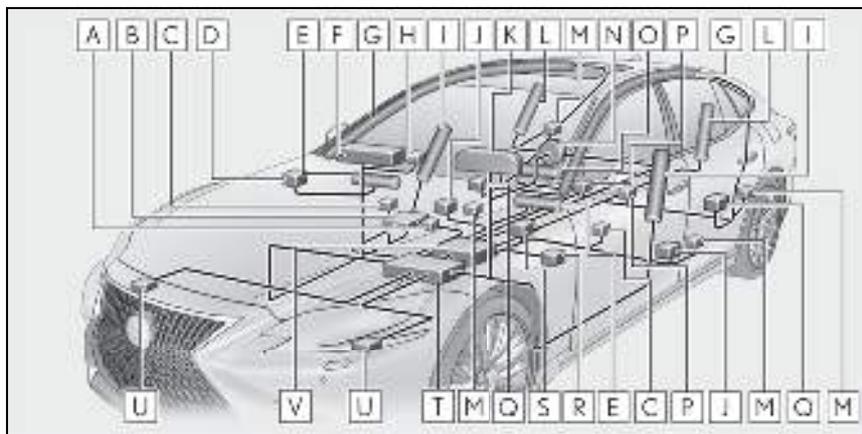
#### ▶ SRS side and curtain shield airbags

**C** SRS front side airbags  
Can help protect the torso of the front seat occupants

**D** SRS rear side airbags  
Can help protect the torso of occupants in the rear outer seats

- E** SRS curtain shield airbags
  - Can help protect primarily the head of occupants in the outer seats
  - For Korea: Can help prevent the occupants from being thrown from the vehicle in the event of vehicle rollover
- F** SRS seat cushion airbags (if equipped)
  - Can help restrain the power rear seat occupants

■ SRS airbag system components



- A** Front passenger's seat belt buckle switch
- B** Front passenger occupant classification system (ECU and sensors) (if equipped)
- C** Side impact sensors (front door)
- D** Airbag manual on-off switch (if equipped)
- E** Knee airbags
- F** Front passenger airbag
- G** Curtain shield airbags
- H** "PASSENGER AIR BAG" indicator light (if equipped)/"AIR BAG ON" and "AIR BAG OFF" indicator light (if equipped)
- I** Front side airbags
- J** Side impact sensors (front)
- K** SRS warning light
- L** Rear side airbags
- M** Seat belt pretensioners

- N** Driver airbag
- O** Seat cushion airbags (if equipped)
- P** Rear seat belt buckle switches (if equipped)
- Q** Side impact sensors (rear)
- R** Driver's seat position sensor
- S** Driver's seat belt buckle switch
- T** Airbag sensor assembly
- U** Front impact sensors
- V** Pop Up Hood computer assembly

The main SRS airbag system components are shown above. The SRS airbag system is controlled by the airbag sensor assembly. As the airbags deploy, a chemical reaction in the inflators quickly fills the airbags with non-toxic gas to help restrain the motion of the occupants.

#### ■ If the SRS airbags deploy (inflate)

- Slight abrasions, burns, bruising etc., may be sustained from SRS airbags, due to the extremely high speed deployment (inflation) by hot gases.
- A loud noise and white powder will be emitted.
- Parts of the airbag module (steering wheel hub, airbag cover and inflator) as well as the seats, parts of the front and rear pillars, and roof side rails, may be hot for several minutes. The airbag itself may also be hot.
- The windshield may crack.
- All of the doors will be unlocked. (→P.139)
- The brakes and stop lights will be controlled automatically. (→P.380)
- The interior lights will turn on automatically. (→P.422)
- The emergency flashers will be turned on automatically. (→P.512)
- Fuel supply to the engine will be stopped. (→P.520)

#### ■ PCS-linked SRS airbag deployment control (vehicles with Lexus Safety System + A)

If the PCS (Pre-Collision System) determines that the possibility of a side collision is high, the SRS side and curtain shield airbags will be prepared to operate.

#### ■ SRS airbag deployment conditions (SRS front airbags/SRS seat cushion airbags)

- The SRS front airbags and SRS seat cushion airbags will deploy in the event of an impact that exceeds the set threshold level (the level of force corresponding to an approximately 20 - 30 km/h [12 - 18 mph] frontal collision with a fixed wall that does not move or deform).

However, this threshold velocity will be considerably higher in the following situations:

- If the vehicle strikes an object, such as a parked vehicle or sign pole, which can move or deform on impact
- If the vehicle is involved in an underride collision, such as a collision in which the front of the vehicle underrides, or goes under, the bed of a truck
- Depending on the type of collision, it is possible that only the seat belt

pretensioners will activate.

- Front passenger occupant classification system: The SRS front airbags for the front passenger will not activate if there is no passenger sitting in the front passenger seat. However, the SRS front airbags for the front passenger may deploy if luggage is put in the seat, even if the seat is unoccupied.
- The SRS seat cushion airbags on the rear seat will not operate if the occupant is not wearing a seat belt.

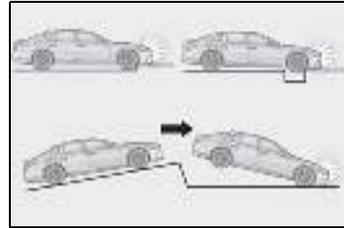
#### ■ SRS airbag deployment conditions (SRS side and curtain shield airbags)

- The SRS side and curtain shield airbags will deploy in the event of an impact that exceeds the set threshold level (the level of force corresponding to the impact force produced by an approximately 1500 kg [3300 lb.] vehicle colliding with the vehicle cabin from a direction perpendicular to the vehicle orientation at an approximate speed of 20 - 30 km/h [12 - 18 mph]).
- For Korea: Both SRS curtain shield airbags may deploy in the event of a severe side collision.
- For Korea: Both SRS curtain shield airbags will deploy in the event of vehicle rollover.
- Both SRS curtain shield airbags may also deploy in the event of a severe frontal collision.

#### ■ Conditions under which the SRS airbags may deploy (inflate), other than a collision

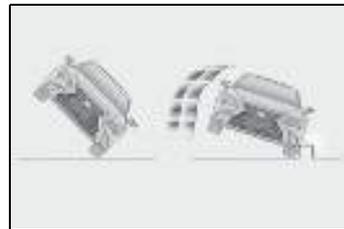
The SRS front airbags, SRS curtain shield airbags and SRS seat cushion airbags may also deploy if a serious impact occurs to the underside of your vehicle. Some examples are shown in the illustration.

- Hitting a curb, edge of pavement or hard surface
- Falling into or jumping over a deep hole
- Landing hard or falling



For Korea: The SRS curtain shield airbags may also deploy under the situations shown in the illustration.

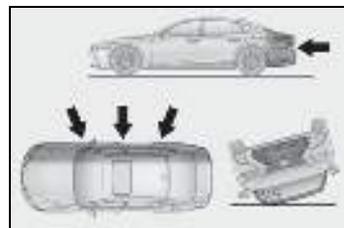
- The angle of vehicle tip-up is marginal.
- The vehicle skids and hits a curb stone.



#### ■ Types of collisions that may not deploy the SRS airbags (SRS front airbags/SRS seat cushion airbags)

The SRS front airbags and SRS seat cushion airbags do not generally inflate if the vehicle is involved in a side or rear collision, if it rolls over, or if it is involved in a low-speed frontal collision. But, whenever a collision of any type causes sufficient forward deceleration of the vehicle, deployment of the SRS front airbags and SRS seat cushion airbags may occur.

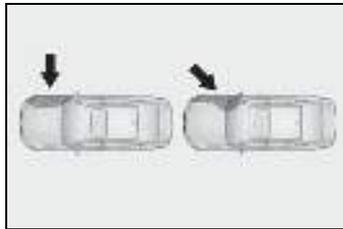
- Collision from the side
- Collision from the rear
- Vehicle rollover



■ **Types of collisions that may not deploy the SRS airbags (SRS side and curtain shield airbags)**

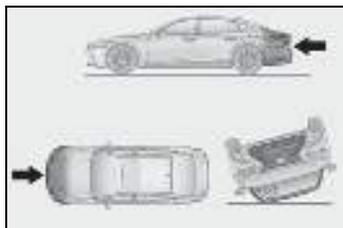
The SRS side and curtain shield airbags may not activate if the vehicle is subjected to a collision from the side at certain angles, or a collision to the side of the vehicle body other than the passenger compartment.

- Collision from the side to the vehicle body other than the passenger compartment
- Collision from the side at an angle



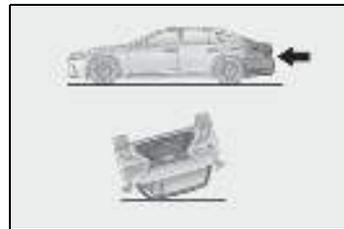
The SRS side airbags do not generally inflate if the vehicle is involved in a frontal or rear collision, if it rolls over, or if it is involved in a low-speed side collision.

- Collision from the front
- Collision from the rear
- Vehicle rollover



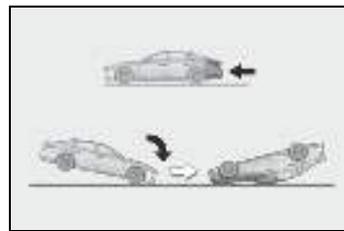
Except for Korea: The SRS curtain shield airbags do not generally inflate if the vehicle is involved in a rear collision, if it rolls over, or if it is involved in a low-speed side or low-speed frontal collision.

- Collision from the rear
- Vehicle rollover



For Korea: The SRS curtain shield airbags do not generally inflate if the vehicle is involved in a rear collision, if it pitches end over end, or if it is involved in a low-speed side or low-speed frontal collision.

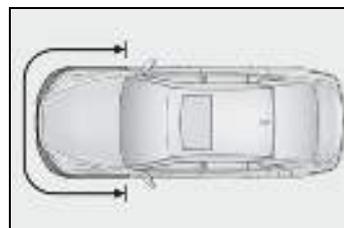
- Collision from the rear
- Pitching end over end



■ **When to contact your Lexus dealer**

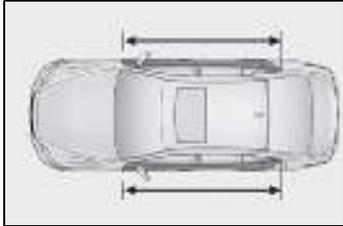
In the following cases, the vehicle will require inspection and/or repair. Contact your Lexus dealer as soon as possible.

- Any of the SRS airbags have been inflated.
- The front of the vehicle is damaged or deformed, or was involved in an accident that was not severe enough to cause the SRS front airbags and SRS cushion airbags to inflate.

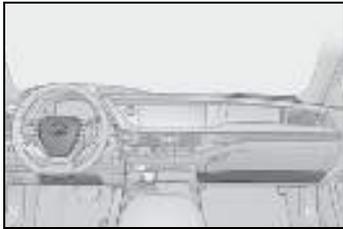


- A portion of a door or its surrounding area is damaged, deformed or has had a hole made in it, or the vehicle was involved in an accident that was not

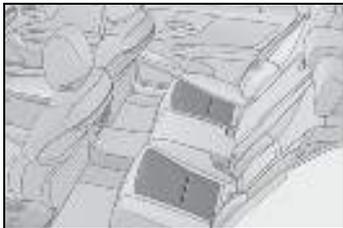
severe enough to cause the SRS side and curtain shield airbags to inflate.



- The pad section of the steering wheel, dashboard near the front passenger airbag or lower portion of the instrument panel is scratched, cracked, or otherwise damaged.



- Vehicles with power rear seat: The seat cushion surface is scratched, cracked, or otherwise damaged.

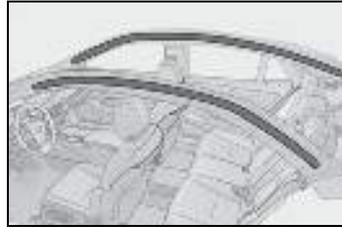


- The surface of the seats with the side airbag is scratched, cracked, or otherwise damaged.



- The portion of the front pillars, rear pillars

or roof side rail garnishes (padding) containing the curtain shield airbags inside is scratched, cracked, or otherwise damaged.



### WARNING

#### ■ SRS airbag precautions

Observe the following precautions regarding the SRS airbags. Failure to do so may cause death or serious injury.

- The driver and all passengers in the vehicle must wear their seat belts properly. The SRS airbags are supplemental devices to be used with the seat belts.
- The SRS driver airbag deploys with considerable force, and can cause death or serious injury especially if the driver is very close to the airbag.

Since the risk zone for the driver's airbag is the first 50 - 75 mm (2 - 3 in.) of inflation, placing yourself 250 mm (10 in.) from your driver airbag provides you with a clear margin of safety. This distance is measured from the center of the steering wheel to your breastbone. If you sit less than 250 mm (10 in.) away now, you can change your driving position in several ways:

- Move your seat to the rear as far as you can while still reaching the pedals comfortably.

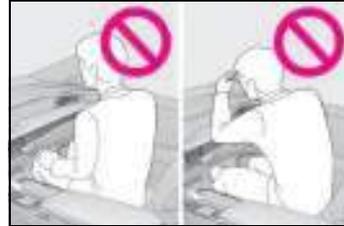
### ⚠ WARNING

- Slightly recline the back of the seat. Although vehicle designs vary, many drivers can achieve the 250 mm (10 in.) distance, even with the driver seat all the way forward, simply by reclining the back of the seat somewhat. If reclining the back of your seat makes it hard to see the road, raise yourself by using a firm, non-slippery cushion, or raise the seat if your vehicle has that feature.
- If your steering wheel is adjustable, tilt it downward. This points the airbag toward your chest instead of your head and neck.

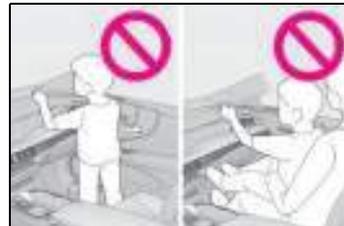
The seat should be adjusted as recommended above, while still maintaining control of the foot pedals, steering wheel, and your view of the instrument panel controls.

- The SRS front passenger airbag also deploys with considerable force, and can cause death or serious injury especially if the front passenger is very close to the airbag. The front passenger seat should be as far from the airbag as possible with the seatback adjusted, so the front passenger sits upright.
- Improperly seated and/or restrained infants and children can be killed or seriously injured by a deploying airbag. An infant or child who is too small to use a seat belt should be properly secured using a child restraint system. Lexus strongly recommends that all infants and children be placed in the rear seats of the vehicle and properly restrained. The rear seats are safer for infants and children than the front passenger seat. (→P.87, 57)

- Do not sit on the edge of the seat or lean against the dashboard.



- Do not allow a child to stand in front of the SRS front passenger airbag unit or sit on the knees of a front passenger.



- Do not allow the front seat occupants to hold items on their knees.
- Do not lean against the door, the roof side rail or the front, side and rear pillars.



**⚠ WARNING**

- Do not allow anyone to kneel on the passenger seats toward the door or put their head or hands outside the vehicle.



- Do not attach anything to or lean anything against areas such as the dashboard, steering wheel pad and lower portion of the instrument panel. These items can become projectiles when the SRS driver, front passenger and knee airbags deploy.



- Do not attach anything to areas such as a door, windshield, side windows, front or rear pillar, roof side rail and assist grip.



- Do not hang coat hangers or hard objects on the coat hooks. All of these items could become projectiles and may cause death or serious injury, should the SRS curtain shield airbags deploy.

- If a vinyl cover is put on the area where the SRS knee airbag will deploy, be sure to remove it.

- Do not use seat accessories which cover the parts where the SRS side airbags inflate as they may interfere with inflation of the SRS airbags. Such accessories may prevent the side airbags from activating correctly, disable the system or cause the side airbags to inflate accidentally, resulting in death or serious injury.

- Do not strike or apply significant levels of force to the area of the SRS airbag components or the front doors. Doing so can cause the SRS airbags to malfunction.

- Do not touch any of the component parts immediately after the SRS airbags have deployed (inflated) as they may be hot.

- If breathing becomes difficult after the SRS airbags have deployed, open a door or window to allow fresh air in, or leave the vehicle if it is safe to do so. Wash off any residue as soon as possible to prevent skin irritation.

- If the areas where the SRS airbags are stored, such as the steering wheel pad and front and rear pillar garnishes are damaged or cracked, have them replaced by your Lexus dealer.

**⚠ WARNING**

- Vehicles with front passenger occupant classification system:  
Do not place anything, such as a cushion, on the front passenger's seat. Doing so will disperse the passenger's weight, which prevents the sensor from detecting the passenger's weight properly. As a result, the SRS front airbags for the front passenger may not deploy in the event of a collision.

- **Modification and disposal of SRS airbag system components**

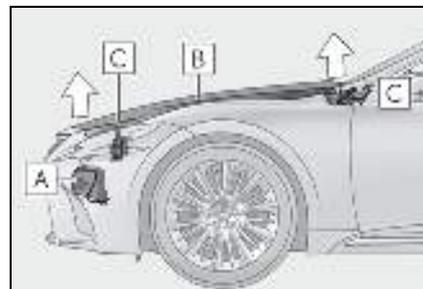
Do not dispose of your vehicle or perform any of the following modifications without consulting your Lexus dealer. The SRS airbags may malfunction or deploy (inflate) accidentally, causing death or serious injury.

- Installation, removal, disassembly and repair of the SRS airbags
- Repairs, modifications, removal or replacement of the steering wheel, instrument panel, dashboard, seats or seat upholstery, front, side and rear pillars, roof side rails, front door panels, front door trims or front door speakers
- Modifications to the front door panel (such as making a hole in it)
- Repairs or modifications of the front fender, front bumper, or side of the occupant compartment
- Except of Korea: Installation of a grille guard (bull bars, kangaroo bar, etc.), snow plows or winches
- For Korea: Installation of a grille guard (bull bars, kangaroo bar, etc.), snow plows, winches or roof luggage carrier
- Modifications to the vehicle's suspension system
- Installation of electronic devices such as mobile two-way radios (RF-transmitter) and CD players

**Pop Up Hood**

In the event of a frontal collision with a body, such as a pedestrian, the Pop Up Hood system raises the hood to reduce the possibility of a serious impact to the pedestrian's head area by adding clearance to the engine compartment.

When the sensors located at the back of the front bumper detect a frontal impact with a body, such as a pedestrian, which meets or exceeds the threshold level while the vehicle is being driven within the operational speed range, the system operates.

**System components**

**A** Sensors

**B** Hood

**C** Lifters

- **Pop Up Hood precautions**

- Before scrapping your vehicle, make sure to contact your Lexus dealer.
- The Pop Up Hood system cannot be reused once it has operated. Have it

replaced by your Lexus dealer.

#### ■ PCS-linked Pop Up Hood operation control (Vehicles with Lexus Safety System + A or Lexus Safety System + \*)

If the PCS (Pre-Collision System) determines that the possibility of a collision with a pedestrian or bicyclist is high, the Pop Up Hood will be prepared to operate.

\*: For countries/areas specified as Region A (→P.271)

#### ■ Pop Up Hood operational conditions

The Pop Up Hood will operate when the vehicle detects an impact such as the following:

- The front bumper detects a frontal impact equivalent to or greater than that of a pedestrian while the vehicle being driven within the operational speed range of approximately 25 to 55 km/h (16 to 34 mph). (The system is operated by an impact of threshold level or greater, even in the case of a minor collision that may not leave a trace on the front bumper. Also, depending on the impact conditions or vehicle speed, the system may operate by a collision with a light or small object or a small animal.)
- In other situations, such as the following the system may operate when an impact is applied to the lower part of the vehicle or front bumper:
  - Colliding with a curb
  - Falling into a deep hole
  - Landing hard
  - Hitting the slope of a parking lot, an undulating road, a protruding object or falling object

#### ■ Conditions under which the Pop Up Hood may not operate properly

- If a pedestrian collides with the right or left corner of the front bumper or the side of the vehicle. As such impacts may be difficult to detect, the system may not operate.
- If the vehicle speed is not detected correctly, such as if the vehicle is sliding sideways, the system may not operate properly.

#### ■ Conditions under which the Pop Up Hood will not operate

The Pop Up Hood will not operate in the following situations:

- Colliding with a lying person
- A frontal impact applied to the front bumper while driving at speeds outside of the operational speed range
- A side impact or rear impact
- A vehicle rollover (In some accident situations, the Pop Up Hood may operate.)

#### WARNING

##### ■ When the Pop Up Hood is operated

- Do not pull the hood lock release lever. Doing so after the Pop Up Hood has operated will further raise the hood and may cause an injury. Do not drive with the hood raised, as doing so may block the driver's vision, possibly causing an accident.
- Do not forcibly push down the hood. As the popped up hood cannot be lowered by hand, doing so may deform the hood or cause an injury.
- If the Pop Up Hood has operated, have it replaced by your Lexus dealer. If the Pop Up Hood has operated, stop the vehicle in a safe place and contact your Lexus dealer.
- Do not touch the lifters immediately after the Pop Up Hood has operated, as the lifters may be hot and burn you.

#### NOTICE

##### ■ Pop Up Hood precautions

- Make sure to close the hood before driving, as the system may not operate properly if the hood is not fully closed.



## NOTICE

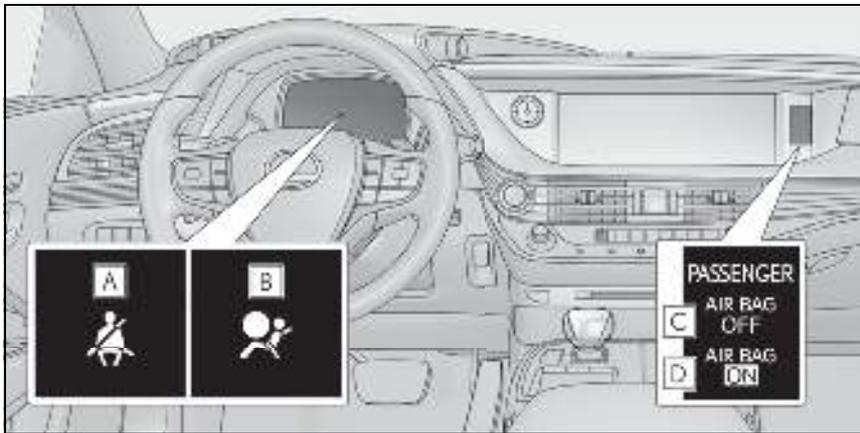
- Make sure that all 4 tires are of the specified size and inflated to the specified tire pressure. If tires of a different size are used, the system may not operate properly.
- If something has hit the area around the front bumper, the sensors may be damaged even if the Pop Up Hood has not operated. Have the vehicle inspected by your Lexus dealer.
- Do not remove or repair the parts or wiring of the Pop Up Hood, as doing so may cause accidental operation or prevent the system from operating properly. If repair or replacement is necessary, contact your Lexus dealer.
- Do not remove such components as the front bumper, hood or suspension, or replace them with non-genuine parts, as doing so may prevent the system from operating properly.
- Do not install anything to the front bumper or hood, as doing so may prevent the sensors from detecting an impact correctly and prevent the system from operating properly.
- Do not close the hood with force or apply load to the lifters, as doing so may damage the lifters and prevent the system from operating properly.
- Do not modify the suspension, as changes made to the vehicle height may prevent the system from operating properly.

## Front passenger occupant classification system\*

\*: If equipped

Your vehicle is equipped with a front passenger occupant classification system. This system detects the conditions of the front passenger seat and activates or deactivates the front passenger airbag and front passenger knee airbag.

### System components



- A** Driver's and front passenger's seat belt reminder light
- B** SRS warning light
- C** "AIR BAG OFF" indicator light
- D** "AIR BAG ON" indicator light

#### **⚠ WARNING**

##### **■ Front passenger occupant classification system precautions**

Observe the following precautions regarding the front passenger occupant classification system. Failure to do so may cause death or serious injury.

- Wear the seat belt properly.

- Make sure the front passenger's seat belt plate has not been left inserted into the buckle before someone sits in the front passenger seat.
- Do not apply a heavy load to the front passenger seat or equipment (e.g. seatback pocket).
- Do not put weight on the front passenger seat by putting your hands or feet on the front passenger seat seatback from the rear passenger seat.

 **WARNING**

- Do not let a rear passenger lift the front passenger seat with their feet or press on the seatback with their legs.
- Do not put objects under the front passenger seat.
- Do not recline the front passenger seatback so far that it touches a rear seat. This may cause the "AIR BAG OFF" indicator light to be illuminated, which indicates that the SRS airbags for the front passenger will not activate in the event of a severe accident. If the seatback touches the rear seat, return the seatback to a position where it does not touch the rear seat. Keep the front passenger seatback as upright as possible when the vehicle is moving. Reclining the seatback excessively may lessen the effectiveness of the seat belt system.
- If an adult sits in the front passenger seat, the "AIR BAG ON" indicator light is illuminated. If the "AIR BAG OFF" indicator is illuminated, ask the passenger to sit up straight, well back in the seat, feet on the floor, and with the seat belt worn correctly. If the "AIR BAG OFF" indicator still remains illuminated, either ask the passenger to move to the rear seat, or if that is not possible, move the front passenger seat fully rearward.
- When it is unavoidable to install a forward-facing child restraint system on the front passenger seat, install the child restraint system on the front passenger seat in the proper order. (→P.88)
- Do not modify or remove the front seats.
- Do not kick the front passenger seat or subject it to severe impact. Otherwise, the SRS warning light may come on to indicate a malfunction of the front passenger occupant classification system. In this case, contact your Lexus dealer immediately.
- Child restraint systems installed on the rear seat should not contact the front seatbacks.
- Do not use a seat accessory, such as a cushion and seat cover, that covers the seat cushion surface.
- Do not modify or replace the upholstery of the front seat.

### Condition and operation in the front passenger occupant classification system

#### ■ Adult<sup>\*1</sup>

Indicator/warning light	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG ON"
	SRS warning light	Off
	Driver's and front passenger's seat belt reminder light	Off <sup>*2</sup> or flashing <sup>*3</sup>
Devices	Front passenger airbag	Activated
	Front passenger knee airbag	

#### ■ Child<sup>\*4</sup>

Indicator/warning light	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG OFF" or "AIR BAG ON" <sup>*4</sup>
	SRS warning light	Off
	Driver's and front passenger's seat belt reminder light	Off <sup>*2</sup> or flashing <sup>*3</sup>
Devices	Front passenger airbag	Deactivated or activated <sup>*4</sup>
	Front passenger knee airbag	

#### ■ Child restraint system with infant<sup>\*5</sup>

Indicator/warning light	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG OFF" <sup>*6</sup>
	SRS warning light	Off
	Driver's and front passenger's seat belt reminder light	Off <sup>*2</sup> or flashing <sup>*3</sup>
Devices	Front passenger airbag	Deactivated
	Front passenger knee airbag	

### ■ Unoccupied

Indicator/warning light	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG OFF"
	SRS warning light	Off
	Driver's and front passenger's seat belt reminder light	
Devices	Front passenger airbag	Deactivated
	Front passenger knee airbag	

### ■ There is a malfunction in the system

Indicator/warning light	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG OFF"
	SRS warning light	On
	Driver's and front passenger's seat belt reminder light	Off
Devices	Front passenger airbag	Deactivated
	Front passenger knee airbag	

\*1: The system judges a person of adult size as an adult. When a smaller adult sits in the front passenger seat, the system may not recognize him/her as an adult depending on his/her physique and posture.

\*2: In the event the front passenger is wearing a seat belt

\*3: In the event the front passenger does not wear a seat belt

\*4: For some children, child in seat, child in booster seat or child in convertible seat, the system may not recognize him/her as a child. Factors which may affect this can be the physique or posture.

\*5: Never install a rear-facing child restraint system on the front passenger seat. A forward-facing child restraint system should only be installed on the front passenger seat when it is unavoidable. (→P.87)

\*6: In case the indicator light is not illuminated, consult this manual on how to install the child restraint system properly. (→P.88)

**Exhaust gas precautions**

**Harmful substance to the human body is included in exhaust gases if inhaled.**

 **WARNING**

Exhaust gases include harmful carbon monoxide (CO), which is colorless and odorless. Observe the following precautions.

Failure to do so may cause exhaust gases enter the vehicle and may lead to an accident caused by light-headedness, or may lead to death or a serious health hazard.

**■ Important points while driving**

- Keep the trunk lid closed.
- If you smell exhaust gases in the vehicle even when the trunk lid is closed, open the windows and have the vehicle inspected at your Lexus dealer as soon as possible.

**■ When parking**

- If the vehicle is in a poorly ventilated area or a closed area, such as a garage, stop the engine.
- Do not leave the vehicle with the engine on for a long time.  
If such a situation cannot be avoided, park the vehicle in an open space and ensure that exhaust fumes do not enter the vehicle interior.
- Do not leave the engine running in an area with snow build-up, or where it is snowing. If snowbanks build up around the vehicle while the engine is running, exhaust gases may collect and enter the vehicle.

**■ Exhaust pipe**

The exhaust system needs to be checked periodically. If there is a hole or crack caused by corrosion, damage to a joint or abnormal exhaust noise, be sure to have the vehicle inspected and repaired by your Lexus dealer.

## Airbag manual on-off system\*

\*: If equipped

This system deactivates the front passenger airbag and front passenger knee airbag. Only deactivate the airbags when using a child restraint system on the front passenger seat.

### System components



**A** "PASSENGER AIR BAG" indicator

"PASSENGER AIR BAG" and "ON" indicator light turns on when the airbag system is on, and about after 60 seconds they go off. (only when the engine switch is in IGNITION ON mode)

**B** Airbag manual on-off switch

## Deactivating the front seat passenger airbag and front passenger knee airbag

Insert the mechanical key into the cylinder and rotate to the "OFF" position.

The "OFF" indicator light turns on (only when the engine switch is in IGNITION ON mode).



### "PASSENGER AIR BAG" indicator information

If any of the following problems occur, it is possible that there is a malfunction in the system. Have the vehicle inspected by your Lexus dealer.

- The "OFF" indicator does not illuminate when the airbag manual on-off switch is set to "OFF".
- The indicator light does not change when the airbag manual on-off switch is switched to "ON" or "OFF".

 **WARNING**
**■ When installing a child restraint system**

For safety reasons, always install a child restraint system in a rear seat. In the event that the rear seat cannot be used, the front seat can be used as long as the airbag manual on-off system is set to "OFF".

If the airbag manual on-off system is left on, the strong impact of the airbag deployment (inflation) may cause serious injury or even death.

**■ When a child restraint system is not installed on the front passenger seat**

Ensure that the airbag manual on-off system is set to "ON".

If it is left off, the airbag may not deploy in the event of an accident, which may result in serious injury or even death.

**Riding with children**

Observe the following precautions when children are in the vehicle.

**Use a child restraint system appropriate for the child, until the child becomes large enough to properly wear the vehicle's seat belt.**

- It is recommended that children sit in the rear seats to avoid accidental contact with the shift lever, wiper switch etc.
- Use the rear door child-protector lock or the window lock switch to avoid children opening the door while driving or operating the power window accidentally. (→P.142, 191)
- Do not let small children operate equipment which may catch or pinch body parts, such as the power window, hood, trunk, seats etc.

 **WARNING**
**■ When children are in the vehicle**

Never leave children unattended in the vehicle, and never allow children to have or use the key.

Children may be able to start the vehicle or shift the vehicle into neutral. There is also a danger that children may injure themselves by playing with the windows, the moon roof or panoramic moon roof, or other features of the vehicle. In addition, heat build-up or extremely cold temperatures inside the vehicle can be fatal to children.

**Child restraint systems (except for Korea)**

Before installing a child restraint system in the vehicle, there are precautions that need to be observed, different types of child restraint systems, as well as installation methods, etc., written in this manual.

Use a child restraint system when riding with a small child that cannot properly use a seat belt. For the child's safety, install the child restraint system to a rear seat. Be sure to follow the installation method that is in the operation manual enclosed with the restraint system.

**Table of contents**

- Points to remember: P.57
- When using a child restraint system: P.58
- Child restraint system compatibility for each seating position: P.64, 68, 72, 77
- Child restraint system installation method: P.80
  - Fixed with a seat belt: P.81
  - Fixed with an ISOFIX lower anchorage: P.83
  - Using a top tether anchorage: P.85

**Points to remember**

- If child restraint system regulations exist in the country where you reside, please contact your Lexus

dealer for the child restraint system installation.

- Use a child restraint system until the child becomes large enough to properly wear the vehicle's seat belt.
- Choose a child restraint system appropriate to the age and size of the child.
- Note that not all child restraint systems can fit in all vehicles. Before using or purchasing a child restraint system, check the compatibility of the child restraint system with seat positions. (→P.64, 68, 72, 77)

**⚠ WARNING**

**■ When a child is riding**

Observe the following precautions. Failure to do so may result in death or serious injury.

- For effective protection in automobile accidents and sudden stops, a child must be properly restrained, using a seat belt or child restraint system which is correctly installed. For installation details, refer to the operation manual enclosed with the child restraint system. General installation instruction is provided in this manual.
- Lexus strongly urges the use of a proper child restraint system that conforms to the weight and size of the child, installed on the rear seat. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.

**WARNING**

- Holding a child in your or someone else's arms is not a substitute for a child restraint system. In an accident, the child can be crushed against the windshield or between the holder and the interior of the vehicle.

- **Handling the child restraint system**

If the child restraint system is not properly fixed in place, the child or other passengers may be seriously injured or even killed in the event of sudden braking, sudden swerving, or an accident.

- If the vehicle were to receive a strong impact from an accident, etc., it is possible that the child restraint system has damage that is not readily visible. In such cases, do not reuse the restraint system.
- Depending on the child restraint system, installation may be difficult or impossible. In those cases, check whether the child restraint system is suitable for installment in the vehicle. (→P.64, 68, 72, 77) Be sure to install and observe the usage rules after carefully reading the child restraint system fixing method in this manual, as well as the operation manual enclosed with the child restraint system.
- Keep the child restraint system properly secured on the seat even if it is not in use. Do not store the child restraint system unsecured in the passenger compartment.
- If it is necessary to detach the child restraint system, remove it from the vehicle or store it securely in the trunk.

### When using a child restraint system

- **When installing a child restraint system to a front passenger seat (except for Taiwan)**

For the safety of a child, install child restraint systems to a rear seats. When installing child restraint system to a front passenger seat is unavoidable, adjust the seat as follows and install the child restraint system:

- Move the front seat fully rearward.
- Adjust the seatback angle to the most upright position.

Vehicles with an airbag manual on-off switch: When installing a forward-facing child seat, if there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved.

Vehicles without an airbag manual on-off switch: If there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved.

- Adjust the front of the seat cushion to the lowest position.
- Adjust the seat height to the uppermost position.
- Adjust the lumbar support to the lowest position.
- Adjust the shoulder bolster to the lowest position (if equipped).
- Adjust the pelvic support to the lowest position.
- Adjust the seatback side bolster to the widest position (if equipped).

- Adjust the seat cushion side bolster to the lowest position (if equipped).
- Adjust the hip support to the lowest position (if equipped).
- If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint. Otherwise, put the head restraint in the upper most position.
- Adjust the lumbar support to the lowest position.
- Adjust the pelvic support to the lowest position.
- Disable the automatic rear seat operation. (→P.174)
- For the rear seat with an ottoman (if equipped): Adjust the seatback to the most upright position and ottoman (footrest) to the stowed position.



■ **When installing a child restraint system to a power rear seat (if equipped)**

When using a child restraint system in an outer rear seat, adjust the seat as follows and install the child restraint system:

- Adjust the seat cushion to the fully rearward position.
- Adjust the upper seatback to the rearmost position.
- Adjust the front of the seat cushion to the lowest position.
- Adjust the head restraint to the lowest and rearmost position.
- Adjust the shoulder bolster to the lowest position.



**⚠ WARNING**

■ **When using a child restraint system (except for Taiwan)**

Observe the following precautions. Failure to do so may result in death or serious injury.

**⚠ WARNING**

- Vehicles without an airbag manual on-off switch: Never use a rear-facing child restraint system on the front passenger seat. The force of the rapid inflation of the front passenger airbag can cause death or serious injury to children in the event of an accident.



- Vehicles with an airbag manual on-off switch: Never use a rear-facing child restraint system on the front passenger seat when the airbag manual on-off switch is on. (→P.55) The force of the rapid inflation of the front passenger airbag can cause death or serious injury to children in the event of an accident.



- There is a label(s) on the passenger side sun visor, indicating it is forbidden to attach a rear-facing child restraint system to the front passenger seat. Details of the label(s) are shown in the illustration below.



**! WARNING**



**! WARNING**

- Only put a forward-facing child restraint system on the front seat when unavoidable. When installing a forward-facing child restraint on the front passenger seat, move the seat as far back as possible. Failing to do so may result in death or serious injury if the airbags deploy (inflate).



- Do not allow the child to lean his/her head or any part of his/her body against the door or the area of the seat, front or rear pillars, or roof side rails from which the SRS side airbags or SRS curtain shield airbags deploy even if the child is seated in the child restraint system. It is dangerous if the SRS side and curtain shield airbags inflate, and the impact could cause death or serious injury to the child.



- When a junior seat (booster seat) is installed, always ensure that the shoulder belt is positioned across the center of the child's shoulder. The belt should be kept away from the child's neck, but not so that it could fall off the child's shoulder.
- Use child restraint system suitable to the age and size of the child and install it to the rear seat.

**⚠ WARNING**

- If the driver's seat interferes with the child restraint system and prevents it from being attached correctly, attach the child restraint system to the right-hand rear seat (left-hand drive vehicles) or the left-hand rear seat (right-hand drive vehicles).



- Adjust the front passenger seat so that it does not interfere with the child restraint system.

**■ When using a child restraint system (for Taiwan)**

Observe the following precautions. Failure to do so may result in death or serious injury.

- Never use a child restraint system on the front passenger seat. The force of the rapid inflation of the front passenger airbag can cause death or serious injury to children in the event of an accident.



- There is a label(s) on the passenger side sun visor, indicating it is forbidden to attach a child restraint system to the front passenger seat. Details of the label(s) are shown in the illustration below.



**⚠ WARNING**



**⚠ WARNING**

- Do not allow the child to lean his/her head or any part of his/her body against the door or the area of the seat, front or rear pillars, or roof side rails from which the SRS side airbags or SRS curtain shield airbags deploy even if the child is seated in the child restraint system. It is dangerous if the SRS side airbags and curtain shield airbags inflate, and the impact could cause death or serious injury to the child.



- When a junior seat (booster seat) is installed, always ensure that the shoulder belt is positioned across the center of the child's shoulder. The belt should be kept away from the child's neck, but not so that it could fall off the child's shoulder.

- Use child restraint system suitable to the age and size of the child and install it to the rear seat.
- If the driver's seat interferes with the child restraint system and prevents it from being attached correctly, attach the child restraint system to the right-hand rear seat.



- Adjust the front passenger seat so that it does not interfere with the child restraint system.

**Child restraint system compatibility for each seating position (except for ASEAN countries<sup>\*1</sup>, Latin American countries<sup>\*2</sup> and Taiwan)**

<sup>\*1</sup>: Brunei, Indonesia, Malaysia, Singapore, the Philippines, Vietnam and Thailand

<sup>\*2</sup>: Costa Rica, R.Dominica, Guatemala, Honduras, Nicaragua, Panama, El Salvador, Bolivia, Chile, Aruba, Curacao, Paraguay and Peru

■ **Child restraint system compatibility for each seating position**

Compatibility of each seating position with child restraint systems (→P.65) displays the type of child restraint systems that can be used and possible seating positions for installation using symbols.

Check the selected child restraint system together with the following [Before confirming the compatibility of each seating position with child restraint systems].

■ **Before confirming the compatibility of each seating position with child restraint systems**

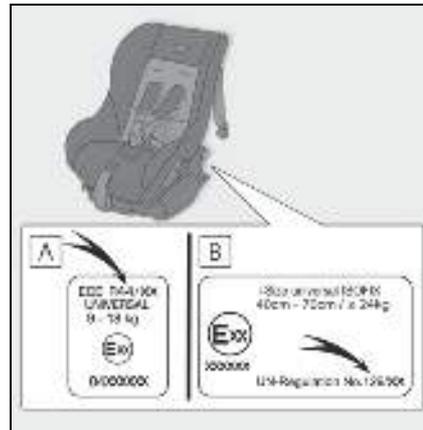
**1** Checking the child restraint system standards.

Use a child restraint system that conforms to UN(ECE) R44<sup>\*1</sup> or UN(ECE) R129<sup>\*1,2</sup>.

The following approval mark is displayed on child restraint systems which are conformed.

Check for an approval mark

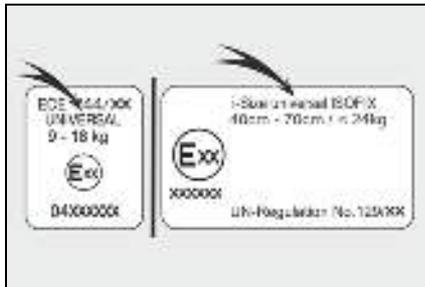
attached to the child restraint system.



Example of the displayed regulation Number

- A** UN(ECE) R44 approval mark<sup>\*3</sup>  
The weight range of the child who is applicable for an UN(ECE) R44 approval mark is indicated.
- B** UN(ECE) R129 approval mark<sup>\*3</sup>  
The height range of the child who is applicable as well as available weights for an UN(ECE) R129 approval mark is indicated.
- 2** Checking the category of the child restraint system.  
Check the approval mark of the child restraint system for which of the following categories the child restraint system is suitable.  
Also, if there are any uncertainties, check the user's guide included with the child restraint system or contact the retailer of the child restraint system.
- "universal"
  - "semi-universal"

- “restricted”
- “vehicle specific”



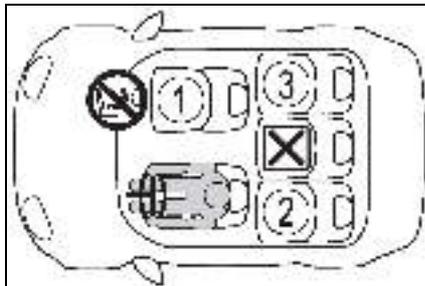
\*1: UN(ECE) R44 and UN(ECE) R129 are U.N. regulations for child restraint systems.

\*2: The child restraint systems mentioned in the table may not be available outside of the EU area.

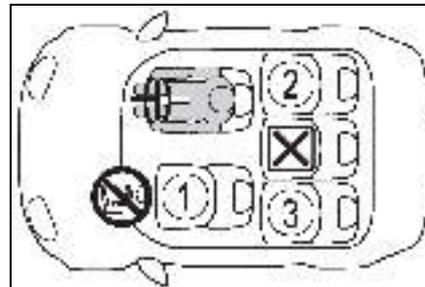
\*3: The displayed mark may differ depending on the product.

■ **Compatibility of each seating position with child restraint systems**

▶ **Left-hand drive vehicles**



▶ **Right-hand drive vehicles**



<p>① *1, 2, 3</p>	<p>U *4</p>
<p>② *2, 3</p>	<p>U</p>  
<p>③ *2, 3</p>	<p>U</p>  

**U** Suitable for “universal” category child restraint system fixed with the seat belt.

 Suitable for i-Size and ISOFIX child restraint system.

 Includes a top tether anchorage point.



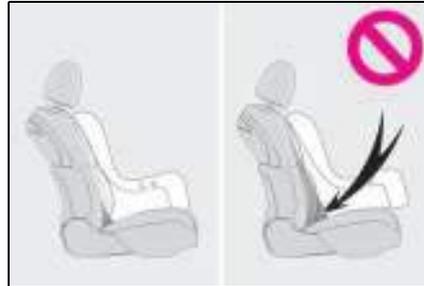
Not suitable for child restraint system.



Never use a rear-facing child restraint system on the front passenger seat when the airbag manual on-off switch is on or without the airbag manual on-off switch.

\*1: Move the front seat fully rearward. If the passenger seat height can be adjusted, move it to the upper most position.

\*2: Adjust the seatback angle to the most upright position. When installing a forward-facing child seat, if there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved.



\*3: If the head restraint interferes with your child restraint system, and the head restraint can be removed, remove the head restraint.

Otherwise, put the head restraint in the upper most position.

\*4: Use only a front-facing child restraint system when the airbag manual on-off switch is on or without the airbag manual on-off switch.

■ Detail information for CRS installation

Seating position					
Seat position number	①			②	③
	Vehicles without airbag manual on-off switch	Vehicles with airbag manual on-off switch			
		ON	OFF		
Seating position suitable for universal belted (yes/no)	yes Forward facing only	yes Forward facing only	yes	yes	yes
i-Size seating position (yes/no)	no	no	no	yes	yes
Seating position suitable for lateral fixture (L1/L2/no)	no	no	no	no	no

Seating position					
Seat position number	①			②	③
	Vehicles without airbag manual on-off switch	Vehicles with airbag manual on-off switch			
		ON	OFF		
Suitable rearward facing fixture (R1/R2X/R2/R3/no)	no	no	no	R1, R2X, R2, R3	R1, R2X, R2, R3
Suitable forward facing fixture (F2X/F2/F3/no)	no	no	no	F2X, F2, F3	F2X, F2, F3
Suitable junior seat fixture (B2/B3/no)	no	no	no	B2, B3	B2, B3

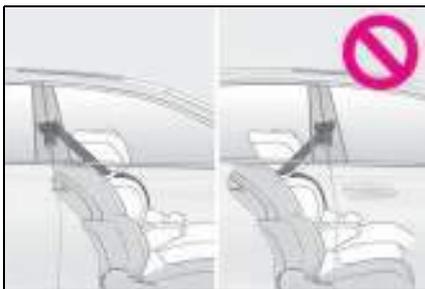
ISOFIX child restraint systems are divided into different “fixture”. The child restraint system can be used in the seating positions for “fixture” mentioned in the table above. For kind of “fixture” relation, confirm the following table.

If your child restraint system has no kind of “fixture” (or if you cannot find information in the table below), please refer to the child restraint system “vehicle list” for compatibility information or ask the retailer of your child seat.

Fixture	Description
F3	Full-height, forward-facing child restraint systems
F2	Reduced-height forward-facing child restraint systems
F2X	Reduced-height forward-facing child restraint systems
R3	Full-size, rearward-facing child restraint systems
R2	Reduced-size, rearward-facing child restraint systems
R2X	Reduced-size, rearward-facing child restraint systems
R1	Rearward-facing infant seat
L1	Left lateral-facing (carrycot) infant seat
L2	Right lateral-facing (carrycot) infant seat
B2	Junior seat
B3	Junior seat

When securing some types of child restraint systems in rear seat, it may not be possible to properly use the seat belts in positions next to the child restraint without interfering with it or affecting seat belt effectiveness. Be sure your seat belt fits snugly across your shoulder and low on your hips. If it does not, or if it interferes with the child restraint, move to a different position. Failure to do so may result in death or serious injury.

- When installing a child restraint in the rear seats, adjust the front seat so that it does not interfere with the child or child restraint system.
- When installing a child seat with support base, if the child seat interferes with the seatback when latching it into the support base, adjust the seatback rearward until there is no interference.
- If the seat belt shoulder anchor is ahead of the child seat belt guide, move the seat cushion forward.



- When installing a junior seat, if the child in your child restraint system is in a very upright position, adjust the seatback angle to the most comfort-

able position. And if the seat belt shoulder anchor is ahead of the child seat belt guide, move the seat cushion forward.

### Child restraint system compatibility for each seating position (for ASEAN countries<sup>\*</sup>)

<sup>\*</sup>: Brunei, Indonesia, Malaysia, Singapore, the Philippines, Vietnam and Thailand

#### ■ Child restraint system compatibility for each seating position

Compatibility of each seating position with child restraint systems (→P.69) displays the type of child restraint systems that can be used and possible seating positions for installation using symbols. Also, the recommended child restraint system that is suitable for your child can be selected.

Otherwise, check [Recommended child restraint systems and Compatibility table] for recommended child restraint systems. (→P.72) Check the selected child restraint system together with the following [Before confirming the compatibility of each seating position with child restraint systems].

#### ■ Before confirming the compatibility of each seating position with child restraint systems

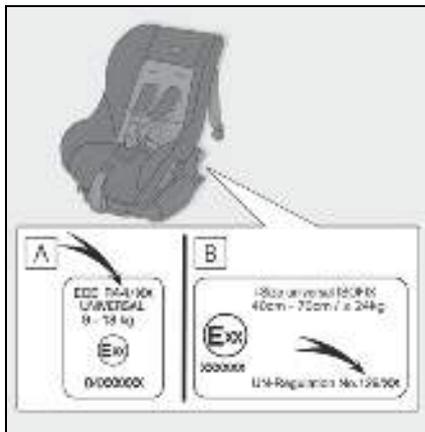
- 1 Checking the child restraint system standards.

Use a child restraint system that conforms to UN(ECE) R44<sup>\*1</sup> or

UN(ECE) R129<sup>\*1,2</sup>.

The following approval mark is displayed on child restraint systems which are conformed.

Check for an approval mark attached to the child restraint system.



Example of the displayed regulation Number

**A** UN(ECE) R44 approval mark<sup>\*3</sup>  
The weight range of the child who is applicable for an UN(ECE) R44 approval mark is indicated.

**B** UN(ECE) R129 approval mark<sup>\*3</sup>  
The height range of the child who is applicable as well as available weights for an UN(ECE) R129 approval mark is indicated.

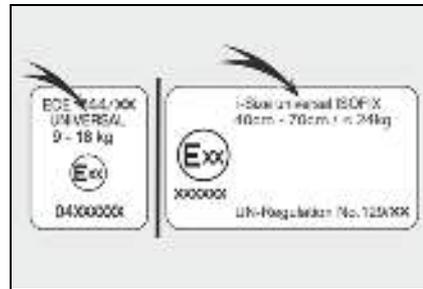
**2** Checking the category of the child restraint system.

Check the approval mark of the child restraint system for which of the following categories the child restraint system is suitable.

Also, if there are any uncertainties,

check the user's guide included with the child restraint system or contact the retailer of the child restraint system.

- "universal"
- "semi-universal"
- "restricted"
- "vehicle specific"



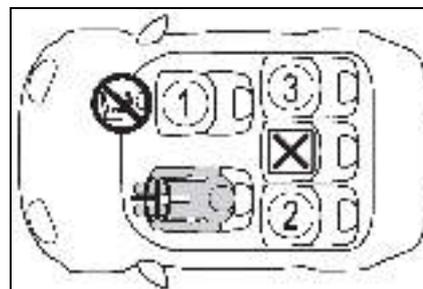
<sup>\*1</sup>: UN(ECE) R44 and UN(ECE) R129 are U.N. regulations for child restraint systems.

<sup>\*2</sup>: The child restraint systems mentioned in the table may not be available outside of the EU area.

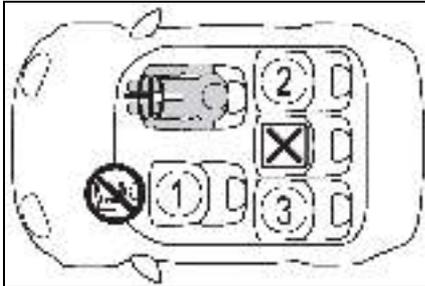
<sup>\*3</sup>: The displayed mark may differ depending on the product.

#### ■ Compatibility of each seating position with child restraint systems

- ▶ Left-hand drive vehicles



► Right-hand drive vehicles



① *1,2,3	U *4	
② *2,3	U L	L i-Size/ISOFIX
③ *2,3	U L	L i-Size/ISOFIX



Suitable for "universal" category child restraint system fixed with the seat belt.



Suitable for child restraint systems given on recommended child restraint systems and compatibility table (→P.72)



Suitable for i-Size and ISOFIX child restraint system.



Includes a top tether anchorage point.



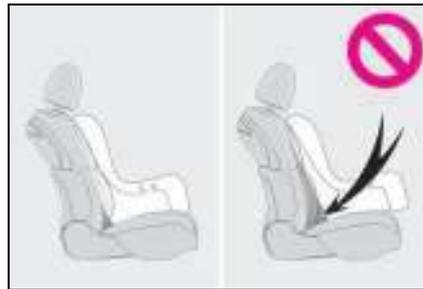
Not suitable for child restraint system.



Never use a rear-facing child restraint system on the front passenger seat.

\*1: Move the front seat fully rearward. If the passenger seat height can be adjusted, move it to the upper most position.

\*2: Adjust the seatback angle to the most upright position. When installing a forward-facing child seat, if there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved.



\*3: If the head restraint interferes with your child restraint system, and the head restraint can be removed, remove the head restraint. Otherwise, put the head restraint in the upper most position.

\*4: Use only a front-facing child restraint system.

### ■ Detail information for CRS installation

Seating position			
Seat position number	①	②	③
Seating position suitable for universal belted (yes/no)	yes Forward facing only	yes	yes
i-Size seating position (yes/no)	no	yes	yes
Seating position suitable for lateral fixture (L1/L2/no)	no	no	no
Suitable rearward facing fixture (R1/R2X/R2/R3/no)	no	R1, R2X, R2, R3	R1, R2X, R2, R3
Suitable forward facing fixture (F2X/F2/F3/no)	no	F2X, F2, F3	F2X, F2, F3
Suitable junior seat fixture (B2/B3/no)	no	B2, B3	B2, B3

ISOFIX child restraint systems are divided into different “fixture”. The child restraint system can be used in the seating positions for “fixture” mentioned in the table above. For kind of “fixture” relation, confirm the following table.

If your child restraint system has no kind of “fixture” (or if you cannot find information in the table below), please refer to the child restraint system “vehicle list” for compatibility information or ask the retailer of your child seat.

Fixture	Description
F3	Full-height, forward-facing child restraint systems
F2	Reduced-height forward-facing child restraint systems
F2X	Reduced-height forward-facing child restraint systems
R3	Full-size, rearward-facing child restraint systems
R2	Reduced-size, rearward-facing child restraint systems
R2X	Reduced-size, rearward-facing child restraint systems
R1	Rearward-facing infant seat
L1	Left lateral-facing (carrycot) infant seat
L2	Right lateral-facing (carrycot) infant seat

Fixture	Description
B2	Junior seat
B3	Junior seat

■ Recommended child restraint systems and Compatibility table

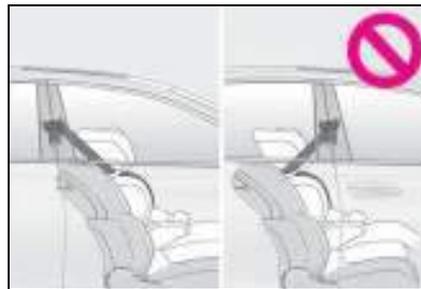
	Recommended Child Restraint System	Seating position		
		①	②	③
i-Size child Restraint systems	i-Size MIDI (yes/no)	no	yes	yes

The child restraint systems mentioned in the table may not be available outside the ASEAN area.

When securing some types of child restraint systems in rear seat, it may not be possible to properly use the seat belts in positions next to the child restraint without interfering with it or affecting seat belt effectiveness. Be sure your seat belt fits snugly across your shoulder and low on your hips. If it does not, or if it interferes with the child restraint, move to a different position. Failure to do so may result in death or serious injury.

- When installing a child restraint in the rear seats, adjust the front seat so that it does not interfere with the child or child restraint system.
- When installing a child seat with support base, if the child seat interferes with the seatback when latching it into the support base, adjust the seatback rearward until there is no interference.
- If the seat belt shoulder anchor is ahead of the child seat belt guide, move the seat cushion forward.

move the seat cushion forward.



- When installing a junior seat, if the child in your child restraint system is in a very upright position, adjust the seatback angle to the most comfortable position. And if the seat belt shoulder anchor is ahead of the child seat belt guide, move the seat cushion forward.

**Child restraint system compatibility for each seating position (for Latin American\*)**

\*: Costa Rica, R.Dominica, Guatemala, Honduras, Nicaragua, Panama, El Salva-

dor, Bolivia, Chile, Aruba, Curacao, Paraguay and Peru

### ■ Child restraint system compatibility for each seating position

Compatibility of each seating position with child restraint systems (→P.74) displays the type of child restraint systems that can be used and possible seating positions for installation using symbols. Also, the recommended child restraint system that is suitable for your child can be selected.

Otherwise, check [Recommended child restraint systems and Compatibility table] for recommended child restraint systems. (→P.76)

Check the selected child restraint system together with the following [Before confirming the compatibility of each seating position with child restraint systems].

### ■ Before confirming the compatibility of each seating position with child restraint systems

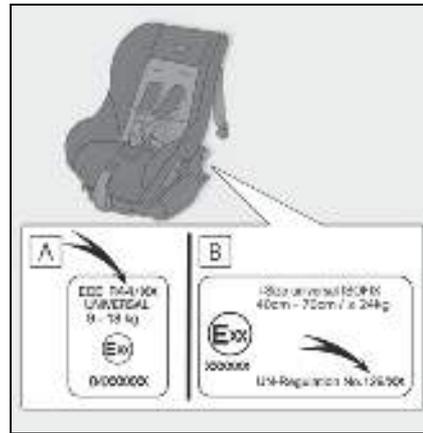
#### 1 Checking the child restraint system standards.

Use a child restraint system that conforms to UN(ECE) R44<sup>\*1</sup> or UN(ECE) R129<sup>\*1,2</sup>.

The following approval mark is displayed on child restraint systems which are conformed.

Check for an approval mark

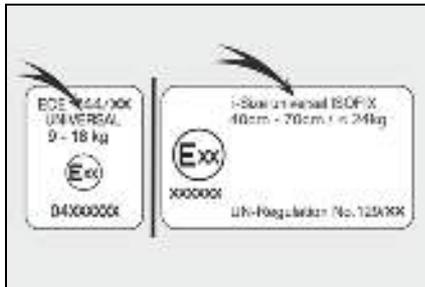
attached to the child restraint system.



Example of the displayed regulation Number

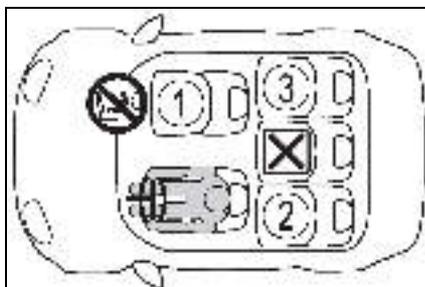
- A** UN(ECE) R44 approval mark<sup>\*3</sup>  
The weight range of the child who is applicable for an UN(ECE) R44 approval mark is indicated.
- B** UN(ECE) R129 approval mark<sup>\*3</sup>  
The height range of the child who is applicable as well as available weights for an UN(ECE) R129 approval mark is indicated.
- 2** Checking the category of the child restraint system.  
Check the approval mark of the child restraint system for which of the following categories the child restraint system is suitable. Also, if there are any uncertainties, check the user's guide included with the child restraint system or contact the retailer of the child restraint system.
- "universal"
  - "semi-universal"

- “restricted”
- “vehicle specific”



- \*1: UN(ECE) R44 and UN(ECE) R129 are U.N. regulations for child restraint systems.
- \*2: The child restraint systems mentioned in the table may not be available outside of the EU area.
- \*3: The displayed mark may differ depending on the product.

■ **Compatibility of each seating position with child restraint systems**



 *1, 2, 3	 *4	
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 *2, 3	 	 
 *2, 3	 	 

- Suitable for “universal” category child restraint system fixed with the seat belt.
- Suitable for child restraint systems given on recommended child restraint systems and compatibility table (→P.76)
- Suitable for i-Size and ISOFIX child restraint system.
- Includes a top tether anchorage point.
- Not suitable for child restraint system.
- Never use a rear-facing child restraint system on the front passenger seat.

- \*1: Move the front seat fully rearward. If the passenger seat height can be adjusted, move it to the upper most position.
- \*2: Adjust the seatback angle to the most upright position. When installing a forward-facing child seat, if there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved.



Otherwise, put the head restraint in the upper most position.

\*4: Use only a front-facing child restraint system.

\*3: If the head restraint interferes with your child restraint system, and the head restraint can be removed, remove the head restraint.

■ Detail information for CRS installation

Seating position			
Seat position number	①	②	③
Seating position suitable for universal belted (yes/no)	yes Forward facing only	yes	yes
i-Size seating position (yes/no)	no	yes	yes
Seating position suitable for lateral fixture (L1/L2/no)	no	no	no
Suitable rearward facing fixture (R1/R2X/R2/R3/no)	no	R1, R2X, R2, R3	R1, R2X, R2, R3
Suitable forward facing fixture (F2X/F2/F3/no)	no	F2X, F2, F3	F2X, F2, F3
Suitable junior seat fixture (B2/B3/no)	no	B2, B3	B2, B3

ISOFIX child restraint systems are divided into different “fixture”. The child restraint system can be used in the seating positions for “fixture” mentioned in the table above. For kind of “fixture” relation, confirm the following table.

If your child restraint system has no kind of “fixture” (or if you cannot find information in the table below), please refer to the child restraint system “vehicle list” for compatibility information or ask the retailer of your child seat.

Fixture	Description
F3	Full-height, forward-facing child restraint systems
F2	Reduced-height forward-facing child restraint systems
F2X	Reduced-height forward-facing child restraint systems
R3	Full-size, rearward-facing child restraint systems
R2	Reduced-size, rearward-facing child restraint systems
R2X	Reduced-size, rearward-facing child restraint systems
R1	Rearward-facing infant seat
L1	Left lateral-facing (carycot) infant seat
L2	Right lateral-facing (carycot) infant seat
B2	Junior seat
B3	Junior seat

■ Recommended child restraint systems and Compatibility table

Mass groups	Recommended Child Restraint System	Seating position		
		①	②	③
0,0+ Up to 13 kg (28 lb.)	LEXUS GO+, BABY SAFE PLUS (yes/no)	no	yes	yes
	MIDI 2 (yes/no)	no	yes	yes
I 9 to 18 kg (20 to 39 lb.)	LEXUS DUO PLUS (yes/no)	yes Belt fix only	yes	yes
	MIDI 2 (yes/no)	no	yes	yes

The child restraint systems mentioned in the table may not be available outside the LATIN area.

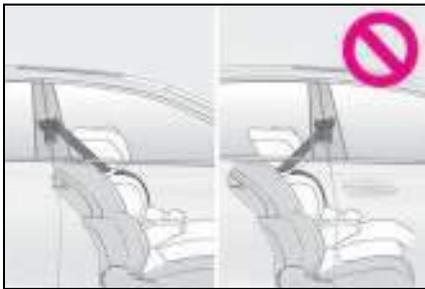
When securing some types of child restraint systems in rear seat, it may not be possible to properly use the seat belts in positions next to the child restraint without interfering with it or affecting seat belt effectiveness. Be sure your seat belt fits snugly across

your shoulder and low on your hips. If it does not, or if it interferes with the child restraint, move to a different position. Failure to do so may result in death or serious injury.

- When installing a child restraint in

the rear seats, adjust the front seat so that it does not interfere with the child or child restraint system.

- When installing a child seat with support base, if the child seat interferes with the seatback when latching it into the support base, adjust the seatback rearward until there is no interference.
- If the seat belt shoulder anchor is ahead of the child seat belt guide, move the seat cushion forward.



- When installing a junior seat, if the child in your child restraint system is in a very upright position, adjust the seatback angle to the most comfortable position. And if the seat belt shoulder anchor is ahead of the child seat belt guide, move the seat cushion forward.

#### Child restraint system compatibility for each seating position (for Taiwan)

##### ■ Child restraint system compatibility for each seating position

Compatibility of each seating position with child restraint systems (→P.78)

displays the type of child restraint systems that can be used and possible seating positions for installation using symbols.

Check the selected child restraint system together with the following [Before confirming the compatibility of each seating position with child restraint systems].

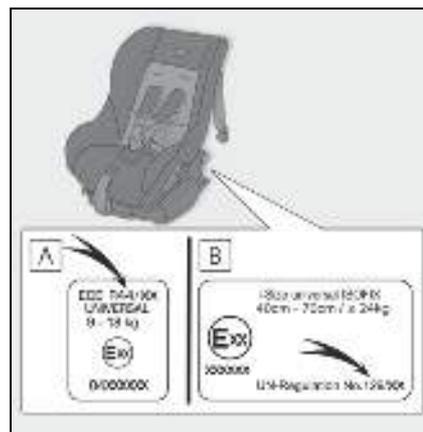
##### ■ Before confirming the compatibility of each seating position with child restraint systems

- 1 Checking the child restraint system standards.

Use a child restraint system that conforms to UN(ECE) R44\*<sup>1</sup> or UN(ECE) R129\*<sup>1,2</sup>.

The following approval mark is displayed on child restraint systems which are conformed.

Check for an approval mark attached to the child restraint system.



Example of the displayed regulation Number

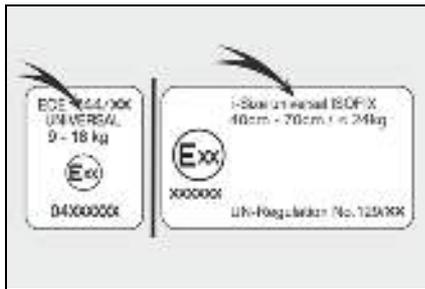
**A** UN(ECE) R44 approval mark<sup>\*3</sup>  
The weight range of the child who is applicable for an UN(ECE) R44 approval mark is indicated.

**B** UN(ECE) R129 approval mark<sup>\*3</sup>  
The height range of the child who is applicable as well as available weights for an UN(ECE) R129 approval mark is indicated.

**2** Checking the category of the child restraint system.

Check the approval mark of the child restraint system for which of the following categories the child restraint system is suitable. Also, if there are any uncertainties, check the user's guide included with the child restraint system or contact the retailer of the child restraint system.

- "universal"
- "semi-universal"
- "restricted"
- "vehicle specific"

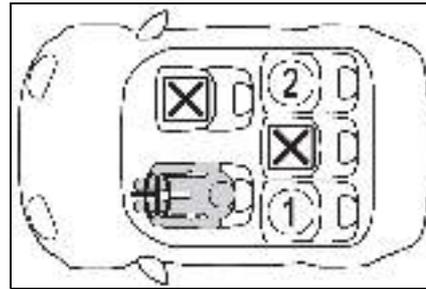


<sup>\*1</sup>: UN(ECE) R44 and UN(ECE) R129 are U.N. regulations for child restraint systems.

<sup>\*2</sup>: The child restraint systems mentioned in the table may not be available outside of the EU area.

<sup>\*3</sup>: The displayed mark may differ depending on the product.

■ **Compatibility of each seating position with child restraint systems**



<p>1</p> <p><sup>*1,2</sup></p>	<p>U</p>	
<p>2</p> <p><sup>*1,2</sup></p>	<p>U</p>	

**U** Suitable for "universal" category child restraint system fixed with seat belt.

Suitable for i-Size and ISOFIX child restraint system.

Includes a top tether anchorage point.

**X** Not suitable for child restraint system.

<sup>\*1</sup>: Adjust the seatback angle to the most upright position. When installing a forward-facing child seat, if there is a gap between the child seat and the seatback, adjust the seatback angle

until good contact is achieved.



\*2: If the head restraint interferes with your child restraint system, and the head restraint can be removed, remove the head restraint. Otherwise, put the head restraint in the upper most position.

#### ■ Detail information for CRS installation

Seating position		
Seat position number	①	②
Seating position suitable for universal belted (yes/no)	yes	yes
i-Size seating position (yes/no)	yes	yes
Seating position suitable for lateral fixture (L1/L2/no)	no	no
Suitable rearward facing fixture (R1/R2X/R2/R3/no)	R1, R2X, R2, R3	R1, R2X, R2, R3
Suitable forward facing fixture (F2X/F2/F3/no)	F2X, F2, F3	F2X, F2, F3
Suitable junior seat fixture (B2/B3/no)	B2, B3	B2, B3

ISOFIX child restraint systems are divided into different “fixture”. The child restraint system can be used in the seating positions for “fixture” mentioned in the table above. For kind of “fixture” relation, confirm the following table.

If your child restraint system has no kind of “fixture” (or if you cannot find information in the table below), please refer to the child restraint system “vehicle list” for compatibility information or ask the retailer of your child seat.

Fixture	Description
F3	Full-height, forward-facing child restraint systems
F2	Reduced-height forward-facing child restraint systems
F2X	Reduced-height forward-facing child restraint systems
R3	Full-size, rearward-facing child restraint systems

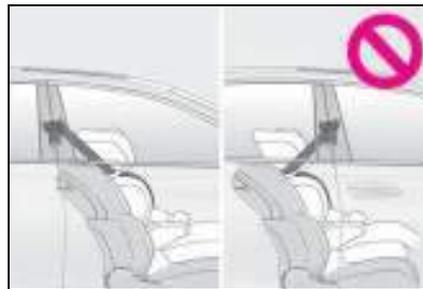
Fixture	Description
R2	Reduced-size, rearward-facing child restraint systems
R2X	Reduced-size, rearward-facing child restraint systems
R1	Rearward-facing infant seat
L1	Left lateral-facing (carrycot) infant seat
L2	Right lateral-facing (carrycot) infant seat
B2	Junior seat
B3	Junior seat

When securing some types of child restraint systems in rear seat, it may not be possible to properly use the seat belts in positions next to the child restraint without interfering with it or affecting seat belt effectiveness. Be sure your seat belt fits snugly across your shoulder and low on your hips. If it does not, or if it interferes with the child restraint, move to a different position. Failure to do so may result in death or serious injury.

- When installing a child restraint in the rear seats, adjust the front seat so that it does not interfere with the child or child restraint system.
- When installing a child seat with support base, if the child seat interferes with the seatback when latching it into the support base, adjust the seatback rearward until there is

no interference.

- If the seat belt shoulder anchor is ahead of the child seat belt guide, move the seat cushion forward.



- When installing a junior seat, if the child in your child restraint system is in a very upright position, adjust the seatback angle to the most comfortable position. And if the seat belt shoulder anchor is ahead of the child seat belt guide, move the seat cushion forward.

### Child restraint system installation method

Confirm with the operation manual enclosed with the child restraint system about the installation of the child restraint system.

Installation method		Page
Seat belt attachment		P.81
ISOFIX lower anchorage attachment		P.83
Top tether anchorage attachment		P.85

### Child restraint system fixed with a seat belt

#### ■ Installing child restraint system using a seat belt

Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

If the child restraint system on hand is

not within the “universal” category (or the necessary information is not in the table), refer to the “Vehicle List” provided by the child restraint system maker for various possible installation positions, or check the compatibility after asking the retailer of the child seat. (→P.64, 68, 72, 77)

#### 1 Adjust the seat

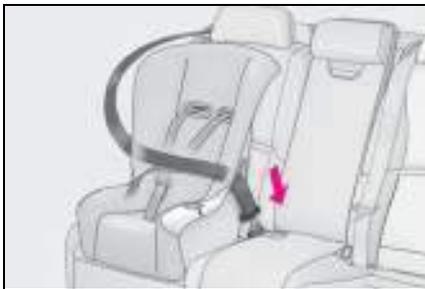
- ▶ When using the front passenger seat

If installing the child restraint system to the front passenger seat is unavoidable, refer to P.58 for the front passenger seat adjustment.

- ▶ When using the power rear seat (if equipped)

If there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved. (→P.59)

- 2 Run the seat belt through the child restraint system and insert the plate into the buckle. Make sure that the belt is not twisted. Securely fix the seat belt to the child restraint system in accordance to the directions enclosed with the child restraint system.



- 3 If your child restraint system is not equipped with a lock-off (a seat belt

locking feature), secure the child restraint system using a locking clip.



- 4 After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.83)

■ **Removing a child restraint system installed with a seat belt**

Press the buckle release button and fully retract the seat belt.

When releasing the buckle, the child restraint system may spring up due to the rebound of the seat cushion. Release the buckle while holding down the child restraint system.

Since the seat belt automatically reels itself, slowly return it to the stowing position.

■ **When installing a child restraint system**

You may need a locking clip to install the child restraint system. Follow the instructions provided by the manufacturer of the system. If your child restraint system does not provide a locking clip, you can purchase the following item from your Lexus dealer: Locking clip for child restraint system (Part No. 73119-22010)

**! WARNING****■ When installing a child restraint system**

Observe the following precautions. Failure to do so may result in death or serious injury.

- Do not allow children to play with the seat belt. If the seat belt becomes twisted around a child's neck, it may lead to choking or other serious injuries that could result in death. If this occurs and the buckle cannot be unfastened, scissors should be used to cut the belt.
- Ensure that the belt and plate are securely locked and the seat belt is not twisted.
- Shake the child restraint system left and right, and forward and backward to ensure that it has been securely installed.
- After securing a child restraint system, never adjust the seat.
- When a junior seat (booster seat) is installed, always ensure that the shoulder belt is positioned across the center of the child's shoulder. The belt should be kept away from the child's neck, but not so that it could fall off the child's shoulder.
- Follow all installation instructions provided by the child restraint system manufacturer.

**Child restraint system fixed with an ISOFIX lower anchorage****■ ISOFIX lower anchorages (ISOFIX child restraint system)**

Lower anchorages are provided for the outboard rear seats. (Tags displaying the location of the anchorages are

attached to the seats.)

**■ Installation with ISOFIX lower anchorage (ISOFIX child restraint system)**

Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

If the child restraint system on hand is not within the "universal" category (or the necessary information is not in the table), refer to the "Vehicle List" provided by the child restraint system maker for various possible installation positions, or check the compatibility after asking the retailer of the child seat. (→P.64, 68, 72, 77)

- 1 Vehicles with power rear seat:  
Adjust the seat

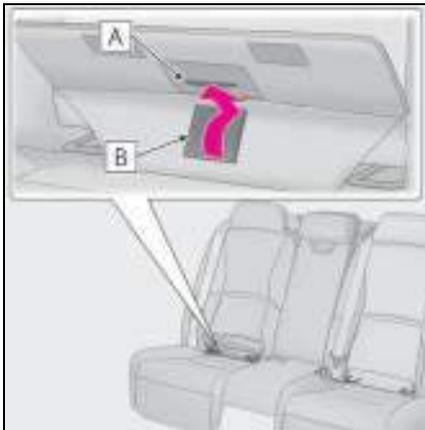
If there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved. (→P.59)

2 Open the cover.



3 Insert the tab **B** into the slit **A** of the cover.

The cover will be held open.



4 Check the positions of the exclusive fixing bars, and install the child restraint system to the seat.

The bars are installed in the clearance

between the seat cushion and seatback.



5 After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.83)

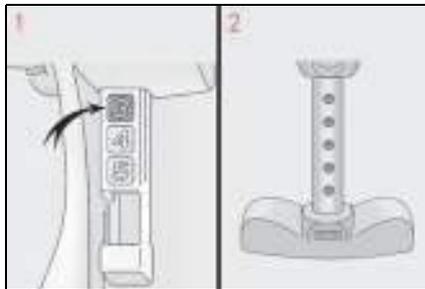
■ When using a "LEXUS DUO PLUS" (for Latin American countries\*)

Adjust it to the most reclined position.

\*: Costa Rica, R.Dominica, Guatemala, Honduras, Nicaragua, Panama, El Salvador, Bolivia, Chile, Aruba, Curacao, Paraguay and Peru

■ When using a "MIDI 2" (for Latin American countries\*)

Adjust the support leg and ISOFIX connectors as follows:

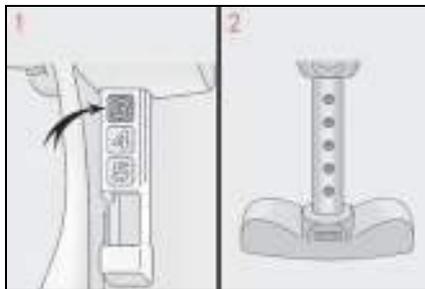


- 1 Lock the ISOFIX connectors where number 3 can be seen.
- 2 Lock the support leg where 5 holes can be seen.

\* : Costa Rica, R.Dominica, Guatemala, Honduras, Nicaragua, Panama, El Salvador, Bolivia, Chile, Aruba, Curacao, Paraguay and Peru

#### ■ When using a "i-Size MIDI" (for ASEAN countries \*)

Adjust the support leg and ISOFIX connectors as follows:



- 1 Lock the ISOFIX connectors where number 3 can be seen.
- 2 Lock the support leg where 5 holes can be seen.

\* : Brunei, Indonesia, Malaysia, Singapore, the Philippines, Vietnam and Thailand

#### ⚠ WARNING

##### ■ When installing a child restraint system

Observe the following precautions. Failure to do so may result in death or serious injury.

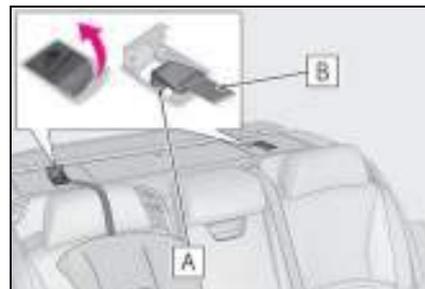
- After securing a child restraint system, never adjust the seat.
- When using the lower anchorages, be sure that there are no foreign objects around the anchorages and that the seat belt is not caught behind the child restraint system.
- Follow all installation instructions provided by the child restraint system manufacturer.

#### Using a top tether anchorage

##### ■ Top tether anchorages

Top tether anchorages are provided for the outboard rear seats.

Use top tether anchorages when fixing the top strap.



**A** Top tether anchorages

**B** Top strap

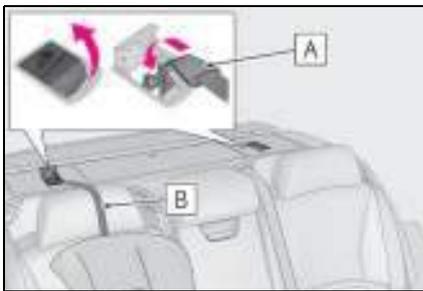
##### ■ Fixing the top strap to the top tether anchorages

Install the child restraint system in accordance to the operation manual

enclosed with the child restraint system.

Open the top tether anchorages cover, latch the hook onto the top tether anchorage and tighten the top strap.

Make sure the top strap is securely latched. (→P.83)



**A** Hook

**B** Top strap

 NOTICE

**Top tether anchorages**

When not in use, make certain to close the lid. If it remains open, the lid may be damaged.

 **WARNING**

**When installing a child restraint system**

Observe the following precautions. Failure to do so may result in death or serious injury.

- Firmly attach the top strap and make sure that the belt is not twisted.
- Do not attach the top strap to anything other than the top tether anchorages.
- After securing a child restraint system, never adjust the seat.
- Follow all installation instructions provided by the child restraint system manufacturer.

## Child restraint systems (for Korea)

Before installing a child restraint system in the vehicle, there are precautions that need to be observed, different types of child restraint systems, as well as installation methods, etc., written in this manual.

Use a child restraint system when riding with a small child that cannot properly use a seat belt. For the child's safety, install the child restraint system to a rear seat. Be sure to follow the installation method that is in the operation manual enclosed with the restraint system.

### Table of contents

- Points to remember: P.87
- Child restraint system: P.88
- When using a child restraint system: P.89
- Child restraint system installation method
  - Fixed with a seat belt: P.92
  - Fixed with an ISOFIX lower anchorage: P.93
  - Using a top tether anchorage: P.95

### Points to remember

- If child restraint system regulations exist in the country where you reside, please contact your Lexus dealer for the child restraint system

installation.

- Use a child restraint system until the child becomes large enough to properly wear the vehicle's seat belt.
- Choose a child restraint system that suits your vehicle and is appropriate to the age and size of the child.

### WARNING

#### ■ When a child is riding

Observe the following precautions. Failure to do so may result in death or serious injury.

- For effective protection in automobile accidents and sudden stops, a child must be properly restrained, using a seat belt or child restraint system which is correctly installed. For installation details, refer to the operation manual enclosed with the child restraint system. General installation instruction is provided in this manual.
- Lexus strongly urges the use of a proper child restraint system that conforms to the weight and size of the child, installed on the rear seat. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.
- Holding a child in your or someone else's arms is not a substitute for a child restraint system. In an accident, the child can be crushed against the windshield or between the holder and the interior of the vehicle.

#### ■ Handling the child restraint system

If the child restraint system is not properly fixed in place, the child or other passengers may be seriously injured or even killed in the event of sudden braking, sudden swerving, or an accident.

**WARNING**

- If the vehicle were to receive a strong impact from an accident, etc., it is possible that the child restraint system has damage that is not readily visible. In such cases, do not reuse the restraint system.
- Make sure you have complied with all installation instructions provided with the child restraint system manufacturer and that the system is properly secured.
- Keep the child restraint system properly secured on the seat even if it is not in use. Do not store the child restraint system unsecured in the passenger compartment.
- If it is necessary to detach the child restraint system, remove it from the vehicle or store it securely in the trunk.

## Child restraint system

### ■ Types of child restraint system installation methods

Confirm with the operation manual enclosed with the child restraint system about the installation of the child restraint system.

Installation method		Page
Seat belt attachment		P.92
ISOFIX lower anchorage attachment		P.93
Top tether anchorage attachment		P.95

### When using a child restraint system

#### ■ When installing a child restraint system to a front passenger seat

For the safety of a child, install child restraint systems to a rear seats. When installing child restraint system to a front passenger seat is unavoidable, adjust the seat as follows and install the

child restraint system.

- Move the front seat fully rearward.
- Adjust the seatback angle to the most upright position.
- Adjust the front of the seat cushion to the lowest position.
- Adjust the seat height to the uppermost position.
- Adjust the lumbar support to the

lowest position.

- Adjust the shoulder bolster to the lowest position (if equipped).
- Adjust the pelvic support to the lowest position.
- Adjust the seatback side bolster to the widest position (if equipped).
- Adjust the seat cushion side bolster to the lowest position (if equipped).
- Adjust the hip support to the lowest position (if equipped).
- If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint. Otherwise, put the head restraint in the upper most position.



■ **When installing a child restraint system to a power rear seat (if equipped)**

When using a child restraint system in an outer rear seat, adjust the seat as follows and install the child restraint system.

- Adjust the seat cushion to the fully rearward position.
- Adjust the upper seatback to the

rearmost position.

- Adjust the front of the seat cushion to the lowest position.
- Adjust the head restraint to the lowest and rearmost position.
- Adjust the shoulder bolster to the lowest position.
- Adjust the lumbar support to the lowest position.
- Adjust the pelvic support to the lowest position.
- Disable the automatic rear seat operation. (→P.174)
- For the rear seat with an ottoman (if equipped): Adjust the seatback to the most upright position and ottoman (footrest) to the stowed position.



**⚠ WARNING**

■ **When using a child restraint system**

Observe the following precautions. Failure to do so may result in death or serious injury.

### WARNING

- Never install a rear-facing child restraint system on the front passenger seat even if the "AIR BAG OFF" indicator light is illuminated. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear-facing child restraint system is installed on the front passenger seat.
- A forward-facing child restraint system may be installed on the front passenger seat only when it is unavoidable. A child restraint system that requires a top strap should not be used in the front passenger seat since there is no top strap anchorage for the front passenger seat.
- A forward-facing child restraint system may be installed on the front passenger seat only when it is unavoidable. When installing a forward-facing child restraint system on the front passenger seat, adjust the seatback angle to the most upright position, move the seat to the rearmost position, and raise the seat to the upper most position, even if the "AIR BAG OFF" indicator light is illuminated.



- Do not allow the child to lean his/her head or any part of his/her body against the door or the area of the seat, front or rear pillars, or roof side rails from which the SRS side airbags or SRS curtain shield airbags deploy even if the child is seated in the child restraint system. It is dangerous if the SRS side and curtain shield airbags inflate, and the impact could cause death or serious injury to the child.



- When a junior seat (booster seat) is installed, always ensure that the shoulder belt is positioned across the center of the child's shoulder. The belt should be kept away from the child's neck, but not so that it could fall off the child's shoulder.
- Use child restraint system suitable to the age and size of the child and install it to the rear seat.
- If the driver's seat interferes with the child restraint system and prevents it from being attached correctly, attach the child restraint system to the right-hand rear seat.



- Adjust the front passenger seat so that it does not interfere with the child restraint system.

### Child restraint system fixed with a seat belt

#### ■ Installing child restraint system using a seat belt

Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

##### 1 Adjust the seat

##### ▶ When using the front passenger seat

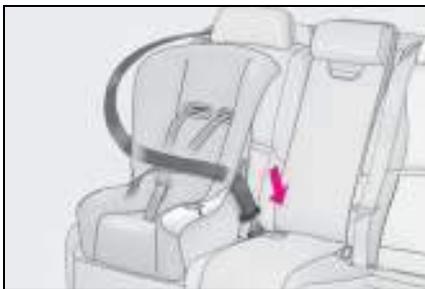
If installing the child restraint system to the front passenger seat is unavoidable, refer to P.89 for the front passenger seat adjustment.

##### ▶ When using the rear power seat (if equipped)

If there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved. (→P.90)

##### 2 Run the seat belt through the child restraint system and insert the plate into the buckle. Make sure that the belt is not twisted.

Securely fix the seat belt to the child restraint system in accordance to the directions enclosed with the child restraint system.



##### 3 If your child restraint system is not equipped with a lock-off (a seat belt locking feature), secure the child restraint system using a locking clip.



##### 4 After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.93)

#### ■ Removing a child restraint system installed with a seat belt

Press the buckle release button and fully retract the seat belt.

When releasing the buckle, the child restraint system may spring up due to the rebound of the seat cushion. Release the buckle while holding down the child restraint system.

Since the seat belt automatically reels itself, slowly return it to the stowing position.

#### ■ When installing a child restraint system

You may need a locking clip to install the child restraint system. Follow the instructions provided by the manufacturer of the system. If your child restraint system does not provide a locking clip, you can purchase the following item from your Lexus dealer: Locking clip for child restraint system (Part No. 73119-22010)

**⚠ WARNING****■ When installing a child restraint system**

Observe the following precautions. Failure to do so may result in death or serious injury.

- Do not allow children to play with the seat belt. If the seat belt becomes twisted around a child's neck, it may lead to choking or other serious injuries that could result in death. If this occurs and the buckle cannot be unfastened, scissors should be used to cut the belt.
- Ensure that the belt and plate are securely locked and the seat belt is not twisted.
- Shake the child restraint system left and right, and forward and backward to ensure that it has been securely installed.
- When a junior seat (booster seat) is installed, always ensure that the shoulder belt is positioned across the center of the child's shoulder. The belt should be kept away from the child's neck, but not so that it could fall off the child's shoulder.
- Follow all installation instructions provided by the child restraint system manufacturer.
- When securing some types of child restraint systems in rear seats, it may not be possible to properly use the seat belts in positions next to the child restraint without interfering with it or affecting seat belt effectiveness. Be sure your seat belt fits snugly across your shoulder and low on your hips. If it does not, or if it interferes with the child restraint, move to a different position. Failure to do so may result in death or serious injury.

- When installing a child restraint system in the rear center seat, adjust both seat cushions to the same position and align both seatbacks at the same angle. Otherwise, the child restraint system cannot be securely restrained and this may cause death or serious injuries in the event of sudden braking, sudden swerving or an accident.
- If the seat is adjusted, reconfirm the security of the child restraint system.

**Child restraint system fixed with an ISOFIX lower anchorage****■ ISOFIX lower anchorages (ISOFIX child restraint system)**

Lower anchorages are provided for the outboard rear seats. (Buttons displaying the location of the anchorages are attached to the seats.)

**■ Installation with ISOFIX lower anchorage (ISOFIX child restraint system)**

Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

- 1 Vehicles with power rear seat:  
Adjust the seat

If there is a gap between the child seat and

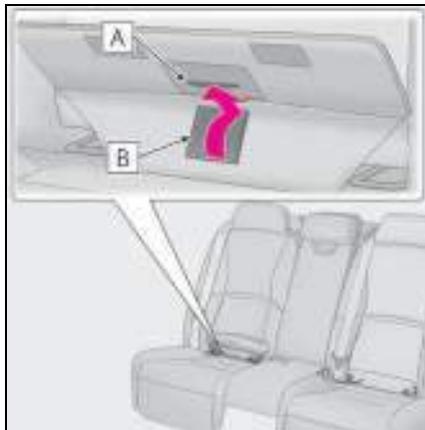
the seatback, adjust the seatback angle until good contact is achieved. (→P.90)

2 Open the cover.



3 Insert the tab **B** into the slit **A** of the cover.

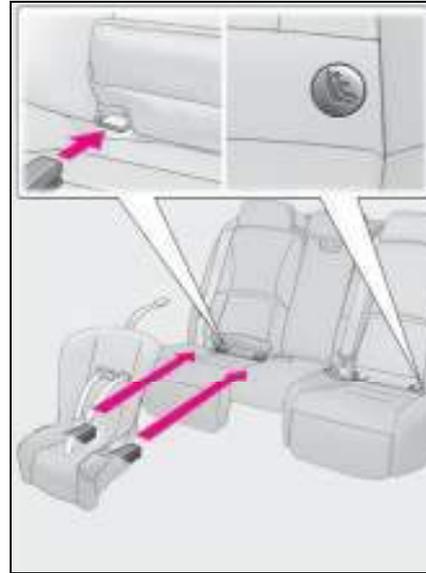
The cover will be held open.



4 Check the positions of the exclusive fixing bars, and install the child restraint system to the seat.

The bars are installed in the clearance

between the seat cushion and seatback.



5 After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.93)

**! WARNING**

**When installing a child restraint system**

Observe the following precautions. Failure to do so may result in death or serious injury.

- When using the lower anchorages, be sure that there are no foreign objects around the anchorages and that the seat belt is not caught behind the child restraint system.
- Follow all installation instructions provided by the child restraint system manufacturer.

**⚠ WARNING**

- When securing some types of child restraint systems in rear seats, it may not be possible to properly use the seat belts in positions next to the child restraint without interfering with it or affecting seat belt effectiveness. Be sure your seat belt fits snugly across your shoulder and low on your hips. If it does not, or if it interferes with the child restraint, move to a different position. Failure to do so may result in death or serious injury.
- If the seat is adjusted, reconfirm the security of the child restraint system.

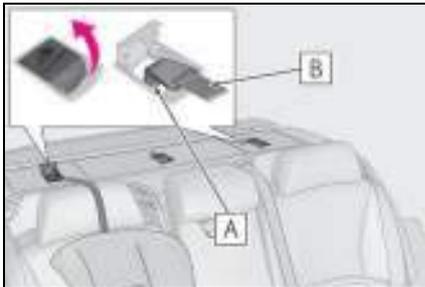
**Using a top tether anchorage**

■ **Top tether anchorage**

Top tether anchorages are provided for each rear seat.

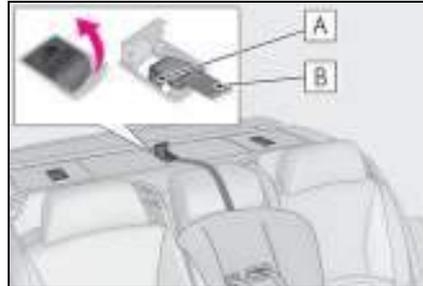
Use top tether anchorages when fixing the top strap.

▶ **Outboard rear seats**



- A** Anchor brackets
- B** Top strap

▶ **Rear center seat**



- A** Anchor bracket
- B** Top strap

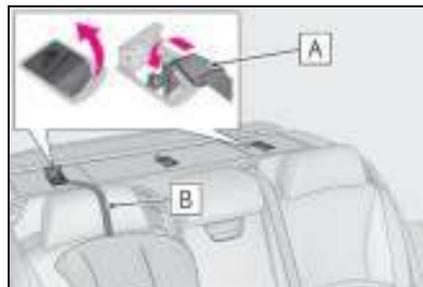
■ **Fixing the top strap to the top tether anchorage**

Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

Open the top tether anchorage cover, latch the hook onto the top tether anchorage and tighten the top strap.

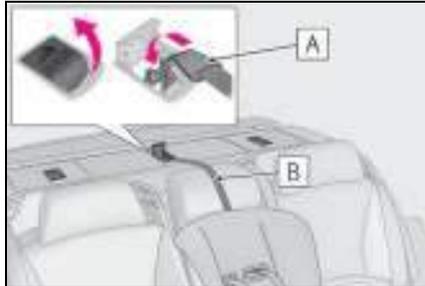
Make sure the top strap is securely latched. (→P.93)

▶ **Outboard rear seats**



- A** Hook
- B** Top strap

## ► Rear center seat

**A** Hook**B** Top strap**WARNING****■ When installing a child restraint system**

Observe the following precautions. Failure to do so may result in death or serious injury.

- Firmly attach the top strap and make sure that the belt is not twisted.
- Do not attach the top strap to anything other than the top tether anchorage.
- Follow all installation instructions provided by the child restraint system manufacturer.
- Be sure to have the top strap pass over the top of the head restraint. If the belt passes below the head restraint, it is possible that the child restraint system may not be securely fixed.
- If the seat is adjusted, reconfirm the security of the child restraint system.

**NOTICE****■ Top tether anchorages**

When not in use, make certain to close the lid. If it remains open, the lid may be damaged.

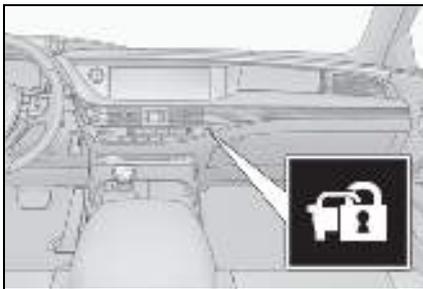
**Engine immobilizer system**

The vehicle's keys have built-in transponder chips that prevent the engine from starting if a key has not been previously registered in the vehicle's on-board computer.

Never leave the keys inside the vehicle when you leave the vehicle.

This system is designed to help prevent vehicle theft but does not guarantee absolute security against all vehicle thefts.

**Operating the system**



■ Certification for the engine immobilizer system

▶ For vehicles sold in Korea



실호열/제조사  
기차재의 품질(모델명)  
최소년월/제조국  
식별구호

: Toyota Motor Corporation  
: 디에프제강도 두산기 (TMIMB-3K6)  
: Shown on product / Japan  
: N14-TMIMB-3K1

The indicator light flashes after the engine switch has been turned off to indicate that the system is operating.

The indicator light stops flashing after the engine switch has been turned to ACCESSORY or IGNITION ON mode to indicate that the system has been canceled.

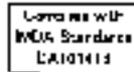
■ System maintenance

The vehicle has a maintenance-free type engine immobilizer system.

■ Conditions that may cause the system to malfunction

- If the grip portion of the key is in contact with a metallic object
- If the key is in close proximity to or touching a key to the security system (key with a built-in transponder chip) of another vehicle

- ▶ For vehicles sold in Singapore



- ▶ For vehicles sold in Taiwan

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率，加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

- ▶ For vehicles sold in Vietnam



- For vehicles sold in Dominican Republic

FCC ID: NI4TMIMB-3

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



#### NOTICE

- To ensure the system operates correctly

Do not modify or remove the system. If modified or removed, the proper operation of the system cannot be guaranteed.

## Alarm

The alarm uses light and sound to give an alert when an intrusion is detected.

The alarm is triggered in the following situations when the alarm is set:

- Except for Malaysia, South Africa and Egypt: A locked door or trunk is unlocked or opened in any way other than using the entry function, wireless remote control or mechanical key. (The doors will lock again automatically.)
- For Malaysia, South Africa and Egypt: A locked door or trunk is unlocked or opened in any way other than using the entry function or wireless remote control. (The doors will lock again automatically.)
- The hood is opened.
- The intrusion sensor detects something moving inside the vehicle. (Example: an intruder breaks a window and gets into the vehicle.)
- The tilt sensor detects a change of vehicle inclination.

## Setting/deactivating/stopping the alarm system

### ■ Items to check before locking the vehicle

To prevent unexpected triggering of

the alarm and vehicle theft, make sure of the following:

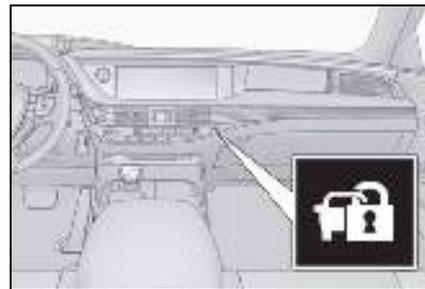
- Nobody is in the vehicle.
- The windows, moon roof (if equipped) and panoramic moon roof (if equipped) are closed before the alarm is set.
- No valuables or other personal items are left in the vehicle.

### ■ Setting

Except for Malaysia, South Africa and Egypt: Close the doors, trunk and hood, and lock all the doors. The system will be set automatically after 30 seconds.

For Malaysia, South Africa and Egypt: Close the doors, trunk and hood, and lock all the doors using the entry function or wireless remote control. The system will be set automatically after 30 seconds.

The indicator light changes from being on to flashing when the system is set.



### ■ Deactivating or stopping

Do one of the following to deactivate or stop the alarms:

- Except for Malaysia, South Africa and Egypt: Unlock the doors.

- For Malaysia, South Africa and Egypt: Unlock the doors or open the trunk using the entry function or wireless remote control.
- Except for Malaysia, South Africa and Egypt: Turn the engine switch to ACCESSORY or IGNITION ON mode, or start the engine. (The alarm will be deactivated or stopped after a few seconds.)
- For Malaysia, South Africa and Egypt: Starting the engine. (The alarm will be deactivated or stopped after a few seconds.)

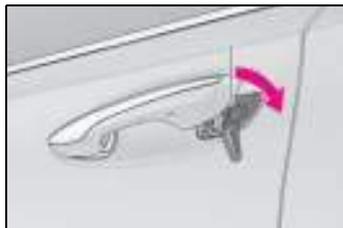
#### ■ System maintenance

The vehicle has a maintenance-free type alarm system.

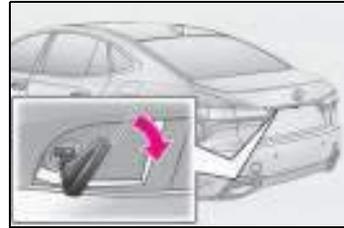
#### ■ Triggering of the alarm

The alarm may be triggered in the following situations:  
(Stopping the alarm deactivates the alarm system.)

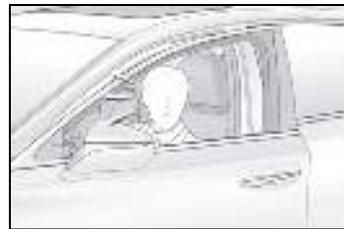
- For Malaysia, South Africa and Egypt: The doors are unlocked using the mechanical key.



- The trunk is opened using the mechanical key.



- A person inside the vehicle opens a door, the trunk or hood, or unlocks the vehicle.



- The battery is recharged or replaced when the vehicle is locked. (→P.544)



#### ■ Alarm-operated door lock

In the following cases, depending on the situation, the door may automatically lock to prevent improper entry into the vehicle:

- When a person remaining in the vehicle unlocks the door and the alarm is activated.
- While the alarm is activated, a person remaining in the vehicle unlocks the door.

#### ⚠ NOTICE

##### ■ To ensure the system operates correctly

Do not modify or remove the system. If modified or removed, the proper operation of the system cannot be guaranteed.

**The intrusion sensor and tilt sensor detection (if equipped)**

■ **The intrusion sensor and tilt sensor detection**

- The intrusion sensor detects intruders or movement in the vehicle.
- The tilt sensor detects changes in vehicle inclination, such as when the vehicle is towed away.

This system is designed to deter and prevent vehicle theft but does not guarantee absolute security against all intrusions.

■ **Setting the intrusion sensor and tilt sensor**

The intrusion sensor and tilt sensor will be set automatically when the alarm is set. (→P.100)

■ **Canceling the intrusion sensor and tilt sensor**

If you are leaving pets or other moving things inside the vehicle, make sure to disable the intrusion sensor and tilt sensor before setting the alarm, as they will respond to movement inside the vehicle.

- 1 Turn the engine switch off.
- 2 Press the intrusion sensor and tilt sensor cancel switch.

Press the switch again to re-enable the intrusion sensor and tilt sensor.

Each time the intrusion sensor and tilt sensor are canceled/set, a message will be

shown on the multi-information display.



■ **Canceling and automatic re-enabling of the intrusion sensor and tilt sensor**

- The alarm will still be set even when the intrusion sensor and tilt sensor are canceled.
- After the intrusion sensor and tilt sensor are canceled, pressing the engine switch or unlocking the doors using the entry function or wireless remote control will re-enable the intrusion sensor and tilt sensor.
- The intrusion sensor and tilt sensor will automatically be re-enabled when the alarm system is deactivated.

■ **Intrusion sensor detection considerations**

The sensor may trigger the alarm in the following situations:

- People or pets are in the vehicle.

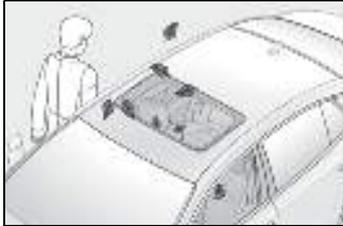


- A window or moon roof (if equipped), panoramic moon roof (if equipped) is open.

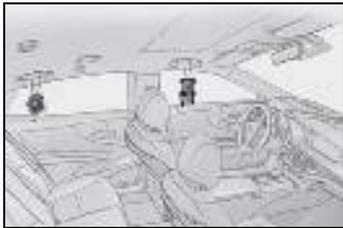
In this case, the sensor may detect the following:

- Wind or the movement of objects such as leaves and insects inside the vehicle

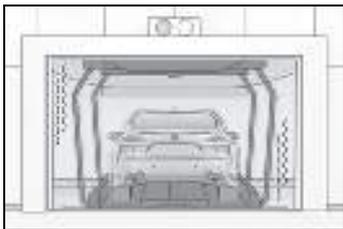
- Ultrasonic waves emitted from devices such as the intrusion sensors of other vehicles
- The movement of people outside the vehicle



- Small insects such as moths or flies are in the vehicle.
- Unstable items, such as dangling accessories or clothes hanging on the coat hooks, are in the vehicle.



- The vehicle is parked in a place where extreme vibrations or noises occur, such as in a parking garage.



- Ice or snow is removed from the vehicle, causing the vehicle to receive repeated impacts or vibrations.



- The vehicle is inside an automatic or high-pressure car wash.
- The vehicle experiences impacts, such as hail, lightning strikes, and other kinds of repeated impacts or vibrations.

■ **Tilt sensor detection considerations**

The sensor may trigger the alarm in the following situations:

- The vehicle is transported by a ferry, trailer, train, etc.
- The vehicle is parked in a parking garage.
- The vehicle is inside a car wash that moves the vehicle.
- Any of the tires loses air pressure.
- The vehicle is jacked up.
- An earthquake occurs or the road caves in.
- Cargo is loaded onto or unloaded from the roof luggage carrier.

⚠ **NOTICE**

■ **To ensure the intrusion sensor function correctly**

- To ensure that the sensors operate properly, do not touch or cover them.



 NOTICE

- Do not spray air fresheners or other products directly into the sensor holes.



- Installing accessories other than genuine Lexus parts or leaving objects between the driver's seat and front passenger's seat may reduce the detection performance.

## Vehicle status information and indicators

2

105

### 2-1. Instrument cluster

Warning lights and indicators .....	106
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2

Vehicle status information and indicators

### Warning lights and indicators

The warning lights and indicators on the instrument cluster, center panel and outside rear view mirrors inform the driver of the status of the vehicle's various systems.

### Warning lights and indicators displayed on the instrument cluster

For the purpose of explanation, the following illustrations display all warning lights and indicators illuminated.

- ▶ Except F SPORT models



The location of warning lights and indicators may differ depending on the intended destination of the vehicle.

▶ F SPORT models



The location of warning lights and indicators may differ depending on the intended destination of the vehicle and the selected main meter location.

2

Vehicle status information and indicators

**Warning lights**

Warning lights inform the driver of malfunctions in the indicated vehicle's systems.

-  Brake system warning light<sup>\*1</sup> (→P.521) (red)
-  Brake system warning light<sup>\*1</sup> (→P.521) (yellow)
-  High coolant temperature warning light<sup>\*2</sup> (→P.521)
-  Charging system warning light<sup>\*2</sup> (→P.522)
-  Low engine oil pressure warning light<sup>\*2</sup> (→P.522)
-  Malfunction indicator lamp<sup>\*1</sup> (→P.522)
-  SRS warning light<sup>\*1</sup> (→P.522)
-  Pop Up Hood warning light<sup>\*1</sup> (→P.523)

-  ABS warning light<sup>\*1</sup> (→P.523)
-  Brake Override System warning light/Drive-Start Control warning light<sup>\*2</sup> (→P.523)
-  Electric power steering system warning light<sup>\*1</sup> (→P.524) (red)
-  Electric power steering system warning light<sup>\*1</sup> (→P.524) (yellow)
-  Low fuel level warning light (→P.524)
-  Driver's and front passenger's seat belt reminder light (→P.524)
-  Rear passengers' seat belt reminder lights<sup>\*3</sup> (→P.525) (type A)
-  Rear passengers' seat belt reminder lights<sup>\*3</sup> (→P.525) (type B)
-  Tire pressure warning light<sup>\*1</sup> (→P.525)

-  LTA indicator (if equipped) (→P.526)
-  LDA indicator (if equipped) (→P.526)
-  Stop & Start cancel indicator <sup>\*1</sup> (if equipped) (→P.526)
-  Lexus parking assist-sensor OFF indicator <sup>\*1</sup> (→P.526)
-  RCTA OFF indicator <sup>\*1</sup> (if equipped) (→P.526)
-  RCD OFF indicator (if equipped) (→P.527)
-  PKSB OFF indicator <sup>\*1</sup> (if equipped) (→P.527)
-  PCS warning light <sup>\*1</sup> (if equipped) (→P.527)
-  Slip indicator <sup>\*1</sup> (→P.528)
-  Parking brake indicator (→P.528)
-  Brake hold operated indicator <sup>\*1</sup> (→P.528)
-  Master warning light <sup>\*4</sup> (→P.528)

<sup>\*1</sup>: These lights come on when the engine switch is turned to IGNITION ON mode to indicate that a system check is being performed. They will turn off after the engine is started, or after a few seconds. There may be a malfunction in a system if the lights do not come on, or turn off. Have the vehicle inspected by your Lexus dealer.

<sup>\*2</sup>: This light illuminates on the multi-information display.

<sup>\*3</sup>: This light illuminates on the center panel.

<sup>\*4</sup>: F SPORT models: This light comes on when the engine switch is turned to IGNITION ON mode to indicate that a system check is being performed. They will turn off after the engine is started, or after a few seconds. There may be a malfunction in a system if the lights do not come on, or turn off. Have the vehicle inspected by your Lexus dealer.

**! WARNING**

**■ If a safety system warning light does not come on**

Should a safety system light such as the ABS and SRS warning light not come on when you start the engine, this could mean that these systems are not available to help protect you in an accident, which could result in death or serious injury. Have the vehicle inspected by your Lexus dealer immediately if this occurs.

**Indicators**

The indicators inform the driver of the operating state of the vehicle's various systems.

-  Turn signal indicator (→P.222)
-  Tail light indicator (→P.227)
-  Headlight high beam indicator (→P.229)
-  AHS indicator (if equipped) (→P.231)
-  AHB indicator (if equipped) (→P.234)

	Multi Weather Lights indicator (if equipped) (→P.236)		Stop & Start cancel indicator <sup>*1, 2</sup> (if equipped) (→P.329)
	Rear fog light indicator (→P.237)		Slip indicator <sup>*1</sup> (→P.381) (flashes)
	PCS warning light <sup>*1,2</sup> (if equipped) (→P.263, 274)		VSC OFF indicator <sup>*1,2</sup> (→P.382)
	Cruise control indicator (→P.308, 318, 321)		High mode indicator (if equipped) (→P.377)
	Dynamic radar cruise control indicator (if equipped) (→P.301, 312)		Smart entry & start system indicator <sup>*4</sup> (→P.212)
	Cruise control "SET" indicator (→P.301, 312, 320)		Parking brake indicator (→P.223)
	LTA indicator (if equipped) (→P.288)		Brake hold standby indicator <sup>*1</sup> (→P.225)
	LDA indicator (if equipped) (→P.297)		Brake hold operated indicator <sup>*1</sup> (→P.225)
	LTA indicator (if equipped) (→P.288)		Eco Driving Indicator Light <sup>*1</sup> (→P.122)
	LDA indicator (if equipped) (→P.297)		Low outside temperature indicator <sup>*5</sup> (→P.111, 114)
	LTA indicator (if equipped) (→P.288)		Security indicator <sup>*6</sup> (→P.97, 100)
	LDA indicator (if equipped) (flashes) (→P.297)		"AIR BAG ON/OFF" indicator <sup>*1,6</sup> (if equipped) (→P.50)
	BSM outside rear view mirror indicators <sup>*1,3</sup> (if equipped) (→P.330, 346)		"PASSENGER AIR BAG" indicator <sup>*1,6</sup> (if equipped) (→P.55)
	BSM indicator (if equipped) (→P.330)	● Drive mode indicators	
	Lexus parking assist-sensor OFF indicator <sup>*1,2</sup> (→P.341)	▶ Except F SPORT models	
	RCTA OFF indicator <sup>*1,2</sup> (if equipped) (→P.346)		Snow mode indicator (if equipped) (→P.219)
	RCD OFF indicator <sup>*2</sup> (if equipped) (→P.351)		Normal mode indicator (→P.374)
	PKSB OFF indicator <sup>*1,2</sup> (if equipped) (→P.355)		Custom mode indicator (if equipped) (→P.374)
	Stop & Start indicator <sup>*1</sup> (if equipped) (→P.323)		

 Comfort mode indicator (if equipped) (→P.374)

 Eco drive mode indicator (→P.374)

 Sport mode indicator (if equipped) (→P.374)

 Sport S mode indicator (if equipped) (→P.374)

 Sport S+ mode indicator (if equipped) (→P.374)

► F SPORT models

 Snow mode indicator (if equipped) (→P.219)

 Normal mode indicator (→P.374)

 Custom mode indicator (→P.374)

 Comfort mode indicator (→P.374)

 Eco drive mode indicator (→P.374)

 Sport S mode indicator (→P.374)

 Sport S+ mode indicator (→P.374)

\*1: These lights come on when the engine switch is turned to IGNITION ON mode to indicate that a system check is being performed. They will turn off after the engine is started, or after a few seconds. There may be a malfunction in a system if the lights do not come on, or turn off. Have the vehicle inspected by

your Lexus dealer.

\*2: This light comes on when the system is turned off.

\*3: This light illuminates on the outside rear view mirrors.

\*4: This light illuminates on the multi-information display.

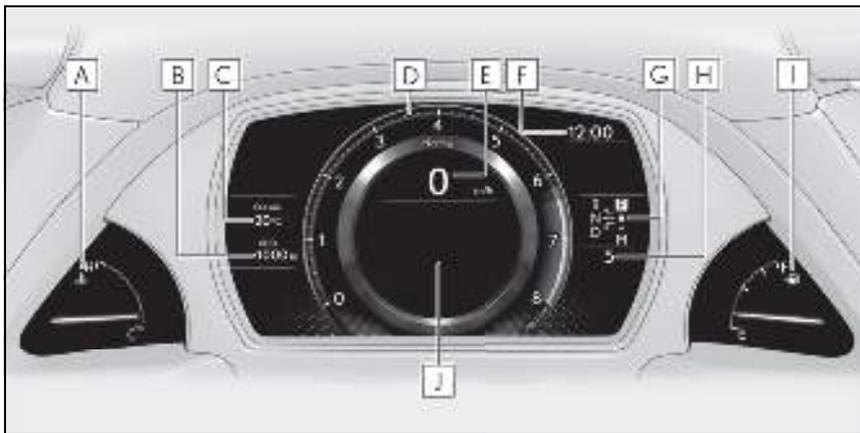
\*5: When the outside temperature is approximately 3°C (37°F) or lower, this indicator will flash for approximately 10 seconds, then stay on.

\*6: This light illuminates on the center panel.

## Gauges and meters (except F SPORT models)

### Meter display

#### ■ Locations of gauges and meters



The location of some displayed items and the units of measure may differ depending on the intended destination of the vehicle.

**A** Engine coolant temperature gauge

Displays the engine coolant temperature

**B** Odometer and trip meter display (→P.112)

**C** Outside temperature

Displays the outside temperature within the range of -40°C (-40°F) to 50°C (122°F)

**D** Tachometer

Displays the engine speed in revolutions per minute

When sport mode is selected for the driving mode, the periphery of the tachometer will change color and the scale of the tachometer will be emphasized.

**E** Speedometer

**F** Clock

Time displayed is linked to the analog clock on the center panel. (→P.434)

**G** Shift position indicator (→P.217)

**H** Shift range/gear position (→P.215)

**I** Fuel gauge

Displays the quantity of fuel remaining in the tank

**J** Multi-information display

Presents the driver with a variety of vehicle data (→P.118)  
 Displays warning messages if a malfunction occurs (→P.530)

■ **Outside temperature display**

- In the following situations, the correct outside temperature may not be displayed, or the display may take longer than normal to change:
  - When stopped, or driving at low speeds (less than 20 km/h [12 mph])
  - When the outside temperature has changed suddenly (at the entrance/exit of a garage, tunnel, etc.)
- When “-” or “E” is displayed, the system may be malfunctioning. Take your vehicle to your Lexus dealer.

■ **Liquid crystal display**

→P.119

■ **Customization**

The gauges and meters can be customized on  of the multi-information display. (→P.124)

 **WARNING**

■ **The information display at low temperatures**

Allow the interior of the vehicle to warm up before using the liquid crystal information display. At extremely low temperatures, the information display monitor may respond slowly, and display changes may be delayed.

For example, there is a lag between the driver’s shifting and the new gear number appearing on the display. This lag could cause the driver to downshift again, causing rapid and excessive engine braking and possibly an accident resulting in death or injury.

 **NOTICE**

■ **To prevent damage to the engine and its components**

- Do not let the indicator needle of the tachometer enter the red zone, which indicates the maximum engine speed.
- The engine may be overheating if the engine coolant temperature gauge is in the red zone (H). In this case, immediately stop the vehicle in a safe place, and check the engine after it has cooled completely. (→P.547)

**Odometer and trip meter display**

■ **Display items**

- **Odometer**

Displays the total distance the vehicle has been driven.

- **Trip meter A/trip meter B**

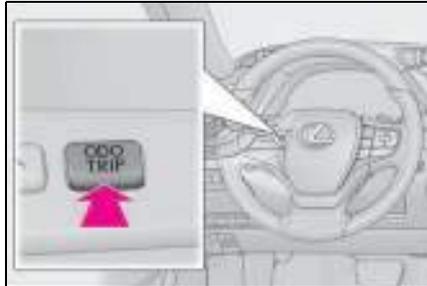
Displays the distance the vehicle has been driven since the meter was last reset. Trip meters A and B can be used to record and display different distances independently.

- **Distance until next engine oil change**

Displays the distance the vehicle can be driven until an oil change is necessary.

■ **Changing the display**

Each time the “ODO TRIP” switch is pressed, the displayed item will be changed. When the trip meter is displayed, pressing and holding the switch will reset the trip meter.



### ■ Pop-up display

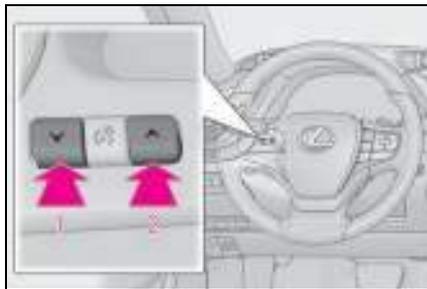
In some situations the following will be temporarily displayed:

- Stop & Start system operation time (current) (if equipped) (→P.323)
- Stop & Start system operating state (if equipped) (→P.327)
- Distance until next engine oil change

When a warning message indicating that oil maintenance should be performed soon or is required is displayed.

### Changing the instrument panel light brightness

The brightness of the instrument panel lights can be adjusted.



- 1 Darker
- 2 Brighter

### ■ Brightness of the meters (day mode and night mode)

The brightness of the meters changes between day mode and night mode.

- Day mode: When the tail lights are off or when the tail lights are on but the surrounding area is bright
- Night mode: When the tail lights are on and the surrounding area is dark

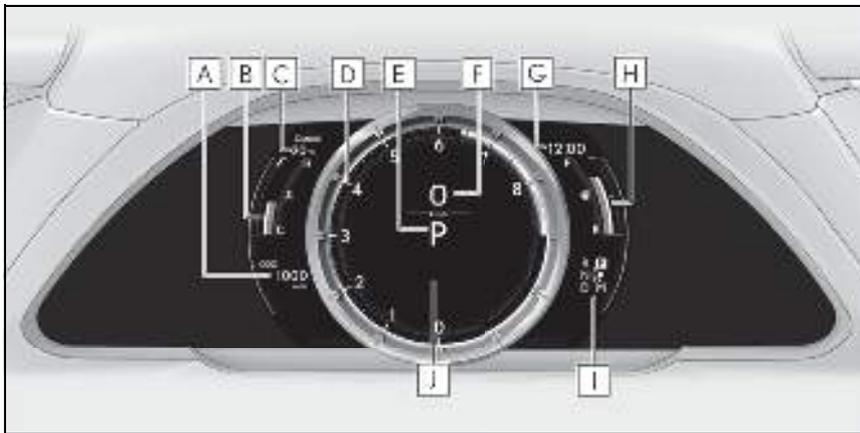
## Gauges and meters (F SPORT models)

### Meter display

#### ■ Locations of gauges and meters

When the main meter is moved to the right, some of the meter displays and the gauge layout will change. (→P.118)

#### ► Main meter in center position



The location of some displayed items and the units of measure may differ depending on the intended destination of the vehicle.

**A** Odometer and trip meter display (→P.117)

**B** Engine coolant temperature gauge

Displays the engine coolant temperature

**C** Outside temperature

Displays the outside temperature within the range of  $-40^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$ ) to  $50^{\circ}\text{C}$  ( $122^{\circ}\text{F}$ )

**D** Tachometer

Displays the engine speed in revolutions per minute

When sport mode is selected for the driving mode, the periphery of the tachometer will change color and the scale of the tachometer will be emphasized.

- Rev indicator (→P.116)

- Rev peak (→P.116)

**E** Shift position/shift range/gear position (→P.215)

**F** Speedometer

**G** Clock

Time displayed is linked to the analog clock on the center panel. (→P.434)

**H** Fuel gauge

Displays the quantity of fuel remaining in the tank

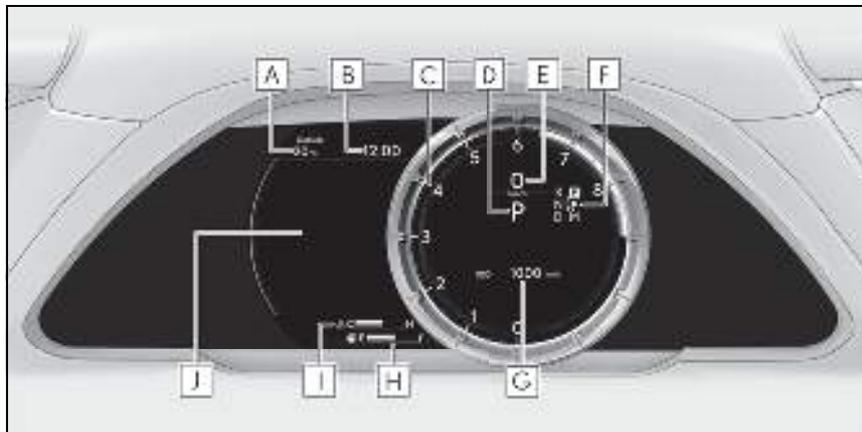
**I** Shift position indicator (→P.217)

**J** Multi-information display

Presents the driver with a variety of vehicle data (→P.118)

Displays warning messages if a malfunction occurs (→P.530)

► Main meter moved to the right



The location of some displayed items and the units of measure may differ depending on the intended destination of the vehicle.

**A** Outside temperature

Displays the outside temperature within the range of -40°C (-40°F) to 50°C (122°F)

**B** Clock

Time displayed is linked to the analog clock on the center panel. (→P.434)

**C** Tachometer

Displays the engine speed in revolutions per minute

When sport mode is selected for the driving mode, the periphery of the tachometer will change color and the scale of the tachometer will be emphasized.

- Rev indicator (→P.116)
- Rev peak (→P.116)

**D** Shift position/shift range/gear position (→P.215)

**E** Speedometer

**F** Shift position indicator (→P.217)

**G** Odometer and trip meter display (→P.117)

**H** Fuel gauge

Displays the quantity of fuel remaining in the tank

**I** Engine coolant temperature gauge

Displays the engine coolant temperature

**J** Multi-information display

Presents the driver with a variety of vehicle data (→P.118)

Displays warning messages if a malfunction occurs (→P.530)

■ Rev indicator

When the engine speed reaches a set speed or the red zone, a ring-shaped indicator (A) will be displayed on the tachometer.

The indicators will be displayed in amber when the engine speed reaches a set speed, and in red when the engine speed reaches the red zone.

The engine speed at which the rev indicator will begin to be displayed can be set on  of the multi-information display. (→P.124)



■ Rev peak

When the engine speed reaches or exceeds 5000 r/min, an afterimage of the tachometer will be displayed at the highest engine speed for approximately 1 second.



■ Outside temperature display

- In the following situations, the correct outside temperature may not be displayed, or the display may take longer than normal to change:
  - When stopped, or driving at low speeds (less than 20 km/h [12 mph])
  - When the outside temperature has changed suddenly (at the entrance/exit of a garage, tunnel, etc.)
- When "--" or "E" is displayed, the system may be malfunctioning. Take your vehicle to your Lexus dealer.

■ Liquid crystal display

→P.119

■ Customization

The gauges and meters can be customized on  of the multi-information display. (→P.124)

**⚠ WARNING****■ The information display at low temperatures**

Allow the interior of the vehicle to warm up before using the liquid crystal information display. At extremely low temperatures, the information display monitor may respond slowly, and display changes may be delayed.

For example, there is a lag between the driver's shifting and the new gear number appearing on the display. This lag could cause the driver to downshift again, causing rapid and excessive engine braking and possibly an accident resulting in death or injury.

**⚠ NOTICE****■ To prevent damage to the engine and its components**

- Do not let the indicator needle of the tachometer enter the red zone, which indicates the maximum engine speed.
- The engine may be overheating if the engine coolant temperature gauge is in the red zone (H). In this case, immediately stop the vehicle in a safe place, and check the engine after it has cooled completely. (→P.547)

**Odometer and trip meter display****■ Display items****● Odometer**

Displays the total distance the vehicle has been driven.

**● Trip meter A/trip meter B**

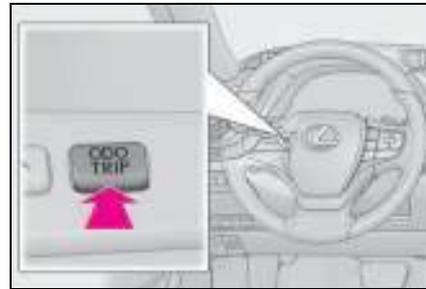
Displays the distance the vehicle has been driven since the meter was last reset. Trip meters A and B can be used to record and display different distances independently.

**● Distance until next engine oil change**

Displays the distance the vehicle can be driven until an oil change is necessary.

**■ Changing the display**

Each time the "ODO TRIP" switch is pressed, the displayed item will be changed. When the trip meter is displayed, pressing and holding the switch will reset the trip meter.

**■ Pop-up display**

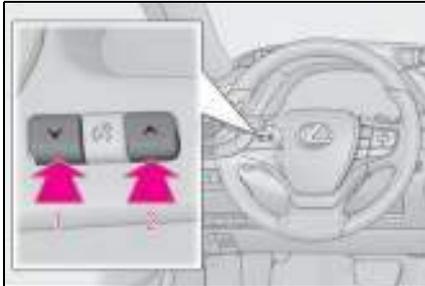
In some situations the following will be temporarily displayed:

- Stop & Start system operation time (current) (if equipped) (→P.323)
- Stop & Start system operating state (if equipped) (→P.327)
- Distance until next engine oil change

When a warning message indicating that oil maintenance should be performed soon or is required is displayed.

**Changing the instrument panel light brightness**

The brightness of the instrument panel lights can be adjusted.



- 1 Darker
- 2 Brighter

#### ■ Brightness of the meters (day mode and night mode)

The brightness of the meters changes between day mode and night mode.

- Day mode: When the tail lights are off or when the tail lights are on but the surrounding area is bright
- Night mode: When the tail lights are on and the surrounding area is dark

#### Changing the main meter location

The display can be switched between the center and side positions.



### Multi-information display

#### Display and menu icons

##### ■ Display (except F SPORT models)

By selecting menu icons on the multi-information display, a variety of driving-related information can be displayed. The multi-information display can also be used to change display settings and other vehicle settings.

Warning or suggestion/advice pop-up displays are also displayed in certain situations.

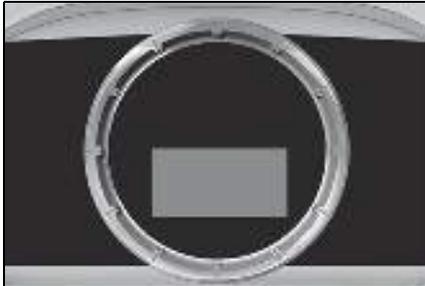


##### ■ Display (F SPORT models)

##### ▶ Main meter in center position

The multi-information display presents the driver with a variety of driving-related information.

Warning or suggestion/advice pop-up displays are also displayed in certain situations.



► Main meter moved to the right

By selecting menu icons on the multi-information display, a variety of driving-related information can be displayed. The multi-information display can also be used to change display settings and other vehicle settings.

Warning or suggestion/advice pop-up displays are also displayed in certain situations.



■ Menu icons

The menu icons will be displayed by pressing  or  of the meter control switch.

F SPORT models: The menu icons can be displayed when the main meter is moved to the right.



Driving information display  
(→P.120)



Navigation system-linked display (if equipped) (→P.123)



Audio system-linked display  
(→P.123)



Driving support system information display (→P.124)



Warning message display  
(→P.530)



Settings display (→P.124)

■ Liquid crystal display

Small spots or light spots may appear on the display. This phenomenon is characteristic of liquid crystal displays, and there is no problem continuing to use the display.



**WARNING**

■ Caution for use while driving

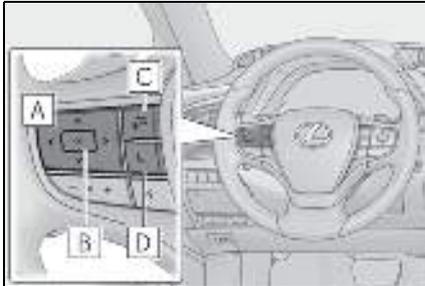
- When operating the multi-information display while driving, pay extra attention to the safety of the area around the vehicle.
- Do not look continuously at the multi-information display while driving as you may fail to see pedestrians, objects on the road, etc. ahead of the vehicle.

■ The information display at low temperatures

→P.112, 117

**Changing the meter display**

The multi-information display is operated using the meter control switches.



- A** ◀ / ▶ : Select menu icons
- ▲ / ▼ : Change displayed content, scroll up/down the screen and move the cursor up/down
- B** Press: Enter/Set  
Press and hold: Reset
- C** Move the main meter\* and return to the previous screen
- D** Call sending/receiving and history display

Linked with the hands-free system, sending or receiving call is displayed. For details regarding the hands-free system, refer to the "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".

\* : F SPORT models

### Content of driving information

#### ■ Display items (except F SPORT models)

Press ◀ or ▶ of the meter control switch and select ⓘ. Then press ▲ or ▼ to display the following items:

- Drive information 1
- Drive information 2

- Stop & Start system information (if equipped)
- Eco Driving Indicator
- Boost gauge (LS500)
- Tire pressure (→P.487)
- Display off

#### ■ Display items (F SPORT models)

- ▶ Main meter in center position

Press ▲ or ▼ of the meter control switch to display the following items:

- Drive information 1
- Drive information 2
- Tire pressure (→P.487)
- Gear positions
- Display off
- Driving support system information\* (→P.124)

\* : Can be selected when a driving support system is enabled. (→P.283, 293, 301, 312)

- ▶ Main meter moved to the right

Press ◀ or ▶ of the meter control switch and select ⓘ. Then press ▲ or ▼ to display the following items:

- Drive information 1
- Drive information 2
- Stop & Start system information (if equipped)
- Eco Driving Indicator
- Boost gauge (LS500)
- G-force

- Gear Position
- Tire pressure (→P.487)
- Display off
- **Drive information 1/Drive information 2**

Displays drive information such as the following:

Use the displayed values as a reference only.

- Drive information 1
  - Current fuel consumption
  - Average fuel economy (after reset)
- Drive information 2
  - Distance (driving range)
  - Average vehicle speed (after reset)

Displayed items (listed below) can be changed on . (→P.124)

- Current fuel consumption

Bar type: Displays instantaneous current fuel consumption

- Average fuel economy

After reset: Displays average fuel consumption since the display was reset<sup>\*1</sup>

After start: Displays average fuel consumption since engine start

After refuel: Displays average fuel consumption since refuel

- Average vehicle speed

After reset: Displays average vehicle speed since the display was reset<sup>\*1</sup>

After start: Displays average vehicle speed since engine start

- Elapsed time

After reset: Displays elapsed time since the

display was reset<sup>\*1</sup>

After start: Displays elapsed time since engine start

- Distance

Driving range: Displays driving range with remaining fuel<sup>\*2,3</sup>

After start: Displays the distance driven since engine start

- Other

Blank: No item

<sup>\*1</sup>: To reset, display the desired item and press and hold  of the meter control switch.

<sup>\*2</sup>: This distance is computed based on your average fuel consumption. As a result, the actual distance that can be driven may differ from that displayed.

<sup>\*3</sup>: When only a small amount of fuel is added to the tank, the display may not be updated.

When refueling, turn the engine switch off. If the vehicle is refueled without turning the engine switch off, the display may not be updated.

- **Stop & Start system information (if equipped)**

- Display items

- Stop & Start system operation time (current)/status notification

Displays the current amount of time the engine has been stopped due to the operation of the Stop & Start system.

Also shows the status of the Stop & Start system with a pop-up display. (→P.327)

- Stop & Start system operation time since engine start
- Stop & Start system operation time since

display was reset

- Stop & Start system settings

Press **OK** of the meter control switch to display the Stop & Start system settings screen.

On this screen, the following operations can be performed:

- **A** Stop & Start

The length of time the Stop & Start system will operate when the "A/C" switch of the air conditioning system is on can be set to 2 different levels.

This setting can also be changed on **Settings**.

- Reset

Resets the Stop & Start system operation time and amount of fuel saved.

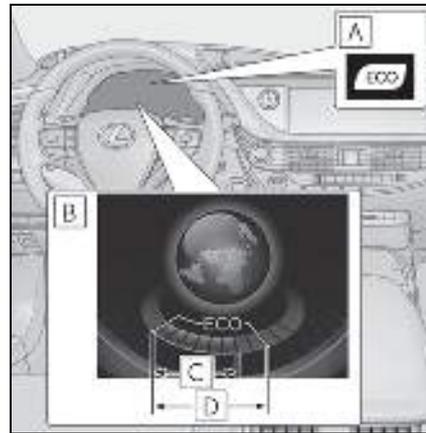
To reset the recorded values, move the cursor to "Reset", and then press and hold **OK** of the meter control switch.

- Stop & Start system display

Select to display Stop & Start system operation time (since engine start and since display was reset) or amount of fuel saved\* (since engine start and since display was reset).

\*: Use the displayed amount of saved fuel for reference only.

### ■ Eco Driving Indicator



#### **A** Eco Driving Indicator Light

During Eco-friendly acceleration (Eco driving), the Eco Driving Indicator Light will turn on. When the acceleration exceeds the Zone of Eco driving, or when the vehicle is stopped, the light turns off.

#### **B** Eco Driving Indicator Zone Display

Suggests the Zone of Eco driving with current Eco driving ratio based on acceleration.

#### **C** Eco driving ratio based on acceleration

If the acceleration exceeds the Zone of Eco driving, the right side of the Eco Driving Indicator Zone Display will illuminate. At this time, the Eco Driving Indicator Light will turn off.

#### **D** Zone of Eco driving

### ■ Boost gauge (LS500)

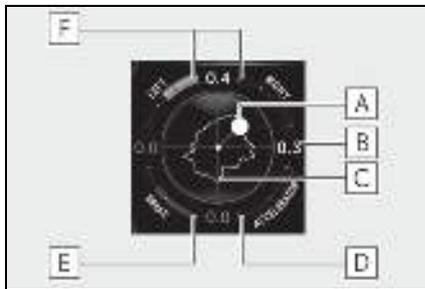
Displays the boost pressure. The display will change color if the specified pressure is exceeded.

This display is intended for use as a guideline. Depending on factors such as the road

surface condition, temperature and vehicle speed, the display may not show the actual condition of the vehicle.

■ **G-force (F SPORT models)**

Displays lateral G-forces on the vehicle. Also displays, around the periphery of the G-force display, the left and right steering amount, accelerator pedal input, and brake fluid pressure.



- A** Acceleration G-force on the vehicle
- B** Current G-force value (analyzed value of front/rear and left/right G-forces)
- C** Record of the maximum G-forces
- D** Accelerator pedal input
- E** Brake fluid pressure
- F** Steering amount

This display is intended for use as a guideline. Depending on factors such as the road surface condition, temperature and vehicle speed, the display may not show the actual condition of the vehicle.

- Resetting the record of maximum G-forces

Press and hold **OK** of the meter control switch to reset the record.

- Peak hold function

If lateral G-forces of 0.5 G or greater are generated, the G-force value display will turn amber and be held for 2 seconds.

■ **Gear Position (F SPORT models)**

Displays the current shift range or gear position when the shift position is in D or M.

■ **Eco Driving Indicator**

Eco Driving Indicator will not operate under the following conditions:

- The shift position is in any position other than D.
- A paddle shift switch is operated.
- The driving mode is set to sport mode.
- The driving mode is set to custom mode and the powertrain control is set to power (→P.374)
- Snow mode is selected. (if equipped)
- The vehicle speed is approximately 130 km/h (80 mph) or higher.

**Navigation system-linked display (if equipped)**

Select to display the following navigation system-linked information.

- Route guidance to destination
- Compass display (heading-up display)

■ **Route guidance to destination display**

When the route guidance to destination display is enabled on the head-up display, it will not be displayed on the multi-information display. (→P.128)

**Audio system-linked display**

Select to enable selection of an audio source or track on the meter using the

meter control switches.

### Driving support system information display

Select to display the operational status of the following systems:

- LTA (Lane Tracing Assist) (if equipped) (→P.283)
- LDA (Lane Departure Alert with steering control) (if equipped) (→P.293)
- Dynamic radar cruise control with full-speed range (if equipped) (→P.301)
- Dynamic radar cruise control (if equipped) (→P.312)
- Cruise control (if equipped) (→P.320)

### Settings display

#### ■ Meter display settings that can be changed

- Language

Select to change the language displayed.

- Units

Select to change the units of measure displayed.

- Speedometer display (except F SPORT models)

Select to set the display of the speedometer to digital/analog/both digital and analog.

- Drive information 1/Drive information 2

Select to select up to 2 items (→P.121) that will be displayed on each Drive information screen (Drive information 1 screen and Drive information 2 screen) respectively.

- Clock

Select to switch between 12-hour display and 24-hour display.

- Pop-up display

Select to enable/disable pop-up displays for each relevant system.

- Accent color

Select to change the accent color on the screen, such as the cursor color.

- Rev indicator (F SPORT models)

- Select to enable/disable the rev indicator.
- Select to set the engine speed at which the rev indicator (amber) will begin to be displayed.

- Rev peak (F SPORT models)

Select to enable/disable the rev peak.

- Eco Driving Indicator Light

Select to enable/disable the Eco Driving Indicator Light.

- Default setting

Select to reset the meter display settings to the default setting.

#### ■ Vehicle functions and settings that can be changed

→P.568

#### ■ Suspension of the settings display

- Some settings cannot be changed while driving. When changing settings, park the vehicle in a safe place.
- If a warning message is displayed, operation of the settings display will be sus-

pending.

**⚠ WARNING**

■ **Cautions during setting up the display**

As the engine needs to be running during setting up the display, ensure that the vehicle is parked in a place with adequate ventilation. In a closed area such as a garage, exhaust gases including harmful carbon monoxide (CO) may collect and enter the vehicle. This may lead to death or a serious health hazard.

**⚠ NOTICE**

■ **During setting up the display**

To prevent battery discharge, ensure that the engine is running while setting up the display features.

**Suggestion function**

Displays suggestions to the driver in the following situations. To select a response to a displayed suggestion, use the meter control switches.

■ **Suggestion to turn off the headlights**

If the headlights are left on for a certain amount of time with the headlight switch in **AUTO** after the engine switch has been turned off, a suggestion message will be displayed asking if you wish to turn the headlights off.

To turn the headlights off, select "Yes".

If a front door is opened after the engine switch is turned off, this suggestion message will not be displayed.

■ **Suggestion to close the power windows (linked to windshield wiper operation)**

If the windshield wipers are operated with a power window open, a suggestion message will be displayed asking if you wish to close the power windows.

To close all of the power windows, select "Yes".

■ **Customization**

Some functions can be customized. (→P.568)

2

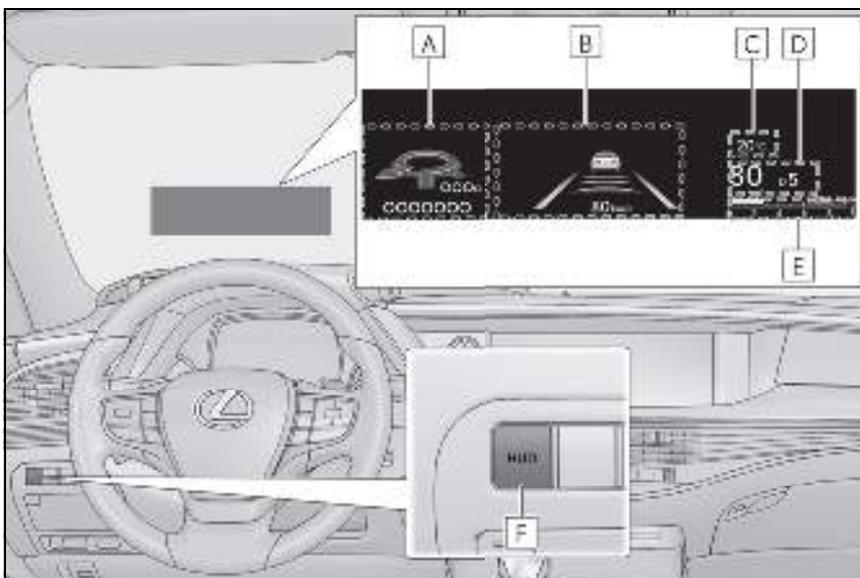
Vehicle status information and indicators

## Head-up display\*

\*: If equipped

The head-up display projects a variety of driving-related information and the operating state of the driving support systems on the windshield.

### System components



Illustrations used in this text are intended as examples, and may differ from the image that is actually displayed by the head-up display.

#### **A** Navigation system-linked display area (if equipped)

Displays the following items which are linked to the navigation system:

- Route guidance to destination
- Street name
- Compass (heading-up display)

#### **B** Driving support system display area (→P.129)

#### **C** Outside temperature display area

#### **D** Driving information display area

Displays the following items:

- Speedometer
- Shift position/shift range/gear position (→P.215)

- E** Tachometer/Eco Driving Indicator display area (→P.130)
- F** HUD (Head-up display) switch

**■ Head-up display will operate when**

The engine switch is in IGNITION ON mode.

**■ When using the head-up display**

The head-up display may seem dark or hard to see when viewed through sunglasses, especially polarized sunglasses. Adjust the brightness of the head-up display or remove your sunglasses.

**■ Street name display**

Only street names which are included in the map data will be displayed.

**■ Outside temperature display**

- When the ambient temperature is approximately 3°C (37°F) or lower, the low outside temperature indicator will flash for approximately 10 seconds and the outside temperature display will turn off. In this case, the display will be displayed again when the outside temperature becomes approximately 5°C (41°F) or higher.
- In the following situations, the correct outside temperature may not be displayed, or the display may take longer than normal to change:
  - When stopped, or driving at low speeds (less than 20 km/h [12 mph])
  - When the outside temperature has changed suddenly (at the entrance/exit of a garage, tunnel, etc.)
- When "--" or "E" is displayed, the system may be malfunctioning. Take your vehicle to your Lexus dealer.

**⚠ WARNING**

**■ When using the head-up display**

- Check that the position and brightness of the head-up display image does not interfere with safe driving. Incorrect adjustment of the image's position or brightness may obstruct the driver's view and lead to an accident, resulting in death or serious injury.
- Do not continuously look at the head-up display while driving as you may fail to see pedestrians, objects on the road, etc. ahead of the vehicle.

**⚠ NOTICE**

**■ Head-up display projector**

- Do not place any drinks near the head-up display projector. If the projector gets wet, electrical malfunctions may result.



- Do not place anything on or put stickers onto the head-up display projector. Doing so could interrupt head-up display indications.
- Do not touch the inside of the head-up display projector or thrust sharp edges or the like into the projector. Doing so could cause mechanical malfunctions.

**Using the head-up display**

■ **Enabling/disabling the head-up display**

Press the HUD switch.



■ **Changing settings of the head-up display**

The following settings can be changed on  of the multi-information display. (→P.568)

- **Brightness and vertical position of the head-up display**  
Select to adjust the brightness or vertical position of the head-up display.
  - **Tachometer/Eco Driving Indicator**  
Select to display the tachometer, Eco Driving Indicator or no content.
  - **Display content**  
Select to enable/disable the following items:
    - Route guidance to destination/street name
    - Driving support system display\*
    - Compass (heading-up display)
    - Audio system operation status
- \*: Make sure to enable this display when using the driving support systems

● **Display angle**

Select to adjust the angle of the head-up display.

■ **Enabling/disabling of the head-up display**

If the head-up display is disabled, it will remain disabled when the engine switch is turned off then back to IGNITION ON mode.

■ **Display brightness**

The brightness of the head-up display can be adjusted on  of the multi-information display. Also, it is automatically adjusted according to the ambient brightness.

■ **Head-up display automatic position adjustment**

If the display position is recorded into memory, the head-up display will be automatically adjusted to the desired position. (→P.175)

■ **When the battery is disconnected**

The customize settings of the head-up display will be reset.

 **WARNING**

■ **Caution for changing settings of the head-up display**

As the engine needs to be running while changing the settings of the head-up display, ensure that the vehicle is parked in a place with adequate ventilation. In a closed area such as a garage, exhaust gases including harmful carbon monoxide (CO) may collect and enter the vehicle. This may lead to death or a serious health hazard.

**NOTICE****■ When changing the settings of the head-up display**

To prevent battery discharge, ensure that the engine is running while the changing the settings of the head-up display.

**Driving support system display area**

Displays the operational status of the following systems:

- LTA (Lane Tracing Assist) (if equipped) (→P.283)
- LDA (Lane Departure Alert with steering control) (if equipped) (→P.293)
- Dynamic radar cruise control with full-speed range (if equipped) (→P.301)
- Dynamic radar cruise control (if equipped) (→P.312)

Details of content displayed on the head-up display may differ from that displayed on the multi-information display. For details, refer to the explanation of each system.

**Pop-up display**

Pop-up displays for the following systems will be displayed when necessary.

**■ Driving support systems**

Displays a warning/suggestion/advice message or the operating state of a relevant system.

- PCS (Pre-Collision System) (if

equipped) (→P.271)

- FCTA (Front Cross Traffic Alert) (if equipped) (→P.280)
- Lexus parking assist-sensor (→P.340)
- Parking Support Brake function (for static objects) (if equipped) (→P.360)
- Brake Override System (→P.204)
- Drive-Start Control (→P.204)

Details of content displayed on the head-up display may differ from that displayed on the multi-information display. For details, refer to the explanation of each system.

**■  /  icons**

These icons are linked to the multi-information display

**: Master warning icon**

Displayed when a warning message is displayed on the multi-information display. (→P.530)

**: Information icon**

Displayed when a suggestion pop-up display (→P.125) or advice pop-up display is displayed on the multi-information display.

**■ Warning message**

Some warning messages are displayed when necessary, according to certain conditions.

Details of content displayed on the head-up display may differ from that displayed on the multi-information display.

**■ Audio system operation status**

Displayed when an audio remote con-

trol switch on the steering wheel is operated.

■ **Hands-free system status**

Displayed when the hands-free system is operated.

■ **When a pop-up display is displayed**

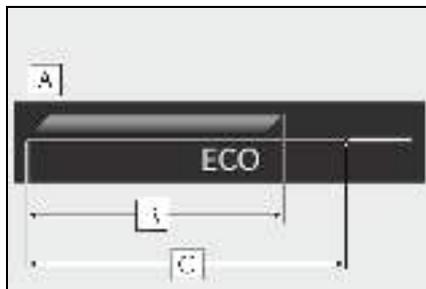
When a pop-up display is displayed, a current display may no longer be displayed. In this case, the display will return after the pop-up display disappears.

**Tachometer/Eco Driving Indicator**

■ **Tachometer**

Displays the engine speed in revolutions per minute.

■ **Eco Driving Indicator**



**A** Eco Driving Indicator Zone Display

**B** Eco driving ratio based on acceleration

**C** Zone of Eco driving

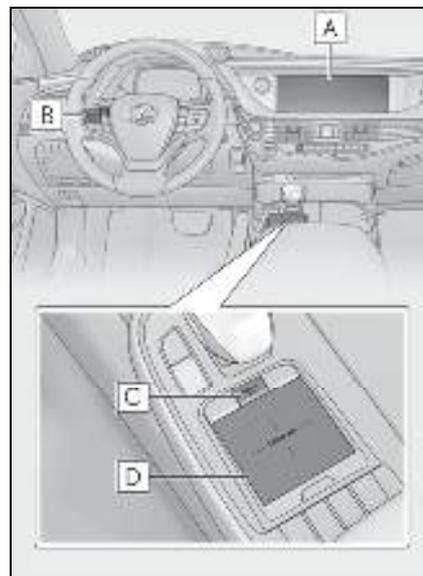
Displayed content is the same as that displayed on the multi-information display (Eco Driving Indicator). For details, refer to P.122.

**Fuel consumption information**

Fuel consumption information can be displayed on the Center Display.

The fuel consumption information can be displayed and operated on the side display.

**System components**



**A** Center Display

**B** Meter control switches

**C** "MENU" button

**D** Touchpad

**Consumption**

■ **Trip information**

Press the "MENU" button on the

Remote Touch, then select **I** on the menu screen.

If a screen other than "Trip information" is displayed, select "Trip information".



- A** Resetting the consumption data
- B** Fuel consumption in the past 15 minutes
- C** Current fuel consumption
- D** Average vehicle speed since the engine was started.
- E** Elapsed time since the engine was started.
- F** Cruising range

Average fuel consumption for the past 15 minutes is divided by color into past averages and averages attained since the engine switch was last turned to IGNITION ON mode. Use the displayed average fuel consumption as a reference.

The image is an example only, and may vary slightly from actual conditions.

■ **History**

Press the "MENU" button on the Remote Touch, then select **I** on the menu screen.

If a screen other than "History" is displayed, select "History".



- A** Best recorded fuel consumption
- B** Latest fuel consumption
- C** Previous fuel consumption record
- D** Resetting the history data
- E** Updating the latest fuel consumption data

The average fuel consumption history is divided by color into past averages and the average fuel consumption since the last updated. Use the displayed average fuel consumption as a reference.

The image is an example only, and may vary slightly from actual conditions.

■ **Updating the history data**

Update the latest fuel consumption by selecting "Clip" to measure the current fuel consumption again.

■ **Resetting the data**

The fuel consumption data can be deleted by selecting "Clear".

■ **Cruising range**

Displays the estimated maximum distance that can be driven with the quantity of fuel remaining.

This distance is computed based on your average fuel consumption.

As a result, the actual distance that can be driven may differ from that displayed.

**Using the side display**

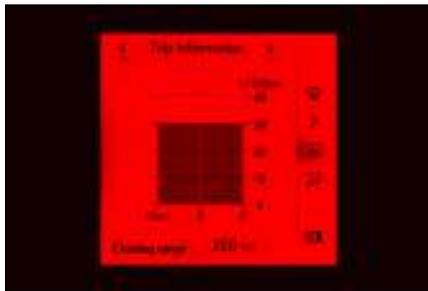
Display the vehicle information on the side display (→P.395), and then select

◀ or ▶ to display the desired screen.

The image is an example only, and may vary slightly from actual conditions.

■ **Trip information (type A)**

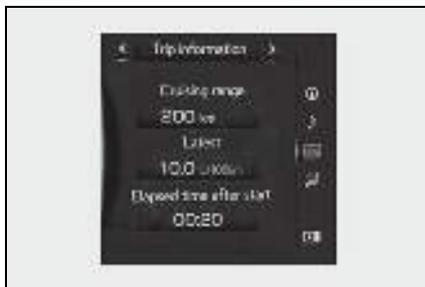
Displays the average fuel consumption for the past 10 minutes in 1 minute intervals, as well as the cruising range.



Use the displayed average fuel consumption as a reference.

■ **Trip information (type B)**

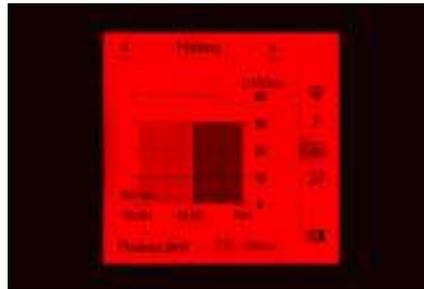
Displays the cruising range, latest fuel consumption and the amount of time elapsed since the engine was started.



Use the displayed average fuel consumption as a reference.

■ **History**

Displays the average fuel consumption and highest fuel consumption.



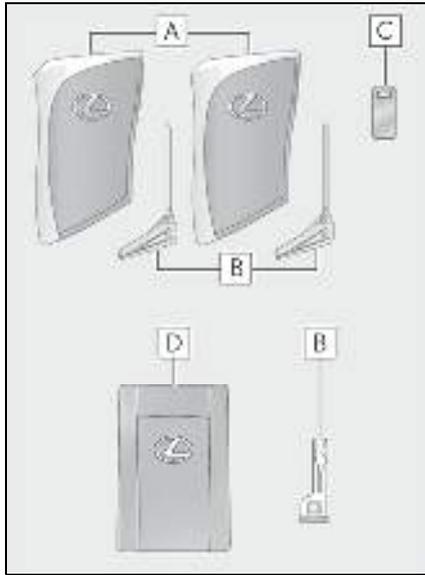
Use the displayed average fuel consumption as a reference.

- 3-1. Key information
  - Keys ..... 134
- 3-2. Opening, closing and locking the doors and trunk
  - Doors ..... 138
  - Trunk ..... 143
  - Smart entry & start system .... 150
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## Keys

### The keys

The following keys are provided with the vehicle.



**A** Electronic keys

- Operating the smart entry & start system (→P.150)
- Operating the wireless remote control function (→P.136)

**B** Mechanical keys

**C** Key number plate

**D** Card key (electronic key) (if equipped)

Operating the smart entry & start system (→P.150)

■ **Card key (if equipped)**

- The card key is not waterproof.
- The mechanical key that is stored inside the card key should be used only if a

problem arises, such as when the card key does not operate properly.

- If it is difficult to take out the mechanical key, push down the lock release button using a pen tip etc. If it is still difficult to pull it out, use a coin etc.
- To store the mechanical key in the card key, insert it while pressing the lock release button.



- If the battery cover is not installed and the battery falls out or if the battery was removed because the key got wet, reinstall the battery with the positive terminal facing the Lexus emblem.



■ **When riding in an aircraft**

When bringing an electronic key onto an aircraft, make sure you do not press any buttons on the electronic key while inside the aircraft cabin. If you are carrying an electronic key in your bag etc., ensure that the buttons are not likely to be pressed accidentally. Pressing a button may cause the electronic key to emit radio waves that could interfere with the operation of the aircraft.

■ **Electronic key battery depletion**

- The standard battery life is 1 to 2 years. (The card key battery life is about a year and a half.)
- If the battery becomes low, an alarm will sound in the cabin and a message will be

shown on the multi-information display when the engine is stopped.

- To reduce key battery depletion when the electronic key is to not be used for long periods of time, set the electronic key to the battery-saving mode. (→P.152)
- As the electronic key always receives radio waves, the battery will become depleted even if the electronic key is not used. The following symptoms indicate that the electronic key battery may be depleted. Replace the battery when necessary.
  - The smart entry & start system or the wireless remote control does not operate.
  - The detection area becomes smaller.
  - The LED indicator on the key surface does not turn on.
- To avoid serious deterioration, do not leave the electronic key within 1 m (3 ft.) of the following electrical appliances that produce a magnetic field:
  - TVs
  - Personal computers
  - Cellular phones, cordless phones and battery chargers
  - Recharging cellular phones or cordless phones
  - Table lamps
  - Induction cookers

#### ■ Replacing the battery

→P.503

#### ■ Confirmation of the number of registered keys

The number of keys already registered to the vehicle can be confirmed. Ask your Lexus dealer for details.

#### ■ If “A New Key has been Registered Contact Your Dealer for Details” is shown on the multi-information display

This message will be displayed each time the driver’s door is opened when the doors are unlocked from the outside for approximately 10 days after a new electronic key has been registered.

If this message is displayed but you have not had a new electronic key registered, ask your Lexus dealer to check if an unknown

electronic key (other than those in your possession) has been registered.

#### NOTICE

##### ■ To prevent key damage

- Do not drop the keys, subject them to strong shocks or bend them.
- Do not expose the keys to high temperatures for a long period of time.
- Do not get the keys wet or wash them in an ultrasonic washer etc.
- Do not attach metallic or magnetic materials to the keys or place the keys close to such materials.
- Do not disassemble the keys.
- Do not attach a sticker or anything else to the surface of the electronic key.
- Do not place the keys near objects that produce magnetic fields, such as TVs, audio systems and induction cookers, or medical electrical equipment, such as low-frequency therapy equipment.

##### ■ Carrying the electronic key on your person

Carry the electronic key 10 cm (3.9 in.) or more away from electric appliances that are turned on. Radio waves emitted from electric appliances within 10 cm (3.9 in.) of the electronic key may interfere with the key, causing the key to not function properly.

##### ■ In case of a smart entry & start system malfunction or other key-related problems

→P.538

##### ■ When an electronic key is lost

→P.537

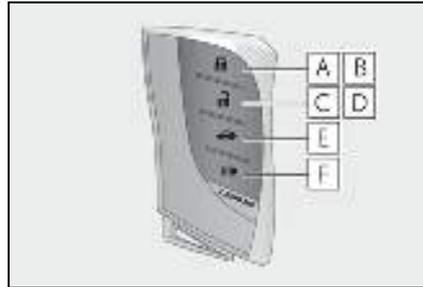
 NOTICE

■ Handling the card key (if equipped)

- Do not apply excess force when inserting the mechanical key into the card key. Doing so may damage the card key.
- If the battery or card key terminals get wet, the battery may corrode and the card key may stop working. If the key is dropped into water, or if drinking water, etc. is spilled on the key, immediately remove the battery cover and wipe the battery and terminals. (To remove the battery cover, lightly grasp and pull it.) If the battery is corroded, have your Lexus dealer replace the battery.
- Do not crush the battery cover or use a screwdriver to remove the battery cover. Forcibly removing the battery cover may bend or damage the key.
- If the battery cover is frequently removed, the battery cover may become loose.
- When installing the battery, make sure to check the direction of the battery. Installing the battery in the wrong direction may cause the battery to deplete rapidly.
- The surface of the card key may be damaged, or its coating may peel off in the following situations:
  - The card key is carried together with hard objects, such as coins and keys.
  - The card key is scraped with a sharp object, such as the tip of a mechanical pencil.
  - The surface of the card key is wiped with thinner or benzene.

**Wireless remote control**

The electronic keys are equipped with the following wireless remote control:



- A** Locks the doors (→P.138)
- B** Except for Korea: Closes the windows and moon roof\* (→P.138)
- C** Unlocks the doors (→P.138)
- D** Except for Korea: Opens the windows and moon roof\* (→P.138)
- E** Opens the trunk (→P.146)
- F** Sounds the alarm (if equipped)

\*: These settings must be customized at your Lexus dealer.

■ Theft deterrent panic mode (if equipped)

When  is pressed for longer than about one second, an alarm will sound intermittently and the vehicle lights will flash to deter any person from trying to break into or damage your vehicle.

To stop the alarm, press any button on the electronic key.

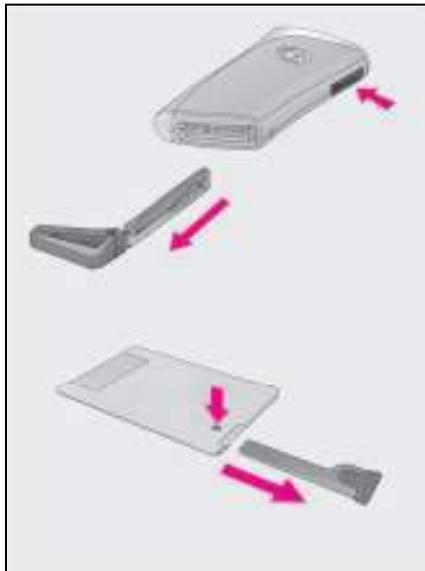


### Using the mechanical key

To take out the mechanical key, push the release button and take the key out.

The mechanical key can only be inserted in one direction, as the key only has grooves on one side. If the key cannot be inserted in a lock cylinder, turn it over and re-attempt to insert it.

After using the mechanical key, store it in the electronic key. Carry the mechanical key together with the electronic key. If the electronic key battery is depleted or the entry function does not operate properly, you will need the mechanical key. (→P.538)



### ■ When required to leave the vehicle's key with a parking attendant

Turn the trunk opener main switch off (→P.149) and lock the glove box (→P.425) as circumstances demand.

Remove the mechanical key for your own use and provide the attendant with the electronic key only.

### ■ If you lose your mechanical keys

→P.537

### ■ If a wrong key is used

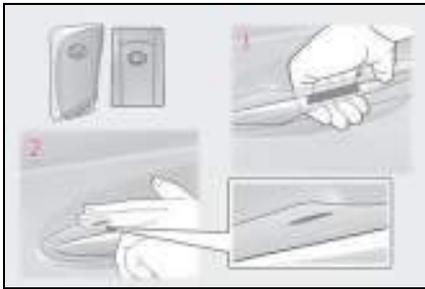
The key cylinder rotates freely, isolated from the internal mechanism.

**Doors**

**Unlocking and locking the doors from the outside**

■ **Smart entry & start system**

Carry the electronic key to enable this function.



- 1** Grip the door handle to unlock the doors.\*

Some models: Grip the driver's door handle to unlock the door. Holding the driver's door handle for approximately 2 seconds unlocks all the doors. Grip any passenger door handle to unlock all the doors.\*

Make sure to touch the sensor on the back of the handle.

The doors cannot be unlocked for 3 seconds after the doors are locked.

\*: The door unlock settings can be changed.

- 2** Touch the lock sensor (indentation on the upper part of the door handle) to lock all the doors.

Check that the door is securely locked.

■ **Wireless remote control**



- 1** Locks all the doors

Check that the door is securely locked.  
Except for Korea: Press and hold to close the windows and moon roof.\*

- 2** Unlocks all the doors

Some models: Pressing the button unlocks the driver's door. Pressing the button again within 5 seconds unlocks the other door.  
Except for Korea: Press and hold to open the windows and moon roof.\*

\*: These settings must be customized at your Lexus dealer.

■ **Switching the door unlock function**

It is possible to set which doors the entry function unlocks using the wireless remote control.

- 1** Turn the engine switch off.
- 2** Cancel the intrusion sensor and tilt sensor of the alarm system to prevent unintended triggering of the alarm while changing the settings. (if equipped) (→P.102)
- 3** When the indicator light on the key surface is not on, press and hold ,  or  for approximately 5 seconds while pressing and holding .

The setting changes each time an operation is performed, as shown below. (When changing the setting continuously, release

the buttons, wait for at least 5 seconds, and repeat step 3.)

Multi-information display/Beep	Unlocking function
 (Left-hand drive vehicles)	Holding the driver's door handle unlocks only the driver's door.
 (Right-hand drive vehicles) Exterior: Beeps 3 times Interior: Pings once	Holding any of the passenger door handles unlocks all the doors.
 Exterior: Beeps twice Interior: Pings once	Holding a door handle unlocks all the doors.

To prevent unintended triggering of the alarm, unlock the doors using the wireless remote control and open and close a door once after the settings have been changed. (If a door is not opened within 30 seconds after  is pressed, the doors will be locked again and the alarm will automatically be set.)

In a case that the alarm is triggered, immediately stop the alarm. (→P.100)

■ **Impact detection door lock release system**

In the event that the vehicle is subject to a strong impact, all the doors are unlocked. Depending on the force of the impact or the type of accident, however, the system may not operate.

■ **Operation signals**

The emergency flashers flash to indicate

that the doors have been locked/unlocked. (Locked: once; Unlocked: twice)

Some models: A buzzer sounds to indicate that the doors have been locked/unlocked. (Locked: once; Unlocked: twice)

A buzzer sounds to indicate that the windows and moon roof are operating.

■ **Security feature**

If a door is not opened within approximately 30 seconds after the vehicle is unlocked, the security feature automatically locks the vehicle again.

■ **When the doors cannot be locked by the lock sensor on the upper part of the door handle**

When the doors cannot be locked even if the lock sensor on the upper part of the door handle is touched by a finger, touch the lock sensor with the palm.

If you are wearing gloves, remove them.



■ **Open door warning buzzer**

If an attempt to lock the doors is made when a door is not fully closed, a buzzer sounds continuously for 5 seconds. Fully close the door to stop the buzzer, and lock the vehicle once more.

■ **Setting the alarm**

Locking the doors will set the alarm system. (→P.100)

■ **Conditions affecting the operation of the smart entry & start system or wireless remote control**

→P.152

■ **If the smart entry & start system or the wireless remote control does not operate properly**

Use the mechanical key to lock and unlock

the doors. (→P.538)  
 Replace the key battery with a new one if it is depleted. (→P.503)

■ **If the battery is discharged**

The doors cannot be locked and unlocked using the smart entry & start system or wireless remote control. Lock or unlock the doors using the mechanical key. (→P.538)

■ **Customization**

Some functions can be customized. (→P.568)

 **WARNING**

■ **To prevent an accident**

Observe the following precautions while driving the vehicle.  
 Failure to do so may result in a door opening and an occupant throwing out of the vehicle, resulting in death or serious injury.

- Ensure that all doors are properly closed and locked.
- Do not pull the inside handle of the doors while driving.

For Korea: Be especially careful for the front doors, as the doors may be opened even if the inside lock buttons are in locked position.

Except for Korea: Be especially careful for the driver's door, as the door may be opened even if the inside lock button is in locked position.

- Set the rear door child-protector locks when children are seated in the rear seats.

■ **When opening or closing a door**

Check the surroundings of the vehicle such as whether the vehicle is on an incline, whether there is enough space for a door to open and whether a strong wind is blowing. When opening or closing the door, hold the door handle tightly to prepare for any unpredictable movement.

■ **When using the wireless remote control and operating the power windows or moon roof**

Except for Korea: Operate the power windows or the moon roof after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the windows or the moon roof. Also, do not allow children to operate the wireless remote control. It is possible for children and other passengers to get caught in the power windows or the moon roof.

■ **Vehicle height control precautions (vehicles with electronically modulated air suspension)**

In the following situations, make sure to check the safety of the area around the vehicle, as the vehicle height may change and part of someone's body may be caught in the vehicle, possibly causing injury or the vehicle may be damaged.

- When opening or closing a door
- When locking or unlocking the doors

### Unlocking and locking the doors from the inside

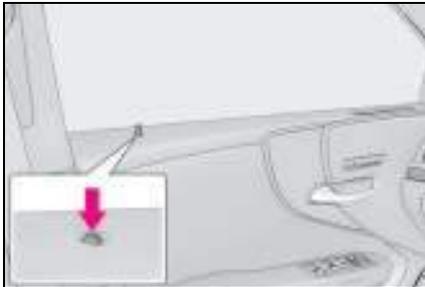
#### ■ Door lock switches (to lock/unlock)



- 1 Locks all the doors
- 2 Unlocks all the doors

#### ■ Inside lock buttons (to lock)

Push down the inside lock button to lock the door.



#### ■ Inside door handles (to unlock)

- ▶ For Korea

For the front doors: Pull the handle to unlock and open the door.

When the door is unlocked, the inside lock button will pop up.

For the rear doors: Pull the handle to unlock the door. Pull the handle a second time to open the door.

When the door is unlocked, the inside lock button will pop up.

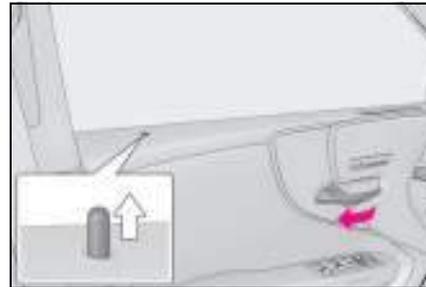
- ▶ Except for Korea

For the driver's door: Pull the handle to unlock and open the door.

When the door is unlocked, the inside lock button will pop up.

For the passenger doors: Pull the handle to unlock the door. Pull the handle a second time to open the door.

When the door is unlocked, the inside lock button will pop up.



#### ■ Locking the front doors from the outside without a key

- 1 Push down the inside lock button.
- 2 For Korea: Close the door.  
Except for Korea: Close the door while pulling the door handle.

The door cannot be locked if the engine switch is in ACCESSORY or IGNITION ON mode, or the electronic key is left inside the vehicle. However, the key may not be detected correctly and the door may be locked.

#### ■ Door closer

In the event that a door is left slightly open, the door closer will automatically close it to the fully closed position.

- The door closer will operate regardless of the engine switch mode.
- The door closer will not function if the door has been closed while pulling the

- inside or outside door handle.
- The door can be opened by pulling the inside or outside door handle, even when the door closer is operating (except when the lock button is in the lock position or the child-protector lock is set).
- A motor sound may be heard for several seconds after the door closer closes the door. This does not indicate a malfunction.

■ **Open door warning buzzer**

If a door or the trunk is not fully closed, a buzzer will sound when the vehicle speed reaches 5 km/h (3 mph). The open door(s) or trunk is indicated on the multi-information display.

**⚠ WARNING**

■ **Door closer**

In the event that a door is left slightly open, the door closer will automatically close it to the fully closed position. It takes several seconds before the door easy closer begins to operate. If the child-protector lock is set, the door closer will not stop during operation even if an attempt is made to open the door from inside the vehicle. Be careful not to catch fingers or anything else in the door. Failure to do so may result in serious injury.



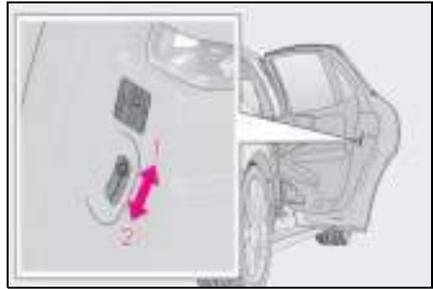
**⚠ NOTICE**

■ **To prevent door closer malfunction**

Do not frequently repeat opening and closing of doors, or apply excessive force to a door while the door closer is operating.

**Rear door child-protector lock**

The door cannot be opened from inside the vehicle when the lock is set.



- 1 Unlock
- 2 Lock

These locks can be set to prevent children from opening the rear doors. Push down on each rear door switch to lock both rear doors.

**Automatic door locking and unlocking systems**

The following functions can be set or canceled:

For instructions on customizing, refer to P.568.

Function	Operation
Speed linked door locking function	All doors are automatically locked when vehicle speed is approximately 20 km/h (12 mph) or higher.
Shift position linked door locking function	All doors are automatically locked when the shift position is shifted to a position other than P.

Function	Operation
Shift position linked door unlocking function	All doors are automatically unlocked when the shift position is shifted to P.
Driver's door linked door unlocking function	All doors are automatically unlocked when driver's door is opened within approximately 45 seconds after turning the engine switch off.

## Trunk

The trunk can be opened using the trunk opener switch, entry function or wireless remote control.

The trunk can be closed using the trunk closer.

### WARNING

Observe the following precautions. Failure to do so may result in death or serious injury.

#### ■ Before driving

- Make sure that the trunk lid is fully closed. If the trunk lid is not fully closed, it may open unexpectedly while driving and hit near-by objects or luggage in the trunk may be thrown out, causing an accident.
- Do not allow children to play in the trunk.  
If a child is accidentally locked in the trunk, they could suffer from heat exhaustion, suffocation or other injuries.
- Do not allow a child to open or close the trunk lid.  
Doing so may cause the trunk lid to open unexpectedly, or cause the child's hands, head, or neck to be caught by the closing trunk lid.

#### ■ Important points while driving

Never let anyone sit in the trunk. In the event of sudden braking or a collision, they are susceptible to death or serious injury.

#### ■ Using the trunk

Observe the following precautions. Failure to do so may cause parts of the body to be caught, resulting in serious injury.

**⚠ WARNING**

- Remove any heavy loads, such as snow and ice, from the trunk lid before opening it. Failure to do so may cause the trunk lid to suddenly shut again after it is opened.
- When opening or closing the trunk lid, thoroughly check to make sure the surrounding area is safe.
- If anyone is in the vicinity, make sure they are safe and let them know that the trunk is about to open or close.
- Use caution when opening or closing the trunk lid in windy weather as it may move abruptly in strong wind.
- The trunk lid may suddenly shut if it is not opened fully. It is more difficult to open or close the trunk lid on an incline than on a level surface, so beware of the trunk lid unexpectedly opening or closing by itself. Make sure that the trunk lid is fully open and secure before using the trunk.



- When closing the trunk lid, take extra care to prevent your fingers etc. from being caught.



- When closing the trunk lid, make sure to press it lightly on its outer surface. If the trunk handle is used to fully close the trunk lid, it may result in hands or arms being caught.
- Do not attach any accessories other than genuine Lexus parts to the trunk lid. Such additional weight on the trunk lid may cause the lid to suddenly shut again after it is opened.

**■ Trunk easy closer**

In the event that the trunk lid is left slightly open, the trunk easy closer will automatically close it to the fully closed position. It takes several seconds before the trunk easy closer begins to operate. Be careful not to catch fingers or anything else in the trunk lid, as this may cause bone fractures or other serious injuries.



**■ Power trunk lid**

Observe the following precautions when operating the power trunk lid. Failure to do so may cause serious injury.

- Check the safety of the surrounding area to make sure there are no obstacles or anything that could cause any of your belongings to get caught.
- If anyone is in the vicinity, make sure they are safe and let them know that the trunk is about to open or close.
- If the trunk closer switch is pressed while the trunk lid is opening during automatic operation, the trunk lid stops opening. Take extra care when on an incline, as the trunk lid may open or close suddenly.

**⚠ WARNING**

- On an incline, the trunk lid may suddenly shut after it opens automatically. Make sure the trunk lid is fully open and secure before using the trunk.
- In the following situations, the power trunk lid may detect an abnormality and automatic operation may be stopped. In this case, the trunk lid has to be operated manually. Take extra care in this situation, as the stopped trunk lid may suddenly shut, causing an accident.
  - When the trunk lid contacts an obstacle
  - When the battery voltage suddenly drops, such as when the engine switch is turned to IGNITION ON mode or the engine is started during automatic operation
- Do not attach any accessories other than genuine Lexus parts to the trunk lid. The power trunk lid may not operate, causing itself to malfunction, or the trunk lid may suddenly shut again after it is opened.

**■ Hands Free Power Trunk Lid (if equipped)**

Observe the following precautions. Failure to do so may cause serious injury.

- Exhaust gasses cause the exhaust pipes to become quite hot. When operating the Hands Free Power Trunk Lid, be careful not to touch the exhaust pipe.
- Do not operate the Hands Free Power Trunk Lid if there is little space under the rear bumper.

**■ Jam protection function**

Observe the following precautions. Failure to do so may cause serious injury.

- Never use any part of your body to intentionally activate the jam protection function.
- The jam protection function may not work if something gets caught just before the trunk lid fully closes. Be careful not to catch fingers or anything else in the trunk lid.
- The jam protection function may not work depending on the shape of the object that is caught. Be careful not to catch fingers or anything else.

**⚠ NOTICE****■ To prevent trunk easy closer malfunctions**

Do not apply force to the trunk lid while the trunk easy closer is operating.

**■ To prevent damage to the power trunk lid**

- Make sure that there is no luggage or snow on the trunk lid before operating the power trunk lid. In addition, make sure that there is no ice between the trunk lid and frame that prevents movement of the trunk lid. Operating the power trunk lid when excessive load is present on the trunk lid may cause a malfunction.
- Do not apply excessive force to the trunk lid while the power trunk lid is operating.

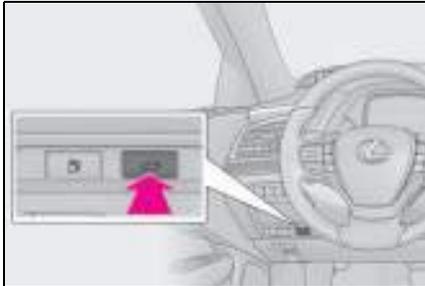
**Opening/closing the trunk****■ Trunk opener switch**

Press the trunk opener switch.

The trunk lid will fully open.

3

Before driving



#### ■ Smart entry & start system

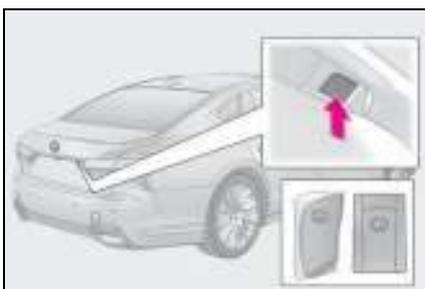
While carrying the electronic key, press the button.

The trunk lid will fully open.

If the button is pressed while the trunk lid is opening, the trunk lid will stop moving.

When all the doors are unlocked using one of the following methods, the trunk can be opened without the electronic key:

- Entry function
- Wireless remote control
- Door lock switches
- Automatic door unlocking system
- Mechanical key



#### ■ Wireless remote control

Press and hold the switch.

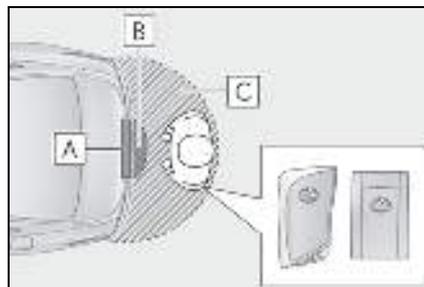
A buzzer will sound and the trunk lid will fully open.

If the button is pressed while the trunk lid is opening, the trunk lid will stop moving.



#### ■ Hands Free Power Trunk Lid (if equipped)

- 1 While carrying an electronic key, stand within the smart entry & start system operation area, approximately 30 to 50 cm (11.8 to 19.7 in.) from the rear bumper.



**A** Kick sensor

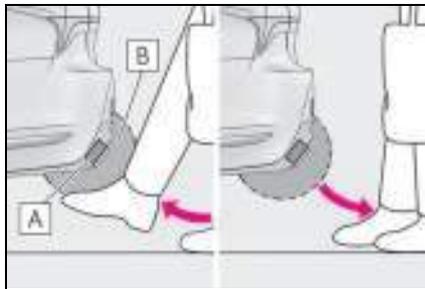
**B** Hands Free Power Trunk Lid operation detection area

**C** Smart entry & start system operation detection area (→P.151)

- 2 Perform a kick operation by moving your foot to within approximately 10 cm (3.9 in.) of the rear bumper and then pulling it back.
  - Perform the entire kick operation within 1 second.
  - The trunk lid will not start operating

while a foot is detected under the rear bumper.

- Operate the Hands Free Power Trunk Lid without contacting the rear bumper with your foot.
- If another electronic key is in the cabin or trunk, it may take slightly longer than normal for the operation to begin.



- A** Kick sensor
- B** Hands Free Power Trunk Lid operation detection area

- 3** When the kick sensor detects that your foot is pulled back, a buzzer will sound and the trunk will automatically fully open/close.

If a foot is moved under the rear bumper while the trunk lid is opening, the trunk lid will stop moving.

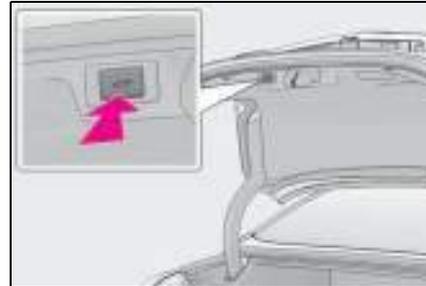
If a foot is moved under the rear bumper while the trunk lid is closing, the trunk lid will open.

#### ■ Trunk closer switch

Press the trunk closer switch.

A buzzer will sound and the trunk lid will fully close.

Pressing the switch while the trunk lid is closing opens the trunk lid again.



#### ■ Trunk grip

Using the trunk grip, pull down the trunk lid without applying sideways force and push the trunk lid down from the outside to close it.



#### ■ Trunk lid light/trunk light

- The trunk lid light/trunk light turns on when the trunk is opened.
- If the trunk lid light/trunk light is left on when the engine switch is turned off, the light will go off automatically after 20 minutes.

#### ■ Trunk easy closer

In the event that the trunk lid is left slightly open, the trunk easy closer will automatically close it to the fully closed position.

- The trunk easy closer will operate regardless of the engine switch mode.
- If the trunk easy closer does not operate, open the trunk to the half open position or more and then close it.

3

Before driving

#### ■ Function to prevent the trunk being locked with the electronic key inside

- When all doors are locked, closing the trunk lid with the electronic key left inside the trunk will sound an alarm. In this case, the trunk lid can be opened pressing the trunk release button on the trunk lid.
- If the spare electronic key is put in the trunk with all the doors locked, the key confinement prevention function is activated so the trunk can be opened. In order to prevent theft, take all electronic keys with you when leaving the vehicle.
- If the electronic key is put in the trunk with all the doors locked, the key may not be detected depending on the location of the key and the surrounding radio wave conditions. In this case, the key confinement prevention function cannot be activated, causing the doors to lock when the trunk is closed. Make sure to check where the key is before closing the trunk.
- The key confinement prevention function cannot be activated if any one of the doors is unlocked. In this case, open the trunk using the trunk opener.

#### ■ Overload protection function

The trunk lid will not operate when excessive load is present on the top of the trunk lid.

#### ■ Fall-down protection function

While the trunk lid is opening automatically, applying excessive force to it will stop the opening operation to prevent the trunk lid from rapidly falling down.

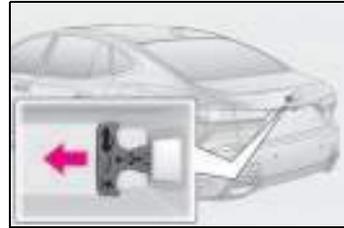
#### ■ Jam protection function

While the trunk lid is closing automatically, the trunk lid will stop closing and open if something gets caught.

#### ■ Internal trunk release lever (for Korea)

The trunk lid can be opened by pulling the glow-in-the-dark lever located on the inside of the trunk lid to the side.

The lever will continue to glow for some time after the trunk lid is closed.



#### ■ Using the mechanical key

The trunk can be also opened using the mechanical key. (→P.539)

If the trunk is unlocked using the mechanical key, the power trunk lid and trunk easy closer will not be operational. To return them to an operational state, fully close the trunk lid by hand.

#### ■ If the smart entry & start system or the wireless remote control does not operate properly

Use the mechanical key to unlock the trunk. (→P.539)

Replace the key battery with a new one if it is depleted.

#### ■ Hands Free Power Trunk Lid operating conditions (if equipped)

- When the Hands Free Power Trunk Lid (kick sensor) operation setting is turned on and the engine switch is turned off
- When an electronic key is carried within the operation range

#### ■ Situations in which the Hands Free Power Trunk Lid may not operate properly (if equipped)

In the following situations, the Hands Free Power Trunk Lid may not operate properly:

- When a foot remains under the rear bumper
- If the rear bumper is strongly hit with a foot or is touched for a while  
If the rear bumper has been touched for a while, wait for a short time before attempting to operate the Hands Free Power Trunk Lid again.
- When standing excessively close to the rear bumper
- When an external radio wave source

interferes with the communication between the electronic key and the vehicle (→P.152)

- When the vehicle is parked near an electrical noise source which affects the sensitivity of the Hands Free Power Trunk Lid, such as a pay parking spot, gas station, electrically heated road, or fluorescent light
- When the vehicle is near a TV tower, electric power plant, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
- When a large amount of water is applied to the rear bumper, such as when the vehicle is being washed or in heavy rain
- When mud, snow, ice, etc. is attached to the rear bumper
- When the vehicle has been parked for a while near objects that may move and contact the rear bumper, such as plants
- When an accessory is installed to the rear bumper

If an accessory has been installed, turn the Hands Free Power Trunk Lid (kick sensor) operation setting off.

#### ■ Preventing unintentional operation of the Hands Free Power Trunk Lid (if equipped)

When an electronic key is in the operation detection area, the Hands Free Power Trunk Lid may operate unintentionally, so be careful in the following situations:

- When a large amount of water is applied to the rear bumper, such as when the vehicle is being washed or in heavy rain
- When dirt is wiped off the rear bumper
- When a small animal or small object, such as a ball, moves under the rear bumper
- When an object is moved from under the rear bumper
- If someone is swinging their legs while sitting on the rear bumper
- If the legs or another part of someone's body contacts the rear bumper while

passing by the vehicle

- When the vehicle is parked near an electrical noise source which affects the sensitivity of the Hands Free Power Trunk Lid, such as a pay parking spot, gas station, electrically heated road, or fluorescent light
- When the vehicle is near a TV tower, electric power plant, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
- When the vehicle is parked in a place where objects such as plants are near the rear bumper
- If luggage, etc. is set near the rear bumper
- If accessories or a vehicle cover is installed/removed near the rear bumper
- When the vehicle is being towed

To prevent unintentional operation, turn the Hands Free Power Trunk Lid (kick sensor) operation setting off.

#### ■ Open door warning buzzer

→P.142

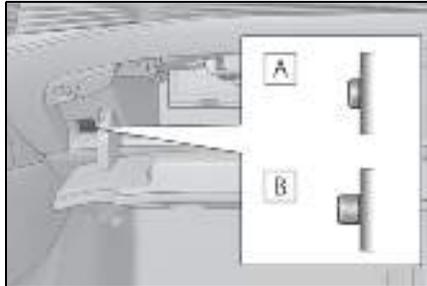
#### ■ Customization

Some functions can be customized. (→P.568)

### Luggage security system

The trunk opener switch can be temporarily disabled to protect luggage stored in the trunk against theft.

Turn the main switch in the glove box off to disable the trunk opener.



**A** On

**B** Off

The trunk lid cannot be opened even with the wireless remote control, entry function or Hands Free Power Trunk Lid.

■ When leaving a key to the vehicle with a parking attendant

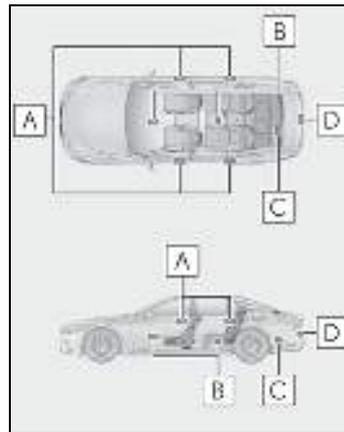
→P.137

### Smart entry & start system

The following operations can be performed simply by carrying the electronic key (including the card key) on your person, for example in your pocket. The driver should always carry the electronic key.

- Locks and unlocks the doors (→P.138)
- Opens the trunk (→P.146)
- Starts the engine (→P.212)

### ■ Antenna location



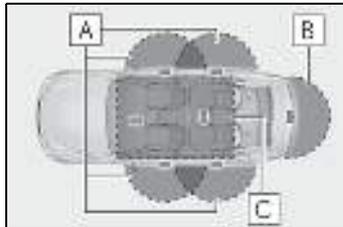
**A** Antennas outside the cabin

**B** Antennas inside the cabin

**C** Antenna inside the trunk

**D** Antenna outside the trunk

■ **Effective range (areas within which the electronic key is detected)**



**A** When locking or unlocking the doors  
The system can be operated when the electronic key is within about 0.7 m (2.3 ft.) of an outside door handle. (Only the doors detecting the key can be operated.)

**B** When opening the trunk  
The system can be operated when the electronic key is within about 0.7 m (2.3 ft.) of the trunk release button.

**C** When starting the engine or changing engine switch modes  
The system can be operated when the electronic key is inside the vehicle.

■ **Alarms and warning messages**

An alarm sounds and warning messages are displayed on the multi-information display to protect against unexpected accidents or theft of the vehicle resulting from erroneous operation. When a warning message is displayed, take appropriate measures based on the displayed message. (→P.530)

When only an alarm sounds, circumstances and correction procedures are as follows.

- When an exterior alarm sounds once for 5 seconds

Situation	Correction procedure
An attempt was made to lock the vehicle while a door was open.	Close all of the doors and lock the doors again.
The trunk was closed while the electronic key was still inside the trunk and all the doors were locked.	Retrieve the electronic key from the trunk and close the trunk lid.

- When an interior alarm sounds continuously

Situation	Correction procedure
The engine switch was turned to ACCESSORY mode while the driver's door was open (The driver's door was opened when the engine switch was in ACCESSORY mode).	Turn the engine switch off and close the driver's door.
The engine switch was turned off while the driver's door was open.	Close the driver's door.

■ **If "Key Detected in Vehicle" is shown on the multi-information display**

An attempt was made to lock the doors using the smart entry & start system while the electronic key was still inside the vehicle. Retrieve the electronic key from the vehicle and lock the doors again.

■ **Battery-saving function**

The battery-saving function will be activated in order to prevent the electronic key battery and the battery from being discharged while the vehicle is not in operation for a long time.

- In the following situations, the smart entry & start system may take some time to

- unlock the doors.
- The electronic key has been left in an area of approximately 2 m (6 ft.) of the outside of the vehicle for 10 minutes or longer.
- The smart entry & start system has not been used for 5 days or longer.
- If the smart entry & start system has not been used for 14 days or longer, the doors cannot be unlocked at any doors except the driver's door. In this case, take hold of the driver's door handle, or use the wireless remote control or the mechanical key, to unlock the doors.

■ **Turning an electronic key to battery-saving mode**

When battery-saving mode is set, battery depletion is minimized by stopping the electronic key from receiving radio waves.

Press  twice while pressing and holding . Confirm that the electronic key indicator flashes 4 times.

While the battery-saving mode is set, the smart entry & start system cannot be used. To cancel the function, press any of the electronic key buttons.



■ **Conditions affecting operation**

The smart entry & start system uses weak radio waves. In the following situations, the communication between the electronic key and the vehicle may be affected, preventing the smart entry & start system, wireless remote control and engine immobilizer system from operating properly. (Ways of coping: →P.538)

- When the electronic key battery is depleted
- Near a TV tower, electric power plant, gas station, radio station, large display,

- airport or other facility that generates strong radio waves or electrical noise
- When carrying a portable radio, cellular phone, cordless phone or other wireless communication device
- When the electronic key is in contact with, or is covered by the following metallic objects
  - Cards to which aluminum foil is attached
  - Cigarette boxes that have aluminum foil inside
  - Metallic wallets or bags
  - Coins
  - Hand warmers made of metal
  - Media such as CDs and DVDs
- When other wireless keys (that emit radio waves) are being used nearby
- When carrying the electronic key together with the following devices that emit radio waves
  - Another vehicle's electronic key or a wireless key that emits radio waves
  - Personal computers or personal digital assistants (PDAs)
  - Digital audio players
  - Portable game systems
- If window tint with a metallic content or metallic objects are attached to the rear window
- When the electronic key is placed near a battery charger or electronic devices
- When the vehicle is parked in a pay parking spot where radio waves are emitted.

■ **Note for the entry function**

- Even when the electronic key is within the effective range (detection areas), the system may not operate properly in the following cases:
  - The electronic key is too close to the window or outside door handle, near the ground, or in a high place when the doors are locked or unlocked.
  - The electronic key is near the ground or in a high place, or too close to the center of the rear bumper when the trunk is opened.
  - The electronic key is on the instrument panel, rear package tray or floor, or in the door pockets or glove box when the

- engine is started or engine switch modes are changed.
- Do not leave the electronic key on top of the instrument panel or near the door pockets when exiting the vehicle. Depending on the radio wave reception conditions, it may be detected by the antenna outside the cabin and the doors will become lockable from the outside, possibly trapping the electronic key inside the vehicle.
  - As long as the electronic key is within the effective range, the doors may be locked or unlocked by anyone. However, only the doors detecting the electronic key can be used to unlock the vehicle.
  - Even if the electronic key is not inside the vehicle, it may be possible to start the engine if the electronic key is near the window.
  - The doors may unlock or lock if a large amount of water splashes on the door handle, such as in the rain or in a car wash, when the electronic key is within the effective range. (The doors will automatically be locked after approximately 30 seconds if the doors are not opened and closed.)
  - If the wireless remote control is used to lock the doors when the electronic key is near the vehicle, there is a possibility that the door may not be unlocked by the entry function. (Use the wireless remote control to unlock the doors.)
  - Touching the door lock sensor while wearing gloves may delay or prevent lock operation.
  - Some models: When the lock operation is performed using the lock sensor, recognition signals will be shown up to two consecutive times. After this, no recognition signals will be given.
  - If the door handle becomes wet while the electronic key is within the effective range, the door may lock and unlock repeatedly. In this case, follow the following correction procedures to wash the vehicle:
    - Place the electronic key in a location 2 m (6 ft.) or more away from the vehicle. (Take care to ensure that the key is not stolen.)
    - Set the electronic key to battery-saving mode to disable the smart entry & start system. (→P.152)
  - If the electronic key is inside the vehicle and a door handle becomes wet during a car wash, a message may be shown on the multi-information display and a buzzer will sound outside the vehicle. To turn off the alarm, lock all the doors.
  - The lock sensor may not work properly if it comes into contact with ice, snow, mud, etc. Clean the lock sensor and attempt to operate it again.
  - A sudden approach to the effective range or door handle may prevent the doors from being unlocked. In this case, return the door handle to the original position and check that the doors unlock before pulling the door handle again.
  - If there is another electronic key in the detection area, it may take slightly longer to unlock the doors after the door handle is gripped.
- **When the vehicle is not driven for extended periods**
- To prevent theft of the vehicle, do not leave the electronic key within 2 m (6 ft.) of the vehicle.
  - The smart entry & start system can be deactivated in advance.
  - Setting the electronic key to battery-saving mode helps to reduce key battery depletion. (→P.152)
- **To operate the system properly**
- Make sure to carry the electronic key when operating the system. Do not get the electronic key too close to the vehicle when operating the system from the outside of the vehicle.
- Depending on the position and holding condition of the electronic key, the key may not be detected correctly and the system may not operate properly. (The alarm may go off accidentally, or the door lock pre-

vention function may not operate.)

- Do not leave the electronic key inside the trunk.  
The key confinement prevention function may not operate, depending on the location of the key (the inside edge of the trunk), conditions (inside a metal bag, close to metallic objects) and the radio waves in the surrounding area. (→P.148)

■ **If the smart entry & start system does not operate properly**

- Locking and unlocking the doors and trunk: →P.538
- Starting the engine: →P.539

■ **Certification for the smart entry & start system**

- ▶ For vehicles sold in Dominican Republic

■ **Customization**

Some functions can be customized. (→P.568)

■ **If the smart entry & start system has been deactivated in a customized setting**

- Locking and unlocking the doors and opening the trunk:  
Use the wireless remote control or mechanical key. (→P.138, 146, 538)
- Starting the engine and changing engine switch modes: →P.539
- Stopping the engine: →P.213

**FCC ID: N14TMLF15-1**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID:HYQ23ABB  
FCC ID:HYQ14FFB

**NOTE:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC WARNING:**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

<For 14FFB>

The FCC ID is affixed inside the equipment. You can find the ID when replacing the battery.

- ▶ For vehicles sold in Aruba and Curacao

FCC ID:HYQ23ABB  
FCC ID:HYQ14FFB  
FCC ID:HYQ14CCL

**NOTE:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC WARNING:**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

<For 14FFB>

The FCC ID is affixed inside the equipment. You can find the ID when replacing the battery.

▶ For vehicles sold in Korea

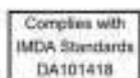
	상호명/제조사	: DENSO CORPORATION
	기자재의 명칭(모델명)	: 데이터전송용 무선기기(14FEA)
	제조년월/제조국	: See product. / Japan
	식별부호	: MSIP-CRM-DKR-14FEA

	상호명/제조사	: DENSO CORPORATION
	기자재의 명칭(모델명)	: 데이터전송용 무선기기(14CEK)
	제조년월/제조국	: See product. / Japan
	식별부호	: R-C-DKR-14CEK

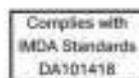
3

Before driving

▶ For vehicles sold in Singapore



DENSO 14FCB



DENSO 14CCL

► For vehicles sold in Taiwan

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

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► For vehicles sold in Vietnam





► For vehicles sold in Paraguay



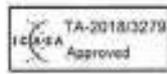
NR: 2016-02-I-0045  
DENSO 14FFB



NR: 2019-02-I-0105  
DENSO 14CCL

[Para los vehículos que se venden en Paraguay]  
Nombre del proveedor en Paraguay: Toyotoshi S.A.  
Dirección: Av. Mariscal Lopez 2801/2899 Asuncion, Paraguay

- ▶ For vehicles sold in South Africa



- ▶ For vehicles sold in Brazil



Este equipamento está homologado pela ANATEL de acordo com os procedimentos regulamentados pela Resolução 242/2000 e atende aos requisitos técnicos aplicados.

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.



4804-15-1732



01420-19-01732

► For vehicles sold in Morocco

MOROCCO : MR12935/2016

DENSO 14FCB

► For vehicles sold in Argentina



**⚠ WARNING**

■ **Caution regarding interference with electronic devices**

- People with implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should maintain a reasonable distance between themselves and the smart entry & start system antennas. (→P.150)

The radio waves may affect the operation of such devices. If necessary, the entry function can be disabled. Ask your Lexus dealer for details, such as the frequency of radio waves and timing of the emitted radio waves. Then, consult your doctor to see if you should disable the entry function.

- Users of any electrical medical device other than implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should consult the manufacturer of the device for information about its operation under the influence of radio waves. Radio waves could have unexpected effects on the operation of such medical devices.

Ask your Lexus dealer for details on disabling the entry function.

## Front seats

### ⚠ WARNING

#### ■ When adjusting the seat position

- Take care when adjusting the seat position to ensure that other passengers are not injured by the moving seat.
- Do not put your hands under the seat or near the moving parts to avoid injury. Fingers or hands may become jammed in the seat mechanism.
- Make sure to leave enough space around the feet so they do not get stuck.

#### ■ Seat adjustment

To reduce the risk of sliding under the lap belt during a collision, do not recline the seat more than necessary. If the seat is too reclined, the lap belt may slide past the hips and apply restraint forces directly to the abdomen, or your neck may contact the shoulder belt, increasing the risk of death or serious injury in the event of an accident. Adjustments should not be made while driving as the seat may unexpectedly move and cause the driver to lose control of the vehicle.

#### ■ Operating the front passenger's seat from the driver's seat or rear seat

Do not operate the front passenger's seat when a passenger is seated in it. In addition, do not let anyone sit down in the front passenger's seat while the seat is being operated or when the head restraint is being folded. The front passenger may catch their legs between the instrument panel and seat, or the head restraint may interfere with their head, resulting in injury.

#### ■ When the front passenger's seat is folded forward

If the outside rear view mirror is difficult to see, due to the position of the front passenger's seat, move the front passenger's seat to an appropriate position. Doing so may lead to mishandling of the vehicle and cause an accident, resulting in death or serious injury.

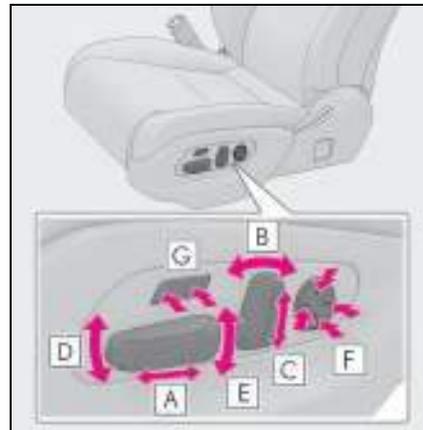
### ⚠ NOTICE

#### ■ Operating the front passenger's seat from the driver's seat or rear seat

Before operating the front passenger's seat, make sure that there is no luggage or any other objects on the seat or in the footwell that could prevent its operation. Such items may result in excess force being applied, causing damage to the seat and/or the luggage.

## Adjustment procedure

### ■ Seat adjustment switches



- A** Seat position adjustment
- B** Seatback angle adjustment
- C** Head restraint height adjustment (if equipped) (→P.181)

- D** Seat cushion (front) angle adjustment
- E** Vertical height adjustment
- F** Lumbar support adjustment
- G** Seat cushion length adjustment (if equipped)

■ **Center Display**

- 1 Press the seat switch.



- 2 Using the Remote Touch pad, select "Driver seat adjustment" or "Passenger seat adjustment".
- 3 Select the button for the desired adjustment.



- A** Head restraint adjustment (if equipped) (→P.181)
- B** Shoulder bolster adjustment (if equipped)
- C** Lumbar support adjustment
- D** Pelvic support adjustment

- E** Seatback side bolster adjustment (if equipped)
- F** Seat cushion side bolster adjustment (if equipped)
- G** Hip support adjustment (if equipped)

- 4 Perform adjustment using the displayed buttons.

The seat will move while a button is selected.

■ **When adjusting the front seats**

While adjusting a front seat, to avoid contact with the ceiling, instrument panel or rear seats, the operation of the seat may be restricted or parts of the seat other than that being adjusted may move.

■ **Operation after the engine switch is turned off**

After a certain time elapses after the engine switch is turned off, the following parts of the front seats will move to their neutral positions.

- Shoulder bolster (if equipped)
- Lumbar support
- Pelvic support
- Seatback side bolster (if equipped)
- Seat cushion side bolster (if equipped)
- Hip support (if equipped)

■ **Automatic angle adjustment of the rear displays (if equipped)**

When a seat is adjusted, the angle of the rear display will be adjusted automatically to maintain an optimal viewing angle for the rear display from the rear seat.

■ **Pre-collision seatbacks for the passenger seats (vehicles with Lexus Safety System + A or Lexus Safety System +)**

→P.261, 272

■ **Customization**

Some functions can be customized.

(→P.568)

**Operating the front passenger's seat from the driver's seat**

■ **Using the driver's seat adjustment switches to adjust the front passenger's seat (front passenger mode)**

The mode of the driver's seat adjustment switches can be changed to adjust the front passenger's seat.

- 1 Press the mode change button on the driver's side door.

The indicator **A** will illuminate when front passenger mode is selected.



- 2 Using the seat adjustment switches on the driver's seat, adjust the front passenger's seat.

To cancel front passenger mode, press the mode change button again.

Front passenger mode will be canceled automatically if the driver's seat adjustment switches are not operated for approximately 30 seconds.

■ **Using the Center Display (vehicles with a foldable head restraint)**

- 1 Press the seat switch.



- 2 Press the sub function button of the Remote Touch. (→P.392)
- 3 Select the button for the desired operation.



- A** Moves the front passenger's seat forward and folds the seatback and head restraint forward
- B** Moves the front passenger's seat backward and the seatback and head restraint to the upright position

If the rear seat behind the front passenger's seat is not in the upright position, it will move to the upright position before the front passenger's seat moves to its upright position.

To stop the front passenger seat while it is moving, select the **A** or **B** button or

**3**  
Before driving

press the seat switch.

■ **Operating the foldable head restraint using the driver's seat adjustment switches in front passenger mode (if equipped)**

- When the front passenger's seatback angle is adjusted using the driver's seat adjustment switches in front passenger mode, the front passenger's head restraint will operate automatically as follows:
  - When the front passenger's seatback is moved forward to the upright position, the head restraint will lower and fold forward when the seatback angle adjustment switch is released.
  - When the front passenger's seatback is moved backward to the upright position, the head restraint will move to the upright position when the seatback angle adjustment switch is released.
- If any of the following conditions are met, the front passenger's head restraint will not fold forward even though the front passenger's seatback angle is being adjusted using the driver's seat adjustment switches in front passenger mode:
  - The engine switch is in ACCESSORY mode or off.
  - The weight of an occupant or heavy object, etc. is detected on the front passenger's seat.

Once weight is detected on the seat, the seat will be judged as occupied until the front passenger's door is opened then closed or the engine switch is turned off.

- Vehicles without a rear seat entertainment system: The front passenger's seat is in the rear most position.
- The front passenger's seat belt is fastened.
- The front passenger's door is open. (The front seat will not move forward.)
- The front passenger's seat is not in the lowest position.
- The front passenger's seat seat cushion (front) is not in the lowest position.
- The front passenger's seat seat cushion is extended (if equipped).

- If either of the following conditions is met, the front passenger's head restraint will not return to the upright position even though the front passenger's seatback angle is being adjusted using the driver's seat adjustment switches in front passenger mode:
  - The engine switch is in ACCESSORY mode or off.
  - The front passenger's seat position is moved to a position forward of the neutral position.

- The engine switch is in ACCESSORY mode or off.
- The front passenger's seat position is moved to a position forward of the neutral position.

■ **Operating the foldable head restraint using the front passenger's seat adjustment switches (if equipped)**

When the front passenger's head restraint is folded forward and the front passenger's door is open, if the front passenger's seat adjustment switches are used to move the seat backward or recline the seatback, the head restraint will move to the upright position automatically when the switch is released.

To stop the operation of the front passenger's head restraint part-way, perform any of the following operations:

- Operate any front passenger's seat adjustment switch.

The head restraint will stop when the seat position adjustment switch or seatback angle adjustment switch is operated to move the seat backward or recline the seatback, and will resume operating when the switch is released.

- Press the "SET" button.
- Press the "1", "2" or "3" button.
- Press the seat switch.

■ **Operation of the front passenger's seat using the Center Display will be canceled when (vehicles with a foldable head restraint)**

In the following situations, the front passenger's seat cannot be operated using the Center Display:

- The engine switch is in ACCESSORY mode or off.

- The weight of an occupant or heavy object, etc. is detected on the front passenger's seat.

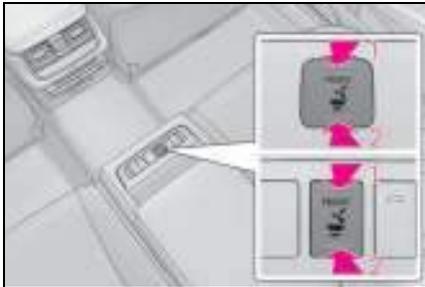
Once weight is detected on the seat, the seat will be judged as occupied until the front passenger's door is opened then closed or the engine switch is turned off.

- The front passenger's seat belt is fastened.
- The front passenger's door is open. (The front seat will not move forward.)

#### ■ When the front passenger's seat is folded forward

By reclining the front passenger's seat seatback, the forward view of the rear passenger can be improved.

### Operating the front passenger's seat from the rear seat (vehicles without power rear seat)



- 1 Press and hold to move the front passenger's seat forward and fold the seatback forward.
- 2 Press and hold to move the front passenger's seat backward and move the seatback to the upright position.

### Operating the front passenger's seat from the rear seat (vehicles with power rear seat)

- 1 Display the home screen on the Rear Multi Operation Panel (→P.396) and then touch "Seat".
- 2 Touch "Passenger".
- 3 Touch the button for the desired operation.

When the operating conditions are not met, the buttons will be grayed out.



- A Move the front passenger's seat forward and fold the seatback forward.

On vehicles with a foldable head restraint, the head restraint will also fold forward.

To stop the front passenger seat while it is moving, touch "STOP".

- B Move the front passenger's seat backward and the seatback to the upright position.

If the rear seat behind the front passenger's seat is not in the upright position, it will move to the upright position before the front passenger's seat moves to its previous position.

On vehicles with a foldable head restraint, the head restraint will also move to the

upright position.

To stop the front passenger seat while it is moving, touch "STOP".

- C** Move the front passenger's seat and the seatback.

The seat and seatback will move while a button is touched and held.

On vehicles with a foldable head restraint, the head restraint will also move.

**■ Operating the front passenger's seat from the rear seat**

- In the following situations, the front passenger's seat cannot be operated using the Rear Multi Operation Panel:
  - The engine switch is in ACCESSORY mode or off.
  - The rear seat belt is not fastened and weight is not detected on the rear seat.

Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

- The weight of an occupant or heavy object, etc. is detected on the front passenger's seat.

Once weight is detected on the seat, the seat will be judged as occupied until the front passenger's door is opened then closed or the engine switch is turned off.

- The front passenger's seat belt is fastened.
- The front passenger's door is open. (The front seat will not move forward.)
- If the rear armrest is stowed while the seat position is being adjusted, the operation will stop.

**■ Canceling an operation**

To cancel an operation, press and hold the

 button of the Rear Multi Operation Panel or press it 3 times in quick succession.

**■ When the front passenger's seat is folded forward**

→P.167

**Front seat refresh system (if equipped)**

Pneumatic chambers built into the front seat apply pressure to the occupant's body at different modes and intensities.

- 1 Press the seat switch.



- 2 Using the Remote Touch pad, select "Driver seat refresh" or "Passenger seat refresh".

- 3 Select the desired mode.

- "Centripetal"

Applies pressure sequentially from the front of the seat cushion to top of the seatback

- "Centrifugal"

Applies pressure sequentially from the top of the seatback to the front of the seat cushion

- "Upper body"

Applies pressure sequentially from the bottom to the top of the seatback

- "Lower body"

Applies pressure sequentially from the

front to the back of the seat cushion

- “Lumbar”

Applies pressure sequentially from the bottom to the top of the lumbar area of the seatback

- 4 Select the desired intensity and then confirm the setting.

The intensity can be adjusted in 5 steps.

To stop the operation select “Stop”.

If a seat is not occupied, do not operate the front seat refresh system for that seat.

#### ■ Refresh system

- Operating conditions
  - The engine switch is in IGNITION ON mode.
  - The temperature in the cabin is not extremely high.
  - For the front passenger’s seat: The weight of an occupant is detected on the front passenger’s seat or the front passenger’s seat belt is fastened.

Once weight is detected on the seat, the seat will be judged as occupied until the front passenger’s door is opened then closed or the engine switch is turned off.

- Automatic stop function
  - The operation will be canceled automatically after approximately 15 minutes.
  - If the power easy access system begins operating, the front seat refresh system will stop.

#### WARNING

##### ■ Important points while driving

Do not adjust the driver’s seat refresh system while driving. Using it may affect your ability to control the vehicle, possibly leading to an accident resulting in death or serious injury.

##### ■ Using the refresh system

- Those who are pregnant, have recently given birth, or suffer from ailments requiring rest (heart disease etc.) should consult a doctor before use.
- Do not allow children to use the refresh function.
- Do not use immediately after consuming a meal or alcohol, or for an extended period of time.
- If you feel sick while using the refresh function, immediately discontinue use.

**Power rear seat\***

\* : If equipped

**⚠ WARNING****■ When adjusting the seat position**

- Take care when adjusting the seat position to ensure that other passengers are not injured by the moving seat.
- When adjusting the rear seat with an ottoman, make sure there is sufficient space so that a foot does not get caught between the ottoman and front passenger seat. (If equipped)
- Vehicles with a rear seat entertainment system: When the rear seat is moving to the Entertainment Mode position, do not allow hands near the rear display. Otherwise, a hand or finger may be caught, possibly causing injury.

**■ Seat adjustment**

To reduce the risk of sliding under the lap belt during a collision, do not recline the seat more than necessary. If the seat is too reclined, the lap belt may slide past the hips and apply restraint forces directly to the abdomen, or your neck may contact the shoulder belt, increasing the risk of death or serious injury in the event of an accident. Adjustments should not be made while driving as the seat may unexpectedly move and cause the driver to lose control of the vehicle.

**■ Using the ottoman (if equipped)**

- Do not sit on the ottoman.
- If someone sits on the ottoman, the seat belt cannot be fitted properly, and they may be thrown from the seat, resulting in death or serious injury in the event of an accident or sudden braking.

- When getting in or out of the vehicle, retract the ottoman. If the ottoman is not retracted, it may cause a fall, resulting in injury.
- Do not operate the ottoman when the vehicle is moving.
- Do not allow anyone to put their hands or feet under the rear seat when stowing the ottoman.

**⚠ NOTICE****■ To prevent an ottoman malfunction (if equipped)**

- Do not place any objects in the rear seat footwell that could prevent the operation of the ottoman.
- Do not place heavy luggage on the ottoman.
- Do not place any objects under the ottoman while it is raised for use. These objects may interfere with the ottoman being folded, causing damage to the ottoman or the objects themselves.

**■ To prevent a rear display malfunction (if equipped)**

Do not attempt to move the rear display by hand, as doing so may damage the rear display.

**Adjustment procedure****■ Automatic operation**

The seat can be moved to preset positions.

- 1 Display the home screen on the Rear Multi Operation Panel (→P.396) and then touch "Seat".
- 2 Touch "Left" or "Right".
- 3 Touch the desired preset button.

When the operating conditions are not

met, the preset buttons will be grayed out.



 /  : Moves the rear seat to the upright position (Business Mode)

 /  : Moves the rear seat with an ottoman to a slightly reclined position (Entertainment Mode) (if equipped)

Vehicles without a rear seat entertainment system: Moves the front passenger's seat forward.

Vehicles with a rear seat entertainment system: Moves the front passenger's seat and rear display to allow the rear display to be comfortably viewed.

 : Moves the rear seat with an ottoman to a deeply reclined position (Relaxation Mode) (if equipped)

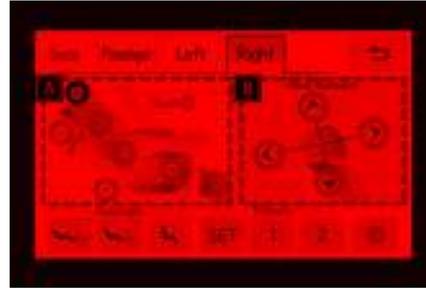
Moves the front passenger's seat forward and folds the seatback and head restraint forward.

To stop the front passenger seat while it is moving, touch "STOP".

■ **Manual operation**

- 1 Display the home screen on the Rear Multi Operation Panel (→P.396) and then touch "Seat".

- 2 Touch "Left" or "Right".
- 3 Touch the button for the desired adjustment.



- A Select the part you wish to adjust.
- B Adjust the position of the selected part.

The part will move while a button is touched.

■ **Adjustment of the rear seat**

- When a rear seat is close to a front seat, the operation of the rear seat may be restricted.
- If the rear armrest is stowed while the seat position is being adjusted, the operation will stop.

■ **Operating conditions of Business Mode**

When the rear seat belt is not fastened and weight is not detected on the rear seat, Business Mode cannot be selected.

Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

■ **The rear seat with an ottoman cannot be moved to Entertainment Mode/Relaxation Mode when (if equipped)**

In the following situations, Entertainment Mode or Relaxation Mode cannot be selected:

- The engine switch is in ACCESSORY

3  
Before driving

mode or off.

- The rear seat belt is not fastened and weight is not detected on the rear seat.

Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

- The weight of an occupant or heavy object, etc. is detected on the front passenger's seat.

Once weight is detected on the seat, the seat will be judged as occupied until the front passenger's door is opened then closed or the engine switch is turned off.

- The front passenger's seat belt is fastened.
- The front passenger's door is open.

■ **When the front passenger's seat is folded forward**

→P.167

■ **Automatic angle adjustment of the rear displays (if equipped)**

When a seat is adjusted, the angle of the rear display will be adjusted automatically to maintain an optimal viewing angle for the rear display from the rear seat.

■ **Operation after the engine switch is turned off**

After a certain time elapses after the engine switch is turned off, the following parts of the rear seats will move to their neutral positions.

- Shoulder bolster
- Lumbar/pelvic support

■ **Canceling an operation**

To cancel an operation, press and hold the

 button of the Rear Multi Operation Panel or press it 3 times in quick succession.

■ **Pre-collision seatbacks for the passenger seats (vehicles with Lexus Safety System + A or Lexus Safety System +)**

→P.261, 272

■ **Customization**

Some functions can be customized. (→P.568)

**Returning the rear seat from the front seats**

- 1 Press the seat switch.



- 2 Press the sub function button of the Remote Touch. (→P.392)

- 3 Select **A**.

The rear seat will move to the upright position.



■ **Operation of the rear seats from the front seats**

In the following situations, the rear seats cannot be operated from the front seats.

- When the armrest is stowed and weight

of an occupant, heavy object, etc. is detected on a rear seat  
 Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

- When the armrest is stowed and a rear seat belt is fastened.

**⚠ WARNING**  
**■ When returning the rear seats to the neutral position**  
 To avoid injuring the rear passengers, wait until they have gotten out of the vehicle before operating the switch.

**Rear seat relaxation system (if equipped)**

The rear seat relaxation system utilizes pneumatic chambers and dedicated heaters, and applies pressure to the occupant's body at different modes and intensities.

To display the rear seat relaxation system screen, display the home screen on the Rear Multi Operation Panel (→P.396) and then touch "Relaxation".



**A** Touch to select the desired rear

seat.

- B** Touch to select the desired mode.

When a button is touched, operation will begin.

- C** Touch to adjust the intensity.

The intensity can be adjusted in 5 steps.

- D** Touch to turn the spot heaters on/off.

- E** Touch to stop the operation.

If a seat is not occupied, do not operate the rear seat relaxation system for that seat.

**■ Relaxation system**

- Operating conditions
  - The engine switch is in IGNITION ON mode.
  - The temperature in the cabin is not extremely high.
  - The weight of an occupant is detected on the rear seat or the rear seat belt is fastened.

Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

- Automatic stop function
  - The operation will be canceled automatically after approximately 15 minutes.
  - If the door for a seat that the relaxation system is currently being used is opened, the relaxation system will stop operating.

**⚠ WARNING**  
**■ Using the relaxation system**  
 ● Those who are pregnant, have recently given birth, or suffer from ailments requiring rest (heart disease etc.) should consult a doctor before use.  
 ● Do not allow children to use the relaxation function.

**WARNING**

- Do not use immediately after consuming a meal or alcohol, or for an extended period of time.
- If you feel sick while using the relaxation function, immediately discontinue use.

**Automatic Seat Operation**

The following functions will cause the rear seats to move automatically.

■ **Seat return function linked to the door opening operation**

The rear seat will return to the upright position automatically when the rear door is opened for easier entry and exit of the vehicle.

For the rear seat with an ottoman (if equipped): When the rear door on the side with the rear seat with an ottoman is opened, the seatback of the rear seat with an ottoman will move to a more upright position. The seatback will move to the upright position after the door is closed and the system determines that the rear passenger has exited.

However, if the armrest is stowed, the rear seat will not move.

■ **Shift-linked rear seat reclining function**

When the shift position is shifted from P, to enhance rear visibility for the driver, the rear seats will recline slightly.

However, the shift-linked rear seat reclining function will not operate in

the following situations:

- The weight of an occupant or heavy object, etc. is detected on a rear seat.

Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

- A rear seat belt is fastened.
- A rear door is open.
- The armrest is stowed.

When a front seat is close to a rear seat, the rear seats may not operate or the range of movement may be restricted.

■ **Changing automatic seat operation settings**

The settings can be changed on the Rear Multi Operation Panel. (→P.396)

- 1 Display the home screen on the Rear Multi Operation Panel (→P.396) and then touch "Seat".
- 2 Touch "Left" or "Right".
- 3 Touch

- 4 Touch a button to change the setting.



### Driving position memory

This feature automatically adjusts the positions of the front seats, steering wheel, outside rear view mirrors and head-up display (if equipped) to make entering and exiting the vehicle easier or to suit your preferences.

Up to 3 different driving positions can be recorded.

Each electronic key (including a card key) can be registered to recall your preferred driving position.

### Power easy access system

The seat and steering wheel are automatically adjusted to allow the driver to enter and exit the vehicle easily.

#### ► Driver's seat

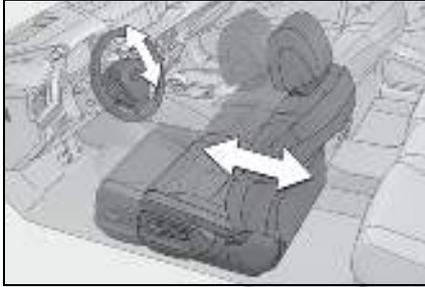
When all of the following have been performed, the seat and steering wheel are automatically adjusted to a position that allows driver to enter and exit the vehicle easily.

- The shift position has been shifted to P.
- The engine switch has been turned off.
- The driver's seat belt has been unfastened.

When the driver's seat adjustment switches are in front passenger mode (→P.165), the seat and steering wheel will not move.

3

Before driving



On vehicles with adjustable seat cushion side bolsters, when the driver's door is opened with the engine switch off, the seat cushion side bolsters will lower if they are in the default position.

When any of the following has been performed, the seat and steering wheel automatically return to their original positions.

- The engine switch has been turned to ACCESSORY mode or IGNITION ON mode.
- The driver's seat belt has been fastened.

► Front passenger's seat

If all of the following have been performed while the vehicle is stopped, the lumbar support, pelvic support, shoulder bolster (if equipped), seatback side bolster (if equipped), and hip support (if equipped) will be moved to their default position. On vehicles with adjustable seat cushion side bolsters, the seat cushion side bolsters will lower.

- The passenger's seat belt has been unfastened.
- The front passenger's door is opened.

■ Operation of the power easy access system

- When exiting the vehicle, the power easy access system may not operate if the seat is already in the rearmost or uppermost position or close to the rear seat.
- If the seat position is adjusted during power easy access system operation, the automatic operation will stop. (The seat will change to manual operation.)
- If the seat position is adjusted during or after the power easy access system operation when the driver is exiting the vehicle, the power easy access system will not operate when entering the vehicle.

■ Seat cushion side bolster adjustment (if equipped)

If the seat cushion side bolsters have been lowered, when the front door is closed, the seat cushion side bolsters will move to their default position.

If the seat is adjusted while the seat cushion side bolsters are moving to the default position, their movement will be temporarily suspended. (The seat cushion side bolsters will move to the default position after a certain amount of time.)

■ Customization

Some functions can be customized. (→P.568)

**Recording a driving position into memory**

- 1 Turn the engine switch to IGNITION ON mode.
- 2 Check that the shift position is in P.
- 3 Adjust the driver's seat, steering wheel, outside rear view mirrors and head-up display (if equipped) to the desired positions.
- 4 While pressing the "SET" button, or within 3 seconds after the "SET"

button is pressed, press button “1”, “2” or “3” until the buzzer sounds.

If the selected button has already been preset, the previously recorded position will be overwritten.

When the driver’s seat adjustment switches are in front passenger mode (→P.165), the position of the driver’s seat cannot be registered.



To record the position of the front passenger’s seat, adjust the front passenger’s seat to the desired position and perform step 4 using the buttons on the front passenger’s side.

#### ■ In order to correctly use the driving position memory function

If a seat position is already in the furthest possible position and the seat is operated in the same direction, the recorded position may be slightly different when it is recalled.

#### **⚠ WARNING**

##### ■ Seat adjustment caution

Take care during seat adjustment so that the seat does not strike the rear passenger or squeeze your body against the steering wheel.

#### Recalling a driving position

- 1 Turn the engine switch to IGNITION ON mode.

- 2 Check that the shift position is in P.
- 3 Press one of the buttons for the driving position you want to recall until the buzzer sounds.

When the driver’s seat adjustment switches are in front passenger mode (→P.165), a driving position cannot be recalled.



#### ■ To stop the position recall operation part-way through

Perform any of the following operations:

- Press the “SET” button.
- Press button “1”, “2” or “3”.
- Press the mode change button.
- Operate any of the seat adjustment switches (only cancels seat position recall).
- Operate the tilt and telescopic steering control switch (only cancels steering wheel position recall).

#### ■ Recalling a driving position

If a driving position is recalled, the movement of the front seat may be stopped part-way if the seat moves close to the rear seat.

If a rear passenger is determined to be in the vehicle, the rearward movement of the front seat may be stopped partway to ensure sufficient space for the rear passenger.

#### ■ Recalling the front passenger’s seat position (vehicles with a rear seat with an ottoman)

If the ottoman of the rear seat is extended,

the front passenger's seat position cannot be recalled.

■ **Operating the driving position memory after turning the engine switch off**

**Driver's seat:**  
Recorded seat positions can be activated up to 180 seconds after the driver's door is opened and another 60 seconds after it is closed again.

**Front passenger's seat:**  
Recorded seat positions can be recalled up to 180 seconds after the front passenger's door is opened.

**Registering/canceling/recall a driving position to an electronic key (including a card key) (memory recall function)**

■ **Registering procedure**

Record your driving position to button "1", "2" or "3" before performing the following:

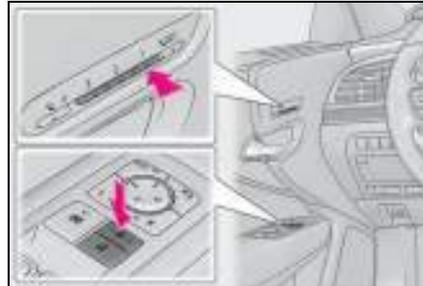
Carry only the key you want to register, and then close the driver's door.

If 2 or more keys are in the vehicle, the driving position cannot be recorded properly.

- 1 Turn the engine switch to IGNITION ON mode.
- 2 Check that the shift position is in P.
- 3 Recall the driving position that you want to record.
- 4 While pressing the recalled button, press and hold the door lock switch (either lock or unlock) until the buzzer sounds.

If the button could not be registered, the buzzer sounds continuously for approxi-

mately 3 seconds.



■ **Cancelation procedure**

Carry only the key you want to cancel and then close the driver's door. If 2 or more keys are in the vehicle, the driving position cannot be canceled properly.

- 1 Turn the engine switch to IGNITION ON mode.
- 2 Check that the shift position is in P.
- 3 While pressing the "SET" button, press and hold the door lock switch (either lock or unlock) until the buzzer sounds twice.

If the button could not be canceled, the buzzer sounds continuously for approximately 3 seconds.

■ **Recall procedure**

- 1 Make sure that the doors are locked before recalling the driving position. Carry the electronic key that has been registered to the driving position, and then unlock and open the driver's door using the smart entry & start system or wireless remote control.

The driving position will move to the recorded position (not including the steering wheel and head-up display [if equipped]). However, the seat will move to

a position slightly behind the recorded position in order to make entering the vehicle easier.

If the driving position is in a position that has already been recorded, the seat and outside rear view mirrors will not move.

- 2 Turn the engine switch to ACCESSORY mode or IGNITION ON mode, or fasten a seat belt.

The seat, steering wheel and head-up display (if equipped) will move to the recorded position.

#### ■ Recalling the driving position using the memory recall function

- Different driving positions can be registered for each electronic key. Therefore, the driving position that is recalled may be different depending on the key being carried.
- If a door other than the driver's door is unlocked with the smart entry & start system, the driving position cannot be recalled. In this case, press the driving position button which has been set.

#### ■ Customization

Some functions can be customized. (→P.568)

### Rear seat position memory\*

\*: If equipped

The rear seat position can be memorized and recalled with the touch of a button.

#### Recording a position into memory

- 1 Turn the engine switch to IGNITION ON mode.
- 2 Display the home screen on the Rear Multi Operation Panel (→P.396) and then touch "Seat".
- 3 Touch "Left" or "Right".
- 4 Adjust the rear seat to the desired position and then touch "SET".
- 5 Touch "1" or "2".

If the preset is being used, the previously recorded seat position will be overwritten.

#### ■ In order to correctly use the position memory function

If a seat position is already in the furthest possible position and the seat is operated in the same direction, the recorded position may be slightly different when it is recalled.

#### WARNING

##### ■ Seat adjustment caution

Take care during seat adjustment so that the rear passengers do not strike the front seats.

3

Before driving

### Recalling the memorized position

- 1 Turn the engine switch to IGNITION ON mode.
- 2 Display the home screen on the Rear Multi Operation Panel (→P.396) and then touch "Seat".
- 3 Touch "Left" or "Right".
- 4 Touch "1" or "2".

When the operating conditions are not met, the buttons will be grayed out.

To stop the operation touch "STOP".

If the seat is adjusted while a memorized position is being recalled, the automatic operation will stop. (The seat will change to manual operation.)

#### ■ Operating condition

The weight of an occupant is detected on the rear seat or the rear seat belt is fastened.

Once weight is detected on the seat, the seat will be judged as occupied until the rear door is opened then closed or the engine switch is turned off.

#### ■ Recalling a rear seat position

If a memorized rear seat position is recalled, the seat may stop part-way to ensure sufficient space for the rear passenger.

#### ■ Recalling the ottoman position (if equipped)

When a seat position is recalled, the ottoman will not raise or extend. The ottoman position can only be recalled if the memorized position is lower and shorter than the current position.

### Head restraints

Head restraints are provided for all seats.

**Vehicles with power rear seat: The head restraint for the rear center seat is integrated into the seatback and cannot be adjusted.**

#### WARNING

##### ■ Head restraint precautions

Observe the following precautions regarding the head restraints. Failure to do so may result in death or serious injury.

- Use the head restraints designed for each respective seat.
- Adjust the head restraints to the correct position at all times.
- Manual type: After adjusting the head restraints, push down on them and make sure they are locked in position.
- Do not drive with the head restraints removed.

### Adjusting a head restraint vertically and horizontally (power head restraints)

#### ■ Front seats

##### ▶ Center Display

- 1 Press the seat switch.



- 2 Using the Remote Touch pad, select "Driver seat adjustment" or "Passenger seat adjustment".
- 3 Select **A** then the desired adjustment button **B**, **C**, **D**, or **E** to adjust the head restraint.



- B** Up
- C** Backward
- D** Down
- E** Forward

The head restraint moves while the adjustment button is selected.

- ▶ Seat adjustment switches (on some models)



- 1 Up
- 2 Down

#### ■ Rear seats

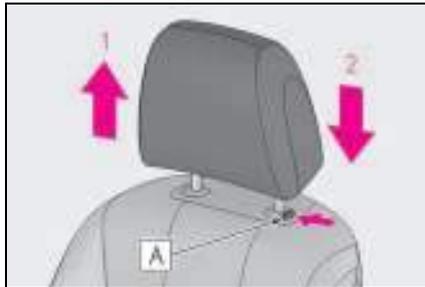
- 1 Display the home screen on the Rear Multi Operation Panel (→P.396) and then touch "Seat".
- 2 Touch "Left" or "Right".
- 3 Touch **A** then the desired adjustment button **B**, **C**, **D**, or **E** to adjust the head restraint.



- B** Up
- C** Backward
- D** Down
- E** Forward

The head restraint moves while the adjustment button is touched.

**Adjusting a head restraint vertically (manual head restraints)**



- 1 Up**  
Pull the head restraints up.
- 2 Down**  
Push the head restraint down while pressing the lock release button **A**.

**Front seat head restraints (power head restraints)**

Depending on the position of the front seat, the front head restraint may not be able to be adjusted upward if it is close to the ceiling.

**Adjusting the height of the head restraints**



Make sure that the head restraints are adjusted so that the center of the head restraint is closest to the top of your ears.

**Adjusting the rear seat head restraints (manual head restraints)**

Always raise the head restraint one level from the stowed position when using.

**Adjusting a head restraint horizontally (manual head restraints)**

The position of the head restraint can be adjusted forward in 4 stages.

If the head restraint is pulled forward from the foremost position, it will return to the rearmost position.



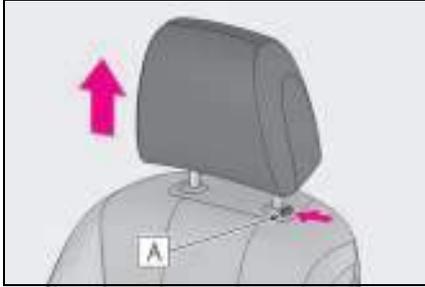
**Adjusting the side supports (if equipped)**

Push the sides of the head restraint.



**Removing the head restraints (manual head restraints)**

Pull the head restraint up while pressing the lock release button **A**.



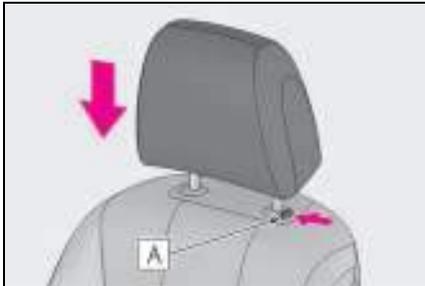
#### ■ Removing the head restraints (power head restraints)

For removal and installation of the head restraint, contact your Lexus dealer.

#### ■ Installing the head restraints (manual head restraints)

Align the head restraint with the installation holes and push it down to the lock position.

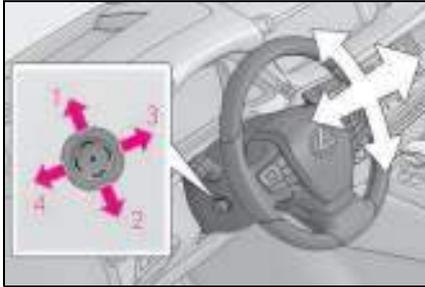
Press and hold the lock release button **A** when lowering the head restraint.



### Steering wheel

#### Adjustment procedure

Operating the switch moves the steering wheel in the following directions:



- 1 Up
- 2 Down
- 3 Toward the driver
- 4 Away from the driver

■ **The steering wheel can be adjusted when**

The engine switch is in ACCESSORY or IGNITION ON mode\*.

\*: If the driver's seat belt is fastened, the steering wheel can be adjusted regardless of engine switch mode.

■ **Automatic adjustment of the steering position**

A desired steering position can be entered to memory and recalled automatically by the driving position memory system. (→P.175)

■ **Power easy access system**

The steering wheel and driver's seat move in accordance with engine switch mode and the driver's seat belt condition. (→P.175)

■ **Customization**

Some functions can be customized. (→P.568)

### ! WARNING

■ **Caution while driving**

Do not adjust the steering wheel while driving. Doing so may cause the driver to mishandle the vehicle and cause an accident, resulting in death or serious injury.

### Sounding the horn

Press on or close to the  mark.



### Inside rear view mirror

The rear view mirror's position can be adjusted to enable sufficient confirmation of the rear view.

#### Adjusting the height of rear view mirror

The height of the rear view mirror can be adjusted to suit your driving posture.

Adjust the height of the rear view mirror by moving it up and down.



#### ⚠ WARNING

##### ■ Caution while driving

Do not adjust the position of the mirror while driving. Doing so may lead to mishandling of the vehicle and cause an accident, resulting in death or serious injury.

#### Anti-glare function

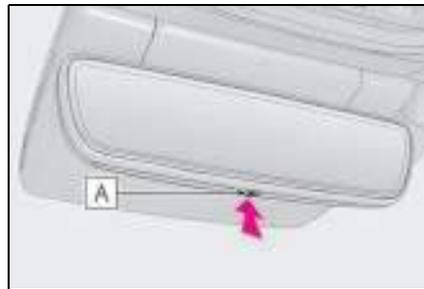
Responding to the level of brightness of the headlights of vehicles behind, the reflected light is automatically reduced.

Turn the automatic anti-glare function

mode on/off

When the automatic anti-glare function is in ON mode, the indicator **A** illuminates. The function will set to ON mode each time the engine switch is turned to IGNITION ON mode.

Pressing the button turns the function to OFF mode. (The indicator **A** also turns off.)



#### ■ To prevent sensor error

To ensure that the sensors operate properly, do not touch or cover them.



3

Before driving

### Outside rear view mirrors

The rear view mirror's position can be adjusted to enable sufficient confirmation of the rear view.

#### ⚠ WARNING

##### ■ Important points while driving

Observe the following precautions while driving.

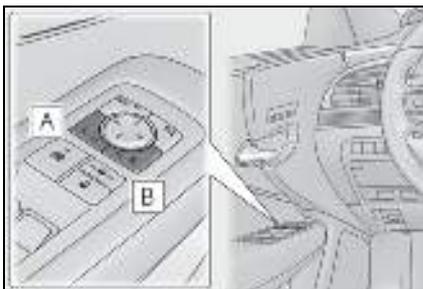
Failure to do so may result in loss of control of the vehicle and cause an accident, resulting in death or serious injury.

- Do not adjust the mirrors while driving.
- Do not drive with the mirrors folded.
- Both the driver and passenger side mirrors must be extended and properly adjusted before driving.

### Adjustment procedure

- 1 To select a mirror to adjust, press the switch.

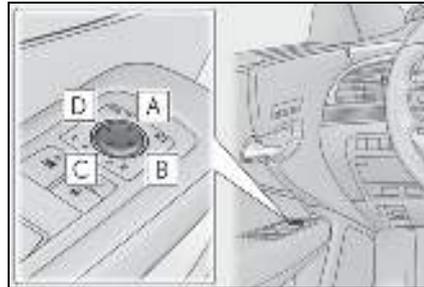
The indicator comes on.



- A Left
- B Right

Pressing the same switch again will put the switch in neutral.

- 2 To adjust the mirror, press the switch.



- A Up
- B Right
- C Down
- D Left

#### ■ Mirror angle can be adjusted when

The engine switch is in ACCESSORY or IGNITION ON mode.

#### ■ Defogging the mirrors

The outside rear view mirrors can be cleared using the mirror defoggers. Turn on the rear window defogger to turn on the outside rear view mirror defoggers. (→P.402)

#### ■ Auto anti-glare function

When the anti-glare inside rear view mirror is set to automatic mode, the outside rear view mirrors will activate in conjunction with the anti-glare inside rear view mirror to reduce reflected light. (→P.185)

#### ■ Automatic adjustment of the mirror angle

A desired mirror face angle can be entered to memory and recalled automatically by the driving position memory. (→P.175)

#### ■ Linked mirror function when reversing

When either "L" or "R" of the mirror select switch is selected, the outside rear view mirrors will automatically angle downwards when the vehicle is reversing in order to give a better view of the ground.

To disable this function, select neither “L” nor “R”.

To set the mirror angle used when the vehicle is reversing, adjust the mirror angle at a desired position with the shift position in R.

The adjusted angle will be memorized and the mirror will automatically tilt to the memorized angle whenever the shift position is shifted to R from next time.

The memorized downward tilt position of the mirror is linked to the normal position (angle adjusted with the shift position in other than R). Therefore, if the normal position is changed after adjustment, the tilt position will also change.

When the normal position is changed, readjust the angle in reversing.

#### WARNING

##### ■ When the mirror defoggers are operating

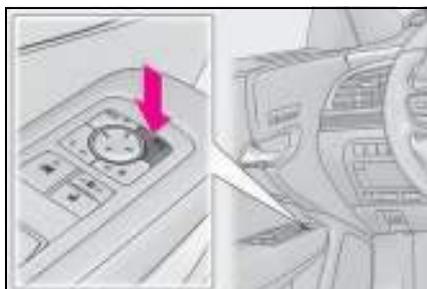
Do not touch the rear view mirror surfaces, as they can become very hot and burn you.

#### Folding and extending the mirrors

##### ■ Using the switch

Press the switch to fold the mirrors.

Press it again to extend them to the original position.



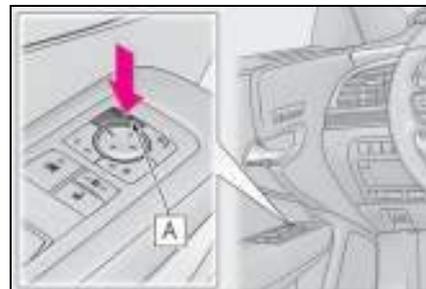
##### ■ Setting automatic mode

Automatic mode allows the folding or extending of the mirrors to be linked to locking/unlocking of the doors.

Press the “AUTO” switch to set automatic mode.

The indicator **A** will come on.

Pressing the switch once more will return to manual mode.



##### ■ When disconnecting and reconnecting battery terminals

The automatic folding/extending mirror function will return to off as default. To turn the function on, press the switch again to select on.

##### ■ Using automatic mode in cold weather

When automatic mode is used in cold weather, the door mirror could freeze up and automatic stowing and return may not be possible. In this case, remove any ice and snow from the door mirror, then either operate the mirror using manual mode or move the mirror by hand.

##### ■ Customization

Some functions can be customized. (→P.568)

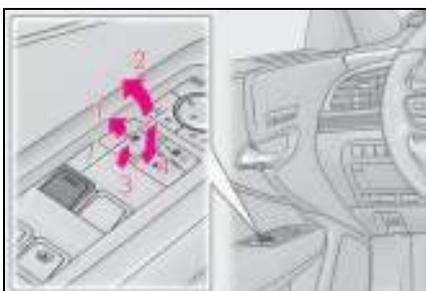
**WARNING****■ When a mirror is moving**

To avoid personal injury and mirror malfunction, be careful not to get your hand caught by the moving mirror.

## Power windows

### Opening and closing the power windows

The power windows can be opened and closed using the switches. Operating the switch moves the windows as follows:



- 1 Closing
- 2 One-touch closing\*
- 3 Opening
- 4 One-touch opening\*

\*: To stop the window partway, operate the switch in the opposite direction.

#### ■ The power windows can be operated when

The engine switch is in IGNITION ON mode.

#### ■ When the driver's power window switch is used to open a rear power window (vehicles with rear door sunshades)

If a rear door sunshade is extended or being extended when the driver's power window switch is pushed, only the rear door sunshade will be retracted. To open the rear power window from the driver's seat, push the driver's power window switch again.

#### ■ Operating the power windows after turning the engine off

The power windows can be operated for approximately 45 seconds even after the engine switch is turned to ACCESSORY mode or turned off. They cannot, however, be operated once either front door is opened.

#### ■ Jam protection function

If an object becomes jammed between the window and the window frame while the window is closing, window movement is stopped and the window is opened slightly.

#### ■ Catch protection function

If an object becomes caught between the door and window while the window is opening, window movement is stopped.

#### ■ When the side window cannot be opened or closed

When the jam protection function or catch protection function operates unusually and the side window cannot be opened or closed, perform the following operations with the power window switch of that door.

- Stop the vehicle. With the engine switch in IGNITION ON mode, within 4 seconds of the jam protection function or catch protection function activating, continuously operate the power window switch in the one-touch closing direction or one-touch opening direction so that the side window can be opened and closed.

- If the side window cannot be opened and closed even when performing the above operations, perform the following procedure for function initialization.

- 1 Turn the engine switch to IGNITION ON mode.
- 2 Pull and hold the power window switch in the one-touch closing direction and completely close the side window.
- 3 Release the power window switch for a moment, resume pulling the switch in the one-touch closing direction, and hold it there for approximately 6 seconds or more.

3

Before driving

- 4 Press and hold the power window switch in the one-touch opening direction. After the side window is completely opened, continue holding the switch for an additional 1 second or more.
- 5 Release the power window switch for a moment, resume pushing the switch in the one-touch opening direction, and hold it there for approximately 4 seconds or more.
- 6 Pull and hold the power window switch in the one-touch closing direction again. After the side window is completely closed, continue holding the switch for a further 1 second or more.

If you release the switch while the window is moving, start again from the beginning. If the window reverses and cannot be fully closed or opened, have the vehicle inspected by your Lexus dealer.

#### ■ Door lock linked window operation

- The power windows can be opened and closed using the mechanical key. (→P.539)
- Except for Korea: The power windows can be opened and closed using the wireless remote control. (→P.138)

\*: These settings must be customized at your Lexus dealer.

#### ■ Power windows open warning buzzer

A buzzer sounds and a message is shown on the multi-information display in the instrument cluster when the engine switch is turned off and the driver's door is opened with the power windows open.

#### ■ Customization

Some functions can be customized. (→P.568)



#### WARNING

Observe the following precautions. Failure to do so may result in death or serious injury.

#### ■ Closing the windows

- The driver is responsible for all the power window operations, including the operation for the passengers. In order to prevent accidental operation, especially by a child, do not let a child operate the power windows. It is possible for children and other passengers to have body parts caught in the power window. Also, when riding with a child, it is recommended to use the window lock switch. (→P.191)
- Check to make sure that all passengers do not have any part of their body in a position where it could be caught when a window is being operated.



- When using the wireless remote control (except for Korea) or mechanical key and operating the power window, operate the power window after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the window. Also do not let a child operate power window by the wireless remote control (except for Korea) or mechanical key. It is possible for children and other passengers to get caught in the power window.
- When exiting the vehicle, turn the engine switch off, carry the key and exit the vehicle along with the child. There may be accidental operation, due to mischief, etc., that may possibly lead to an accident.

#### ■ Jam protection function

- Never use any part of your body to intentionally activate the jam protection function.

**⚠ WARNING**

- The jam protection function may not work if something gets jammed just before the window is fully closed. Be careful not to get any part of your body jammed in the window.

**■ Catch protection function**

- Never use any part of your body or clothing to intentionally activate the catch protection function.
- The catch protection function may not work if something gets caught just before the window is fully opened. Be careful not to get any part of your body or clothing caught in the window.

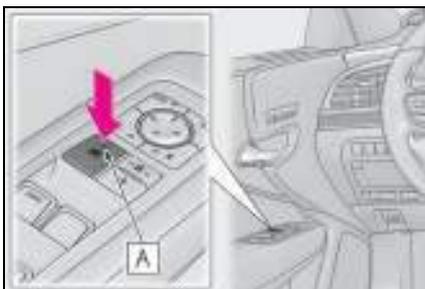
**Preventing accidental operation (window lock switch)**

This function can be used to prevent children from accidentally opening or closing a passenger window.

Press the switch.

The indicator **A** will come on and the passenger windows will be locked.

The passenger windows can still be opened and closed using the driver's switch even if the lock switch is on.

**■ The power windows can be operated when**

The engine switch is in IGNITION ON

mode.

**■ When the battery is disconnected**

The window lock switch is disabled. If necessary, press the window lock switch after reconnecting the battery.

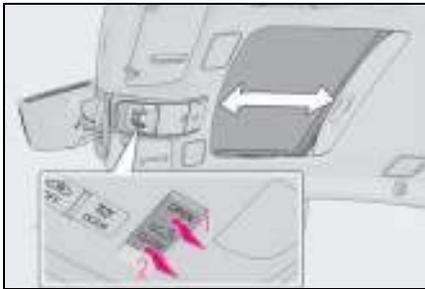
## Moon roof\*

\*: If equipped

Use the overhead switches to open and close the moon roof and tilt it up and down.

## Operating the moon roof

### ■ Opening and closing



**1** Opens the moon roof\*  
The moon roof tilts up and then fully opens.

**2** Closes the moon roof\*

\*: Lightly press either side of the moon roof switch to stop the moon roof partway.

### ■ Tilting up and down



**1** Tilts the moon roof up\*

**2** Tilts the moon roof down\*

\*: Lightly press either side of the moon roof

switch to stop the moon roof partway.

### ■ The moon roof can be operated when

The engine switch is in IGNITION ON mode.

### ■ Operating the moon roof after turning the engine off

The moon roof can be operated for approximately 45 seconds after the engine switch is turned to ACCESSORY mode or turned off. It cannot, however, be operated once either front door is opened.

### ■ Jam protection function

If an object is detected between the moon roof and the frame while the moon roof is closing or tilting down, travel is stopped and the moon roof opens slightly.

### ■ Sunshade

The sunshade can be opened and closed manually. However, the sunshade will open automatically when the moon roof is opened.

### ■ Door lock linked moon roof operation

● The moon roof can be opened and closed using the mechanical key.\*  
(→P.539)

● Except for Korea: The moon roof can be opened and closed using the wireless remote control.\* (→P.138)

\*: These settings must be customized at your Lexus dealer.

### ■ When the moon roof does not close normally

Perform the following procedure:

**1** Stop the vehicle.

**2** Press and hold the "CLOSE" switch.\*

The moon roof will close, reopen and pause for approximately 10 seconds. Then it will close again and stop at the completely closed position.

**3** Check to make sure that the moon roof is completely closed and then release the switch.

\*: If the switch is released at the incorrect

time, the procedure will have to be performed again from the beginning.

If the moon roof does not fully close even after performing the above procedure correctly, have the vehicle inspected by your Lexus dealer.

#### ■ If the moon roof does not move normally

If the moon roof does not open or close normally or the automatic opening function does not operate, perform the following initialization procedure.

- 1 Stop the vehicle.
  - 2 Press and hold the "DOWN" switch.\*
- The moon roof will stop at the tilt-up position. After that, it will open, close, tilt up, tilt down, and stop at the fully closed position.
- 3 Confirm that the moon roof has completely stopped and release the switch.

\*: If you release the switch while the moon roof is moving, perform the procedure again from the beginning.

If, after performing the above procedures correctly, the moon roof still does not open or close normally or the automatic opening function does not operate, have the vehicle inspected by your Lexus dealer.

#### ■ Moon roof open warning buzzer

A buzzer sounds and a message is shown on the multi-information display in the instrument cluster when the engine switch is turned off and the driver's door is opened with the moon roof open.

#### ■ Customization

Some functions can be customized. (→P.568)



#### WARNING

Observe the following precautions. Failure to do so may cause death or serious injury.

#### ■ Opening the moon roof

- Do not allow any passengers to put their hands or heads outside the vehicle while it is moving.

- Do not sit on top of the moon roof.

#### ■ Opening and closing the moon roof

- The driver is responsible for moon roof opening and closing operations. In order to prevent accidental operation, especially by a child, do not let a child operate the moon roof. It is possible for children and other passengers to have body parts caught in the moon roof.
- Check to make sure that all passengers do not have any part of their body in a position where it could be caught when the moon roof is being operated.



- When using the wireless remote control (except for Korea) or mechanical key and operating the moon roof, operate the moon roof after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the moon roof. Also, do not let a child operate moon roof by the wireless remote control (except for Korea) or mechanical key. It is possible for children and other passengers to get caught in the moon roof.

3

Before driving

**⚠ WARNING**

- When exiting the vehicle, turn the engine switch off, carry the key and exit the vehicle along with the child. There may be accidental operation, due to mischief, etc., that may possibly lead to an accident.

**■ Jam protection function**

- Never use any part of your body to intentionally activate the jam protection function.
- The jam protection function may not work if something gets caught just before the moon roof is fully closed. Also, the jam protection function is not designed to operate while the moon roof switch is being pressed. Take care so that your fingers, etc. do not get caught.

**Panoramic moon roof\***

\*: If equipped

**Use the overhead switches to operate the panoramic moon roof and electronic roof sunshade.**

**Operating the panoramic moon roof****■ Opening and closing the electronic front roof sunshade**

- 1 Opens the electronic front roof sunshade\*
- 2 Closes the electronic front roof sunshade\*

If the panoramic moon roof is not fully closed, it will close fully before the electronic front roof sunshade closes.

\*: Lightly press either side of the front roof sunshade switch to stop the electronic front roof sunshade partway.

**■ Opening and closing the electronic rear roof sunshade****▶ Rear roof sunshade switch**

Press the rear roof sunshade switch.

Lightly press the switch while the electronic rear roof sunshade is opening/clos-

ing will stop the operation.

Press the switch again will operate the electronic rear roof sunshade in the opposite direction.



► Rear Multi Operation Panel

- 1 Display the Home screen (→P.396) and then touch “Shade/Lamp” or “Lamp”.
- 2 Touch the button for the desired operation.



**A** Closes the electronic rear roof sunshade

**B** Opens the electronic rear roof sunshade

During a electronic rear roof sunshade open/close operation, if the rear roof sunshade open/close button is touched or the

 button of the Rear Multi Operation Panel is pressed and held or pressed 3 times, the operation will be canceled.

■ Tilting the panoramic moon roof up and down

Press the tilt switch.

When the panoramic moon roof is tilted up, the electronic front roof sunshade will open.

The panoramic moon roof can be tilted down only when it is in the tilt-up position.

Lightly press the switch while the panoramic moon roof is operating will stop the operation.



■ Opening and closing the panoramic moon roof



1 Opens the panoramic moon roof\*

When the panoramic moon roof is opened, the electronic front roof sunshade will open.

The panoramic moon roof can be opened from the tilt-up position.

2 Closes the panoramic moon roof\*

\* : Lightly press either side of the pano-

3

Before driving

ramic moon roof switch to stop the panoramic moon roof partway.

■ **The panoramic moon roof can be operated when**

The engine switch is in IGNITION ON mode.

■ **Operating the panoramic moon roof after turning the engine off**

The panoramic moon roof and electronic roof sunshade can be operated for approximately 45 seconds after the engine switch is turned to ACCESSORY mode or turned off. It cannot, however, be operated once the driver's door is opened.

■ **Jam protection function**

If an object is detected between the panoramic moon roof and the frame in the following situations, travel is stopped and the panoramic moon roof opens slightly:

- The panoramic moon roof is closing or tilting down.
- The electronic roof sunshade is closing.

■ **Door lock linked panoramic moon roof operation**

The panoramic moon roof can be opened and closed using the mechanical key.\* (→P.539)

\*: This setting must be customized at your Lexus dealer.

■ **When the panoramic moon roof or electronic front roof sunshade does not close normally**

Perform the following procedure:

- 1 Stop the vehicle.
- 2 Turn the engine switch to IGNITION ON mode.
- 3 Press and hold the "CLOSE" switch or the front roof sunshade close switch. Continue pressing the switch for approximately 10 seconds after the panoramic moon roof or electronic front roof sunshade closes and reopens. The panoramic moon roof and elec-

tronic front roof sunshade will start to close.\*

- 4 Check that the panoramic moon roof and electronic front roof sunshade are fully closed and release the switch.

\*: If the switch is released at the incorrect time, the procedure will have to be performed again from the beginning.

If the panoramic moon roof or electronic front roof sunshade does not fully close even after performing the above procedure correctly, have the vehicle inspected by your Lexus dealer.

■ **When the electronic rear roof sunshade does not close normally**

Perform the following procedure:

- 1 Stop the vehicle.
- 2 Turn the engine switch to IGNITION ON mode.
- 3 Press and hold the rear roof sunshade switch. Continue pressing the switch for approximately 10 seconds after the electronic rear roof sunshade closes and reopens. The electronic rear roof sunshade will start to close.\*
- 4 Check that the electronic rear roof sunshade are fully closed and release the switch.

\*: If the switch is released at the incorrect time, the procedure will have to be performed again from the beginning.

If the panoramic moon roof or electronic front roof sunshade does not fully close even after performing the above procedure correctly, have the vehicle inspected by your Lexus dealer.

■ **If the panoramic moon roof or electronic front roof sunshade does not move normally**

If the panoramic moon roof or electronic front roof sunshade does not open or close normally or the automatic opening function does not operate, perform the following initialization procedure.

- 1 Stop the vehicle.

- 2 Turn the engine switch to IGNITION ON mode.
- 3 Fully close the panoramic moon roof and electronic front roof sunshade.
- 4 Press and hold the "CLOSE" switch.\*

The electronic front roof sunshade will open after approximately 10 seconds. Then the panoramic moon roof will open, close, tilt up and tilt down. After that, the electronic front roof sunshade will fully close and stop.

- 5 Check that the panoramic moon roof and electronic front roof sunshade are fully closed and release the switch.

\*: If the switch is released at the incorrect time, the procedure will have to be performed again from the beginning.

If, after performing the above procedures correctly, the panoramic moon roof and electronic front roof sunshade still does not open or close normally or the automatic opening function does not operate, have the vehicle inspected by your Lexus dealer.

#### ■ If the electronic rear roof sunshade does not move normally

If the electronic rear roof sunshade does not open or close normally or the automatic opening function does not operate, perform the following initialization procedure.

- 1 Stop the vehicle.
- 2 Turn the engine switch to IGNITION ON mode.
- 3 Open the rear roof sunshade.
- 4 Press and hold the rear roof sunshade switch.\*

Continue pressing the switch for approximately 10 seconds after the electronic rear roof sunshade closes. The electronic rear roof sunshade will begin operating again and stop at the fully closed position.

- 5 Check that the electronic rear roof sunshade are fully closed and release the switch.

\*: If the switch is released at the incorrect time, the procedure will have to be performed again from the beginning.

If, after performing the above procedures

correctly, the electronic rear roof sunshade still does not open or close normally or the automatic opening function does not operate, have the vehicle inspected by your Lexus dealer.

#### ■ Panoramic moon roof open warning buzzer

A buzzer sounds and a message is shown on the multi-information display in the instrument cluster when the engine switch is turned off and the driver's door is opened with the panoramic moon roof open.

#### ■ Customization

Some functions can be customized. (→P.568)

#### WARNING

Observe the following precautions. Failing to do so may cause death or serious injury.

#### ■ Opening and closing the electronic roof sunshade

- Check to make sure that all passengers do not have any part of their body in a position where it could be caught when the electronic sunshade is being operated.
- Do not let a child operate the electronic sunshade. Closing the electronic roof sunshade on someone can cause death or serious injury.

**! WARNING**



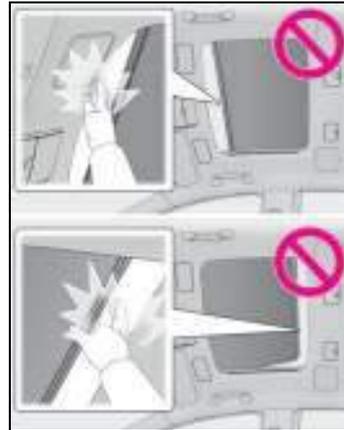
■ **Opening the panoramic moon roof**

- Do not allow any passengers to put their hands or heads outside the vehicle while it is moving.
- Do not sit on top of the panoramic moon roof.

■ **Opening and closing the panoramic moon roof**

- The driver is responsible for panoramic moon roof opening and closing operations. In order to prevent accidental operation, especially by a child, do not let a child operate the panoramic moon roof. It is possible for children and other passengers to have body parts caught in the panoramic moon roof.

- Check to make sure that all passengers do not have any part of their body in a position where it could be caught when the panoramic moon roof is being operated.



- When using the mechanical key and operating the panoramic moon roof, operate the panoramic moon roof after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the panoramic moon roof. Also, do not let a child operate panoramic moon roof by the mechanical key. It is possible for children and other passengers to get caught in the panoramic moon roof.
- When exiting the vehicle, turn the engine switch off, carry the key and exit the vehicle along with the child. There may be accidental operation, due to mischief, etc., that may possibly lead to an accident.

■ **Jam protection function**

- Never use any part of your body to intentionally activate the jam protection function.

 **WARNING**

- The jam protection function may not work if something gets caught just before the panoramic moon roof or electronic roof sunshade is fully closed. Also, the jam protection function is not designed to operate while the switch is being pressed. Take care so that your fingers, etc. do not get caught.

**■ To prevent burns or injuries**

Do not touch the area between the underside of the panoramic moon roof and the electronic sunshade. Your hand may get caught and you could injure yourself. Also, if the vehicle is left in direct sunlight for a long time, the underside of the panoramic moon roof could become very hot and could cause burns.

 **NOTICE****■ To prevent damage to the panoramic moon roof**

- Before opening the panoramic moon roof, make sure that there are no foreign objects, such as stones or ice, around the opening.
  - Do not hit the surface or edge of the panoramic moon roof with hard objects.
- After the vehicle has been washed or rained on**

Before opening the panoramic moon roof, wipe any water off the panoramic moon roof. Otherwise, water may enter the cabin when the panoramic moon roof is opened.



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**Driving the vehicle**

The following procedures should be observed to ensure safe driving:

**Driving procedure**

■ **Starting the engine**

→P.212

■ **Driving**

- 1 With the brake pedal depressed, shift the shift position to D.  
(→P.215)

Check that the shift position indicator shows D.

- 2 If the parking brake is in manual mode, release the parking brake.  
(→P.223)
- 3 Gradually release the brake pedal and gently depress the accelerator pedal to accelerate the vehicle.

■ **Stopping**

- 1 With the shift position in D, depress the brake pedal.

Vehicles with a Stop & Start system: If the Stop & Start system is enabled, depressing the brake pedal will stop the engine.

- 2 If necessary, set the parking brake.

If the vehicle is to be stopped for an extended period of time, shift the shift position to P. (→P.218)

■ **Parking the vehicle**

- 1 With the shift position in D, depress the brake pedal to stop the vehicle completely.

- 2 If the parking brake is in manual mode, set the parking brake.  
(→P.223)

- 3 Shift the shift position to P.  
(→P.218)

Check that the shift position indicator shows P and the parking brake indicator is illuminated.

- 4 Press the engine switch to stop the engine.
- 5 Slowly release the brake pedal.
- 6 Lock the door, making sure that you have the electronic key on your person.

If parking on a hill, block the wheels as needed.

■ **Starting off on a steep uphill**

- 1 Make sure that the parking brake is set and shift the shift position to D.

Hill-start assist control will operate.  
(→P.380)

- 2 Gently depress the accelerator pedal.
- 3 Release the parking brake.

■ **Driving in the rain**

- Drive carefully when it is raining, because visibility will be reduced, the windows may become fogged-up, and the road will be slippery.
- Drive carefully when it starts to rain, because the road surface will be especially slippery.
- Refrain from high speeds when driving on an expressway in the rain, because there may be a layer of water between the tires and the road surface, preventing the steering and brakes from operating properly.

#### ■ Engine speed while driving

In the following conditions, the engine speed may become high while driving. This is due to automatic up-shifting control or down-shifting implementation to meet driving conditions. It does not indicate sudden acceleration.

- The vehicle is judged to be driving uphill or downhill
- When the accelerator pedal is released
- When the brake pedal is depressed

#### ■ Restraining the engine output (Brake Override System)

- When the accelerator and brake pedals are depressed at the same time, the engine output may be restrained.
- A warning message is displayed on the multi-information display while the system is operating.

#### ■ Restraining sudden start (Drive-Start Control)

- When the following unusual operation is performed, the engine output may be restrained.
  - When the shift position is shifted from R to D, D to R, N to R, P to D\*, or P to R\* (D includes M) with the accelerator pedal depressed, a warning message appears on the multi-information display. If a warning message is shown on the multi-information display, read the message and follow the instruction.
  - When the accelerator pedal is depressed too much while the vehicle is in reverse.

\*: Depending on the situation, the shift position may not be changed.

- While Drive-Start Control is being activated, your vehicle may have trouble escaping from the mud or fresh snow. In such case, deactivate TRC (→P.381) to cancel Drive-Start Control so that the vehicle may become able to escape from the mud or fresh snow.

#### ■ Breaking in your new Lexus

To extend the life of the vehicle, observing the following precautions is recommended:

- For the first 300 km (186 miles):

Avoid sudden stops.

- For the first 1000 km (621 miles):
  - Do not drive at extremely high speeds.
  - Avoid sudden acceleration.
  - Do not drive continuously in low gears.
  - Do not drive at a constant speed for extended periods.

#### ■ Drum-in-disc type parking brake system

Your vehicle has a drum-in-disc type parking brake system. This type of brake system needs bedding-down of the brake shoes periodically or whenever the parking brake shoes and/or drum are replaced. Have your Lexus dealer perform the bedding down operation.

#### ■ Vehicles with high coefficient of friction brake pads

The brake pads and discs are designed for use under high load conditions. Therefore, brake noise may be generated depending on the vehicle speed, braking force and vehicle environment (temperature, humidity, etc.).

#### ■ Operating your vehicle in a foreign country

Comply with the relevant vehicle registration laws and confirm the availability of the correct fuel. (→P.557)

#### ■ Idling time before engine stop (LS500)

To prevent damage to the turbocharger, allow the engine to idle immediately after high-speed driving or hill climbing.

Vehicles with a Stop & Start system: To allow the engine to idle when the vehicle is stopped, disable the Stop & Start cancel switch. (→P.329) (With the Stop & Start system enabled, the engine will be stopped by the Stop & Start system when the vehicle is stopped.)

Driving condition	Idling time
Normal city driving	Not necessary
High-speed driving (Constant speed of approx. 100km/h [62 mph])	Not necessary
Steep hill driving or continuous driving at 100 km/h (62 mph) or more (race track driving etc.)	Approximately 1 minute

 **WARNING**

Observe the following precautions. Failure to do so may result in death or serious injury.

**■ When starting the vehicle**

Always keep your foot on the brake pedal while stopped with the engine running. This prevents the vehicle from creeping.

**■ When driving the vehicle**

- Do not drive if you are unfamiliar with the location of the brake and accelerator pedals to avoid depressing the wrong pedal.
- Accidentally depressing the accelerator pedal instead of the brake pedal will result in sudden acceleration that may lead to an accident.
- When backing up, you may twist your body around, leading to a difficulty in operating the pedals. Make sure to operate the pedals properly.
- Make sure to keep a correct driving posture even when moving the vehicle only slightly. This allows you to depress the brake and accelerator pedals properly.

- Depress the brake pedal using your right foot. Depressing the brake pedal using your left foot may delay response in an emergency, resulting in an accident.

- Do not drive the vehicle over or stop the vehicle near flammable materials. The exhaust system and exhaust gases can be extremely hot. These hot parts may cause a fire if there is any flammable material nearby.

- Vehicles without Lexus Safety System + A: During normal driving, do not turn off the engine. Turning the engine off while driving will not cause loss of steering or braking control, but the power assist to these systems will be lost. This will make it more difficult to steer and brake, so you should pull over and stop the vehicle as soon as it is safe to do so.

However, in the event of an emergency, such as if it becomes impossible to stop the vehicle in the normal way: →P.512

- Vehicles with Lexus Safety System + A: During normal driving, do not turn off the engine. Turning the engine off while driving will not cause loss of steering or braking control, however, power assist to the steering will be lost. This will make it more difficult to steer smoothly, so you should pull over and stop the vehicle as soon as it is safe to do so.

In the event of an emergency, such as if it becomes impossible to stop the vehicle in the normal way: →P.512

- Use engine braking (downshift) to maintain a safe speed when driving down a steep hill. Using the brakes continuously may cause the brakes to overheat and lose effectiveness. (→P.215)

 **WARNING**

- Do not adjust the positions of the steering wheel, the seat, or the inside or outside rear view mirrors while driving. Doing so may result in a loss of vehicle control.
- Always check that all passengers' arms, heads or other parts of their body are not outside the vehicle.
- **When driving on slippery road surfaces**
- Sudden braking, acceleration and steering may cause tire slippage and reduce your ability to control the vehicle.
- Sudden acceleration, engine braking due to shifting, or changes in engine speed could cause the vehicle to skid.
- After driving through a puddle, lightly depress the brake pedal to make sure that the brakes are functioning properly. Wet brake pads may prevent the brakes from functioning properly. If the brakes on only one side are wet and not functioning properly, steering control may be affected.
- **When shifting the shift position**
- Do not let the vehicle roll backward while a forward driving position is selected, or roll forward while the shift position is in R. Doing so may cause the engine to stall or lead to poor brake and steering performance, resulting in an accident or damage to the vehicle.
- Do not shift the shift position to P while the vehicle is moving. Doing so can damage the transmission and may result in a loss of vehicle control.

- Do not shift the shift position to R while the vehicle is moving forward. Doing so can damage the transmission and may result in a loss of vehicle control.
- Do not shift the shift position to a driving position while the vehicle is moving backward. Doing so can damage the transmission and may result in a loss of vehicle control.
- Changing the shift position to N while the vehicle is moving will disengage the engine from the transmission. Engine braking is not available when N is selected.
- Be careful not to change the shift position with the accelerator pedal depressed. Changing the shift position to any positions other than P or N may lead to unexpected rapid acceleration of the vehicle that may cause an accident and result in death or serious injury. After changing the shift position, make sure to confirm the current shift position displayed on the shift position indicator inside the meter.

■ **Brake pad wear**

If any of the following situations occurs, have the brake pads visually checked and replaced by your Lexus dealer as soon as possible.

- If the brake pad wear limit of a brake pad is found to have been exceeded when visually checking the brake pads for each wheel (for the brake pad wear limit, refer to P.562)
- If a warning message is displayed on the multi-information display (only the right-side pads can be detected)

Rotor damage may result if the pads are not replaced when needed.

**⚠ WARNING**

Vehicles with high coefficient of friction brake pads: Moderate levels of the brake pad and disc wear allow enhanced braking power. As a result, the discs may wear more quickly than conventional brake discs. Therefore, when replacing the brake pads, Lexus recommends that you also have the thickness of the discs measured.

It is dangerous to drive the vehicle when the wear limits of the brake pads and/or those of the brake discs are exceeded.

**■ When the vehicle is stopped**

- Do not race the engine.  
If the vehicle is in any gear other than P or N, the vehicle may accelerate suddenly and unexpectedly, causing an accident.
- In order to prevent accidents due to the vehicle rolling away, always keep depressing the brake pedal while the engine is running, and apply the parking brake as necessary.
- If the vehicle is stopped on an incline, in order to prevent accidents caused by the vehicle rolling forward or backward, always depress the brake pedal and securely apply the parking brake as needed.
- Avoid revving or racing the engine. Running the engine at high speed while the vehicle is stopped may cause the exhaust system to overheat, which could result in a fire if combustible material is nearby.

**■ When the vehicle is parked**

- Do not leave glasses, cigarette lighters, spray cans, or soft drink cans in the vehicle when it is in the sun. Doing so may result in the following:
  - Gas may leak from a cigarette lighter or spray can, and may lead to a fire.

- The temperature inside the vehicle may cause the plastic lenses and plastic material of glasses to deform or crack.
- Soft drink cans may fracture, causing the contents to spray over the interior of the vehicle, and may also cause a short circuit in the vehicle's electrical components.
- Do not leave cigarette lighters in the vehicle. If a cigarette lighter is in a place such as the glove box or on the floor, it may be lit accidentally when luggage is loaded or the seat is adjusted, causing a fire.
- Do not attach adhesive discs to the windshield or windows. Do not place containers such as air fresheners on the instrument panel or dashboard. Adhesive discs or containers may act as lenses, causing a fire in the vehicle.
- Do not leave a door or window open if the curved glass is coated with a metallized film such as a silver-colored one. Reflected sunlight may cause the glass to act as a lens, causing a fire.
- Always apply the parking brake, shift the shift position to P, stop the engine and lock the vehicle. Do not leave the vehicle unattended while the engine is running. If the vehicle is parked with the shift position in P but the parking brake is not set, the vehicle may start to move, possibly leading to an accident.
- Do not touch the exhaust pipes while the engine is running or immediately after turning the engine off. Doing so may cause burns.

**⚠ WARNING****■ When taking a nap in the vehicle**

Always turn the engine off. Otherwise, if you accidentally move the shift lever or depress the accelerator pedal, this could cause an accident or fire due to engine overheating. Additionally, if the vehicle is parked in a poorly ventilated area, exhaust gases may collect and enter the vehicle, leading to death or a serious health hazard.

**■ When braking**

- When the brakes are wet, drive more cautiously.  
Braking distance increases when the brakes are wet, and this may cause one side of the vehicle to brake differently than the other side. Also, the parking brake may not securely hold the vehicle.
- Vehicles without Lexus Safety System + A: If the brake booster device does not operate, do not follow other vehicles closely and avoid hills or sharp turns that require braking.  
In this case, braking is still possible, but the brake pedal should be depressed more firmly than usual. Also, the braking distance will increase. Have your brakes fixed immediately.
- Vehicles with Lexus Safety System + A: If the electronically controlled brake system does not operate, do not follow other vehicles closely and avoid hills or sharp turns that require braking.  
In this case, braking is still possible, but the brake pedal should be depressed more firmly than usual. Also, the braking distance will increase. Have your brakes fixed immediately.
- Vehicles without Lexus Safety System + A: Do not pump the brake pedal if the engine stalls.  
Each push on the brake pedal uses up the reserve for the power-assisted brakes.

- Vehicles without Lexus Safety System + A: The brake system consists of 2 individual hydraulic systems; if one of the systems fails, the other will still operate. In this case, the brake pedal should be depressed more firmly than usual and the braking distance will increase. Have your brakes fixed immediately.

- Vehicles with Lexus Safety System + A: The brake system consists of 2 or more individual hydraulic systems; if one of the systems fails, the other(s) will still operate. In this case, the brake pedal should be depressed more firmly than usual and the braking distance will increase. Have your brakes fixed immediately.

**■ If the vehicle becomes stuck**

Do not spin the wheels excessively when a driven wheel is up in the air, or the vehicle is stuck in sand, mud, etc. This may damage the driveline components or propel the vehicle forward or backward, causing an accident.

**⚠ NOTICE****■ When driving the vehicle**

- Do not depress the accelerator and brake pedals at the same time during driving, as this may restrain the engine output.
- Do not use the accelerator pedal or depress the accelerator and brake pedals at the same time to hold the vehicle on a hill.

**■ When parking the vehicle**

Always set the parking brake, and shift the shift position to P. Failure to do so may cause the vehicle to move or the vehicle may accelerate suddenly if the accelerator pedal is accidentally depressed.

**NOTICE****■ Avoiding damage to vehicle parts**

- Do not turn the steering wheel fully in either direction and hold it there for an extended period of time. Doing so may damage the power steering motor.
- When driving over bumps in the road, drive as slowly as possible to avoid damaging the wheels, underside of the vehicle, etc.
- LS500: Make sure to idle the engine immediately after high-load driving. Stop the engine only after the turbocharger has cooled down. Failure to do so may cause damage to the turbocharger.

**■ If you get a flat tire while driving**

A flat or damaged tire may cause the following situations. Hold the steering wheel firmly and gradually depress the brake pedal to slow down the vehicle.

- It may be difficult to control your vehicle.
- The vehicle will make abnormal sounds or vibrations.
- The vehicle will lean abnormally.

Information on what to do in case of a flat tire (→P.534)

**■ When encountering flooded roads**

Do not drive on a road that has flooded after heavy rain etc. Doing so may cause the following serious damage to the vehicle:

- Engine stalling
- Short in electrical components
- Engine damage caused by water immersion

In the event that you drive on a flooded road and the vehicle is flooded, be sure to have your Lexus dealer check the following:

- Brake function
- Changes in quantity and quality of oil and fluid used for the engine, transmission, transfer (AWD models), differential, etc.
- Lubricant condition for the propeller shaft, bearings and suspension joints (where possible), and the function of all joints, bearings, etc.

If the shift control system is damaged by flooding, it may not be possible to shift the shift position to P, or from P to other positions. In this case, contact your Lexus dealer.

**■ When parking the vehicle**

Always set the parking brake, and shift the shift position to P. Failure to do so may cause the vehicle to move or the vehicle may accelerate suddenly if the accelerator pedal is accidentally depressed.

## Cargo and luggage

Take notice of the following information about storage precautions, cargo capacity and load:

### WARNING

#### ■ Things that must not be carried in the trunk

The following things may cause a fire if loaded in the trunk:

- Receptacles containing gasoline
- Aerosol cans

#### ■ Storage precautions

Observe the following precautions. Failure to do so may prevent the pedals from being depressed properly, may block the driver's vision, or may result in items hitting the driver or passengers, possibly causing an accident.

- Stow cargo and luggage in the trunk whenever possible.
- Do not place cargo or luggage in or on the following locations.
  - At the feet of the driver
  - On the front passenger or rear seats (when stacking items)
  - On the package tray
  - On the instrument panel
  - On the dashboard
  - In front of the Center Display
- Secure all items in the occupant compartment.

#### ■ Load and distribution

- Do not overload your vehicle.

- Do not apply loads unevenly. Improper loading may cause deterioration of steering or braking control which may cause death or serious injury.

### Trailer towing

Lexus does not recommend towing a trailer with your vehicle. Lexus also does not recommend the installation of a tow hitch or the use of a tow hitch carrier for a wheelchair, scooter, bicycle, etc. Your vehicle is not designed for trailer towing or for the use of tow hitch mounted carriers.



## Engine (ignition) switch

Performing the following operations when carrying the electronic key on your person starts the engine or changes engine switch modes.

### Starting the engine

- 1 Press the parking brake switch to check that the parking brake is set. (→P.223)

The parking brake indicator will come on.

- 2 Firmly depress the brake pedal.

 and a message will be displayed on the multi-information display. If it is not displayed, the engine cannot be started.

- 3 Press the engine switch shortly and firmly.

When operating the engine switch, one short, firm press is enough. It is not necessary to press and hold the switch.

The engine will crank until it starts or for up to 30 seconds, whichever is less.

Continue depressing the brake pedal until the engine is completely started.

The engine can be started from any engine switch mode.



### ■ Engine switch illumination

According to the situation, the engine switch illumination operates as follows.

- When a door is opened, or the engine switch mode is changed from ACCESSORY or IGNITION ON mode to off, the engine switch illumination slowly blinks.
- When depressing the brake pedal with carrying the electronic key on your person, the engine switch illumination rapidly blinks.
- When the engine switch is in ACCESSORY or IGNITION ON mode, the engine switch illumination illuminates.

### ■ If the engine does not start

- The engine immobilizer system may not have been deactivated. (→P.97) Contact your Lexus dealer.
- If a message related to start-up is shown on the multi-information display, read the message and follow the instructions.

### ■ If the battery is discharged

The engine cannot be started using the smart entry & start system. Refer to P.540 to restart the engine.

### ■ Electronic key battery depletion

→P.134

### ■ Conditions affecting operation

→P.152

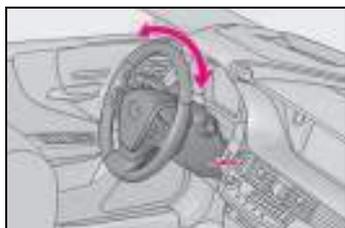
### ■ Notes for the entry function

→P.152

### ■ Steering lock function

- After turning the engine switch off and opening and closing the doors, the steering wheel will be locked due to the steering lock function. Operating the engine switch again automatically cancels the steering lock.
- When the steering lock cannot be released, "Push Engine Switch While Turning Steering Wheel in Either Direction" will be displayed on the multi-information display.

Press the engine switch shortly and firmly while turning the steering wheel left and right.



- To prevent the steering lock motor from overheating, operation of the motor may be suspended if the engine is turned on and off repeatedly in a short period of time. In this case, refrain from operating the engine switch. After about 10 seconds, the steering lock motor will resume functioning.

#### ■ Electronic key battery

→P.503

#### ■ Operation of the engine switch

- If the switch is not pressed shortly and firmly, the engine switch mode may not change or the engine may not start.
- If attempting to restart the engine immediately after turning the engine switch off, the engine may not start in some cases. After turning the engine switch off, please wait a few seconds before restarting the engine.

#### ■ Customization

If the smart entry & start system has been deactivated in a customized setting, refer to P.538.

### ⚠ WARNING

#### ■ When starting the engine

Always start the engine while sitting in the driver's seat. Do not depress the accelerator pedal while starting the engine under any circumstances. Doing so may cause an accident resulting in death or serious injury.

#### ■ Caution while driving

If engine failure occurs while the vehicle is moving, do not lock or open the doors until the vehicle reaches a safe and complete stop. Activation of the steering lock in this circumstance may lead to an accident, resulting in death or serious injury.

### ⚠ NOTICE

#### ■ When starting the engine

- Do not race a cold engine.
- If the engine becomes difficult to start or stalls frequently, have your vehicle checked by your Lexus dealer immediately.

#### ■ Symptoms indicating a malfunction with the engine switch

If the engine switch seems to be operating somewhat differently than usual, such as the switch sticking slightly, there may be a malfunction. Contact your Lexus dealer immediately.

### Stopping the engine

- 1 Stop the vehicle completely.
- 2 If the parking brake is in manual mode, set the parking brake. (→P.223)
- 3 Shift the shift position to P. (→P.218)

Check that the shift position indicator shows P and the parking brake indicator is illuminated.

- 4 Press the engine switch.

The engine will stop, and the meter display will be extinguished (the shift position indicator will be extinguished a few seconds after the meter display).

- 5 Release the brake pedal and check that "ACCESSORY" or "IGNI-

IGNITION ON" is not shown on the meter.

■ **Automatic P position selection function**  
→P.218

**⚠ WARNING**

■ **Stopping the engine in an emergency**

● If you want to stop the engine in an emergency while driving the vehicle, press and hold the engine switch for more than 2 seconds, or press it briefly 3 times or more in succession. (→P.512)

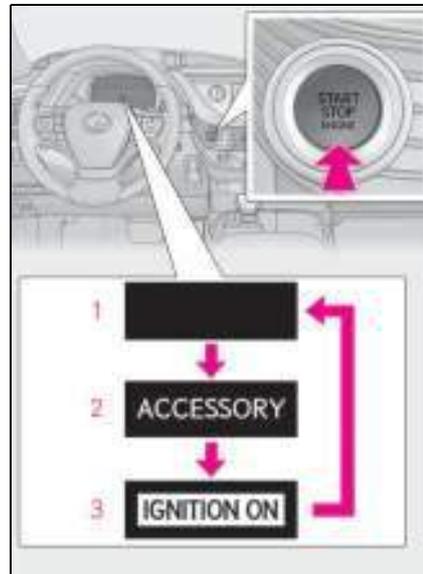
However, do not touch the engine switch while driving except in an emergency. Turning the engine off while driving will not cause loss of steering or braking control, however, power assist to the steering will be lost. This will make it more difficult to steer smoothly, so you should pull over and stop the vehicle as soon as it is safe to do so.

● If the engine switch is operated while the vehicle is running, a warning message will be shown on the multi-information display and a buzzer sounds.

● When restarting the engine after an emergency shutdown, press the engine switch.

**Changing engine switch modes**

Modes can be changed by pressing the engine switch with the brake pedal released. (The mode changes each time the switch is pressed.)



**1 Off**

The emergency flashers can be used.

**2 ACCESSORY mode**

Some electrical components such as the audio system can be used.

"ACCESSORY" will be displayed on the meter.

**3 IGNITION ON mode**

All electrical components can be used.

"IGNITION ON" will be displayed on the meter.

■ **Auto power off function**

If the vehicle is left in ACCESSORY mode for more than 20 minutes or IGNITION ON mode (with the engine not running) for more than an hour with the shift position in P, the engine switch will automatically turn off. However, this function cannot entirely prevent the battery discharge. Do not leave the vehicle with the engine switch in ACCESSORY or IGNITION ON mode for long periods of time when the engine is not running.

### ■ When the shift control system malfunctions

When attempting to turn the engine switch off while there is a malfunction in the shift control system, the engine switch mode may change to ACCESSORY mode. In this case, ACCESSORY mode may be turned off by applying the parking brake and pressing the engine switch again. If there is a malfunction in the system, have the vehicle inspected by your Lexus dealer immediately.



#### NOTICE

#### ■ To prevent battery discharge

- Do not leave the engine switch in ACCESSORY or IGNITION ON mode for long periods of time without the engine running.
- If "ACCESSORY" or "IGNITION ON" is displayed on the meter, the engine switch is not off. Exit the vehicle after turning the engine switch off.

## Automatic transmission

Select the shift position depending on your purpose and situation.

### Shift position purpose and functions

Shift position	Objective or function
P	Parking the vehicle/starting the engine
R	Reversing
N	Neutral (Condition in which the power is not transmitted)
D	Normal driving <sup>*1</sup>
M	M mode driving <sup>*2</sup> (→P.220)

<sup>\*1</sup>: To improve fuel efficiency and reduce noise, set the shift position in D for normal driving. You can choose gear range suitable for your driving situation by operating the paddle shift switches.

<sup>\*2</sup>: Any gear range can be fixed when driving in M mode.

#### ■ For the shift positions

- When the engine switch is off or in ACCESSORY mode, the shift position cannot be changed.
- When the engine switch is in IGNITION ON mode, the shift position can only be changed to N.
- When the engine is running, the shift position can be changed from P to D, N or R.
- The shift position can only be changed to

M directly from D.

In addition, if an attempt is made to change the shift position by moving the shift lever or by pressing the P position switch in any of the following situations, the buzzer will sound and the shifting operation will be disabled or the shift position will automatically change to N. When this happens, select an appropriate shift position.

- Situations where the shifting operation will be disabled:
  - When an attempt is made to change the shift position from P to another position by moving the shift lever without depressing the brake pedal.
  - When an attempt is made to change the shift position from P or N to M by moving the shift lever.
  - When the P position switch is pressed while the vehicle is running.<sup>\*1</sup>
- Situations where the shift position will automatically change to N:
  - When an attempt is made to select the R position by moving the shift lever when the vehicle is moving forward.<sup>\*2</sup>
  - When an attempt is made to select the D position by moving the shift lever when the vehicle is moving in reverse.<sup>\*3</sup>
  - When the shift position is changed from R to M
- If N is selected while driving at a certain speed, even if the shift lever is not held in the N position, the shift position changes to N. In this situation, the buzzer sounds and a confirmation message is displayed on the multi-information display to inform the driver that the shift position has changed to N.

<sup>\*1</sup>: Shift position may be changed to P when driving at extremely low speeds.

<sup>\*2</sup>: Shift position may be changed to R when driving at low speeds.

<sup>\*3</sup>: Shift position may be changed to D when driving at low speeds.

#### ■ Reverse warning buzzer

When shifting into R, a buzzer will sound to inform the driver that the shift position is in

R.

#### ■ To protect the automatic transmission

If the automatic transmission fluid temperature is high, "Transmission Fluid Temp High See Owner's Manual" will be displayed on the multi-information display and the vehicle will go into transmission protection mode automatically. Have the vehicle inspected by your Lexus dealer.

#### ■ When driving with cruise control, dynamic radar cruise control or dynamic radar cruise control with full-speed range activated

Even when performing the following actions with the intent of enabling engine braking, engine braking will not be activated because cruise control, dynamic radar cruise control or dynamic radar cruise control with full-speed range will not be canceled.

- While driving in the D position, downshifting to 9, 8, 7, 6, 5 or 4.
- When switching the driving mode to sport mode while driving in the D position (→P.374)

#### ■ Restraining sudden start (Drive-Start Control)

→P.204

#### ■ AI-SHIFT

The AI-SHIFT automatically selects the suitable gear according to driver performance and driving conditions.

The AI-SHIFT automatically operates when the shift position is in D. (Shifting the shift position to the M position cancels the function.)

#### ■ If a message about a shift operation is shown

To prevent the shift position from being selected incorrectly or the vehicle from moving unexpectedly, the shift position may be changed automatically or operating the shift lever may be required. In this case, change the shift position following the messages on the multi-information display.

- After recharging/reconnecting the battery  
→P.482
- Customization  
Some functions can be customized.  
(→P.568)

**⚠ WARNING**

■ **When driving on slippery road surfaces**

Do not accelerate or shift the shift position suddenly.  
Sudden changes in engine braking may cause the vehicle to spin or skid, resulting in an accident.

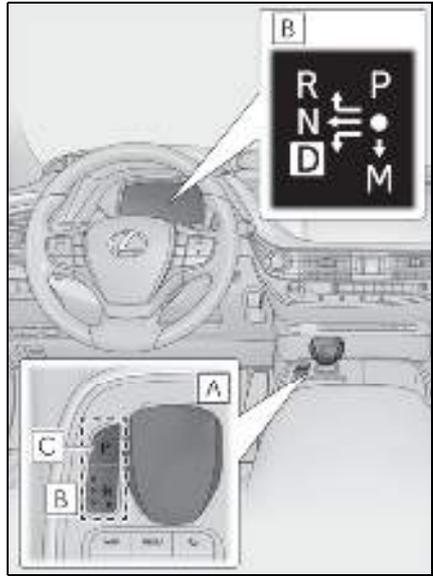
**⚠ NOTICE**

■ **Situations where shift control system malfunctions are possible**

If any of the following situations occurs, shift control system malfunctions are possible.  
Immediately stop the vehicle in a safe place on level ground, apply the parking brake, and then contact your Lexus dealer.

- When the warning message indicating the shift control system appears on the multi-information display.
- The display indicates that no shift position is selected for more than a few seconds.

**Shifting the shift lever**



**A** Shift lever  
Operate the shift lever gently and securely in the direction of the arrow on the shift position indicator.  
To shift to N, slide the shift lever in the direction of the arrow and hold it.  
Release the shift lever after each shifting operation to allow it to return to its regular position (●).  
Shifting to M is only possible when the shift position is in D.  
When shifting from P to N, D or R, from N, D, M or R to P, from D or M to R, or from R to D, ensure that the brake pedal is being depressed and the vehicle is stationary.

**B** Shift position indicator  
Meter display:  
The current shift position is highlighted.  
When any shift position other than D or M is selected, the arrow toward M and the M position indicator are displayed in gray.

Shift lever display:

The current shift position is illuminated.

When selecting the shift position, make sure that the shift position has been changed to the desired position by checking the shift position indicator provided on the instrument cluster.

**C** P position switch

**⚠ WARNING**

**■ For the shift lever**

- Do not remove the shift lever knob or use anything but a genuine Lexus shift lever knob. Also, do not hang anything on the shift lever. Doing so could prevent the shift lever from returning to position, causing unexpected accidents to occur when the vehicle is in motion.
- In order to prevent the shift position from accidentally being changed, do not touch the shift lever when not using them.

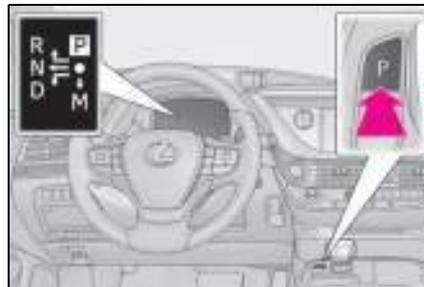
**P position switch**

**■ When shifting the shift position to P**

Fully stop the vehicle and set the parking brake, and then press the P position switch.

When the shift position is changed to P, the switch illuminates.

Check that the shift position indicator shows P.



**■ Shifting the shift position from P to other positions**

- While depressing the brake pedal firmly, operate the shift lever. If the shift lever is operated without depressing the brake pedal, the buzzer will sound and the shifting operation will be disabled.
- When selecting the shift position, make sure that the shift position has been changed to the desired position by checking the shift position indicator provided on the instrument cluster.
- The shift position cannot be changed from P to M directly.

**■ Automatic P position selection function**

In the following situations, the shift position is automatically changed to P.

- When pressing the engine switch with the vehicle stopped while the engine switch is in IGNITION ON mode and the shift position is in a position other than P (after the shift position has changed to P, the engine switch will turn off)\*
- When the vehicle is stopped after the engine has been stopped in an emergency while driving
- When voltage of the battery drops while the shift position is in a position other than P

\* : When the engine switch is pressed while driving at extremely slow speeds, such as immediately before stopping the vehicle, the shift position may automatically change to P. Make sure that the vehicle is completely stopped before pressing the engine switch.

■ **If the shift position cannot be shifted from P**

There is a possibility that the battery is discharged. Check the battery in this situation. (→P.540)

**! WARNING**

■ **P position switch**

- Do not press the P position switch while the vehicle is moving. If the P position switch is pressed when driving at very low speeds (for example, directly before stopping the vehicle), the vehicle may stop suddenly when the shift position switches to P, which could lead to an accident.
- In order to prevent the shift position from accidentally being changed, do not touch the P position switch or shift lever when not using them.
- After changing the shift position to P, do not release the brake pedal until the shift position indicator shows P and the parking brake indicator is illuminated. Otherwise, the vehicle may move, possibly leading to an accident.

**! NOTICE**

■ **Notes regarding shift lever and P position switch operation**

Avoid repeatedly operating the shift lever and P position switch in quick succession.

The system protection function may activate and it will not be temporarily possible to shift the shift position other than P. If this happens, please wait for a while before attempting to change the shift position again.

**Selecting the driving mode**

■ **Driving mode**

→P.374

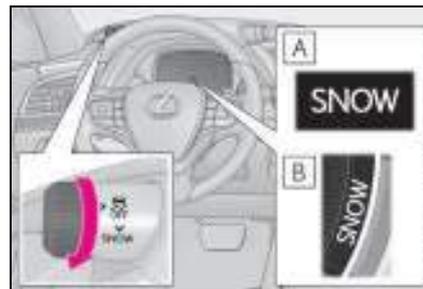
■ **Snow mode (if equipped)**

Snow mode can be selected to suit the conditions when driving on slippery road surfaces, such as on snow.

Turn the snow mode switch backward.

The snow mode indicator illuminates.

Turn the snow mode switch backward again to return to normal mode.



**A** Except F SPORT models

**B** F SPORT models

■ **Snow mode automatic deactivation**

Snow mode is automatically deactivated if

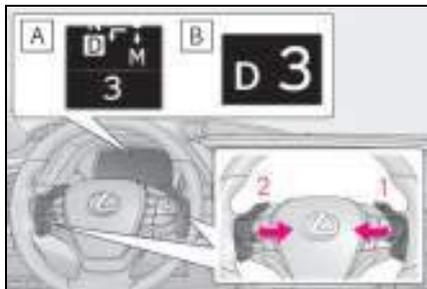
the engine switch is turned off after driving in snow mode.

**Selecting shift ranges in the D position**

To drive using temporary shift range selection, operate the “-” or “+” paddle shift switch.

When the “-” paddle shift switch is operated, the shift range switches to a range that enables engine braking force that is suitable to driving conditions. When the “+” paddle shift switch is operated, the shift range switches to a range that is one range higher than the current range.

Changing the shift range allows restriction of the highest gear, preventing unnecessary upshifting and enabling the level of engine braking force to be selected.



**A** Except F SPORT models

**B** F SPORT models

**1** Upshifting

**2** Downshifting

The selected shift range, from D1 to D10, will be displayed on the meter.

To return to normal D position driving, the “+” paddle shift switch must be held down

for a period of time.

Meter display	Function
D2 - D10	A gear in the range between D1 and the selected shift range is automatically chosen depending on vehicle speed and driving conditions
D1	Setting the shift range at D1

A lower shift range will provide greater engine braking forces than a higher shift range.

**Automatic deactivation of shift range selection in the D position**

Shift range selection in the D position will be deactivated in the following situations:

- When the vehicle comes to a stop
- If the accelerator pedal is depressed for more than a certain period of time
- When the shift position is shifted to a position other than D.
- When pressing and holding the “+” paddle shift switch

**Downshifting restriction warning buzzer**

To help ensure safety and driving performance, downshifting operation may sometimes be restricted. In some circumstances, downshifting may not be possible even when the paddle shift switch is operated. (A buzzer will sound twice.)

**Selecting gears in the M position**

To enter M mode, shift the shift position to M. Gears can be selected by operating the paddle shift switches, allowing you to drive in the gear of your choosing.



**A** Except F SPORT models

**B** F SPORT models

**1** Upshifting

**2** Downshifting

The gear changes once every time the paddle shift switch is operated.

The selected gear, from M1 to M10, will be fixed and displayed on the meter.

When in the M position, the gear will not change unless the paddle shift switches are operated.

However, even when in the M position, the gears will be automatically changed in the following situations:

- When vehicle speed drops (downshift only).
- When it is necessary to protect the engine or automatic transmission when the engine coolant temperature is low, the automatic transmission fluid temperature is high or low, or other reasons.

Also, the gear will not shift when the vehicle speed is low, even if an upshift operation is performed.

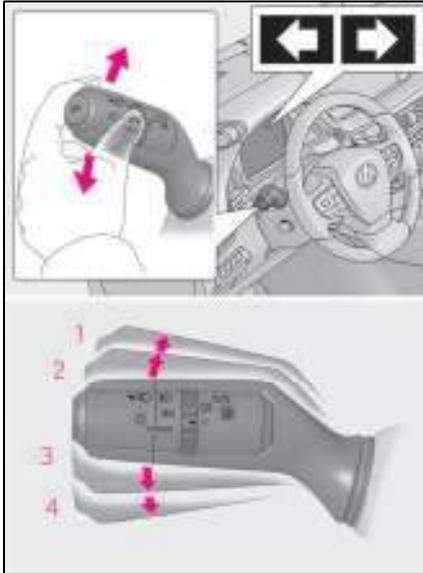
■ **Downshifting restriction warning buzzer**

To help ensure safety and driving perfor-

mance, downshifting operation may sometimes be restricted. In some circumstances, downshifting may not be possible even when the paddle shift switch is operated. (A buzzer will sound twice.)

**Turn signal lever**

**Operating instructions**



- 1** Right turn
- 2** Lane change to the right (move the lever partway and release it)  
The right hand signals will flash 3 times.
- 3** Lane change to the left (move the lever partway and release it)  
The left hand signals will flash 3 times.
- 4** Left turn

■ **Turn signals can be operated when**

The engine switch is in IGNITION ON mode.

■ **If the indicator flashes faster than usual**

Check that a light bulb in the front or rear turn signal lights has not burned out.

■ **If the turn signals stop flashing before a lane change has been performed**

Operate the lever again.

■ **Customization**

Some functions can be customized. (→P.568)

## Parking brake

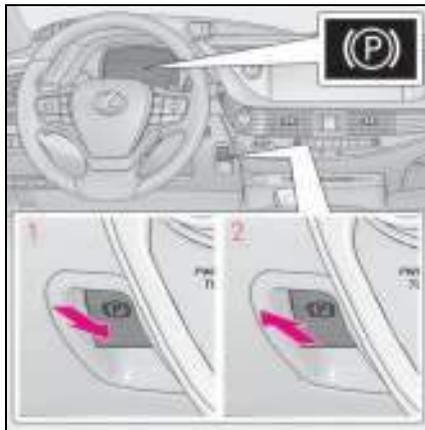
The parking brake can be set or released automatically or manually.

In automatic mode, the parking brake can be set or released automatically according to the shift lever operation. Also, even in automatic mode, the parking brake can be set or released manually.

### Operating instructions

#### ■ Using the manual mode

The parking brake can be set and released manually.



- 1** Push the switch to set the parking brake

The parking brake indicator light will turn on.

Press and hold the parking brake switch if an emergency occurs and it is necessary to operate the parking brake while driving.

- 2** Pull the switch to release the parking brake

- Operate the parking brake switch while depressing the brake pedal.
- Using the parking brake automatic release function, the parking brake can be released by depressing the accelerator pedal. When using this function, slowly depress the accelerator pedal.

Make sure that the parking brake indicator light turn off.

#### ■ Turns automatic mode on

While the vehicle is stopped, press and hold the parking brake switch until a message is shown on the multi-information display.



When the automatic mode is turned on, the parking brake operates as follows.

- When the shift position is shifted from P, the parking brake will be released, and the parking brake indicator light will turn off.
- When the shift position is shifted to P, the parking brake will be set, and the parking brake indicator light will turn on.

Operate the shift lever and P position switch with the vehicle stopped and the brake pedal depressed.

■ Turns automatic mode off

While the vehicle is stopped, pull and hold the parking brake switch until a message is shown on the multi-information display.



■ Parking brake operation

- When the engine switch is not in IGNITION ON mode, the parking brake cannot be released using the parking brake switch.
- When the engine switch is not in IGNITION ON mode, automatic mode (automatic brake setting and releasing) is not available.

■ Parking brake automatic release function

- When the shift position is shifted from P, the parking brake will be released in automatic mode.
- When all of the following conditions are met in manual mode, the parking brake can be released by depressing the accelerator pedal.
  - The driver's door is closed
  - The driver is wearing the seat belt
  - The shift position is in D, M or R

■ If "EPB Frequently Operated Wait a Minute" is displayed on the multi-information display

If the parking brake is operated repeatedly over a short period of time, the system may restrict operation to prevent overheating. If this happens, refrain from operating the parking brake. Normal operation will return after about 1 minute.

■ If "EPB Activation Stopped Incompletely" or "EPB Unavailable" is displayed on the multi-information display

Operate the parking brake switch. If the message does not disappear after operating the switch several times, the system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

■ Parking brake operation sound

When the parking brake operates, a motor sound (whirring sound) may be heard. This does not indicate a malfunction.

■ Parking brake operation

- Depending on the engine switch mode, the parking brake indicator light will turn on and stay on as described below:  
IGNITION ON mode: Comes on until the parking brake is released.  
Not in IGNITION ON mode: Stays on for approximately 15 seconds.
- When the engine switch is turned off with the parking brake set, the parking brake indicator light will stay on for about 15 seconds. This does not indicate a malfunction.

■ When the parking brake switch malfunctions

Automatic mode (automatic brake setting and releasing) will be turned on automatically.

■ Parking the vehicle

→P.203

■ Parking brake engaged warning buzzer

A buzzer will sound if the vehicle is driven with the parking brake engaged. "EPB Applied" is displayed on the multi-information display. (with the vehicle reached a speed of 5 km/h [3 mph])

■ If the brake system warning light comes on

→P.521

■ Usage in winter time

→P.386

**⚠ WARNING****■ When parking the vehicle**

Do not leave a child in the vehicle alone. The parking brake may be released unintentionally and there is the danger of the vehicle moving that may lead to an accident resulting in death or serious injury.

**⚠ NOTICE****■ When parking the vehicle**

Before you leave the vehicle, set the parking brake, shift the shift position to P and make sure that the vehicle does not move.

**■ When the system malfunctions**

Stop the vehicle in a safe place and check the warning messages.

**■ When the parking brake cannot be released due to a malfunction**

Driving the vehicle with the parking brake set will lead to brake components overheating, which may affect braking performance and increase brake wear.

Have the vehicle inspected by your Lexus dealer immediately if this occurs.

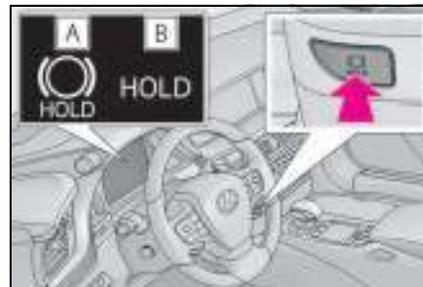
**Brake Hold**

The brake hold system keeps the brake applied when the shift position is in D, M or N with the system on and the brake pedal has been depressed to stop the vehicle. The system releases the brake when the accelerator pedal is depressed with the shift position in D or M to allow smooth start off.

**Enabling the system**

Press the brake hold switch to turn the system on

The brake hold standby indicator (green) **A** comes on. While the system is holding the brakes, the brake hold operated indicator (yellow) **B** comes on.

**■ Brake hold system operating conditions**

The brake hold system cannot be turned on in the following conditions:

- The driver's door is not closed.
- The driver is not wearing the seat belt.

If any of the conditions above are detected when the brake hold system is enabled, the system will turn off and the brake hold standby indicator light will go off. In addition, if any of the conditions are detected

while the system is holding the brake, a warning buzzer will sound and a message will be shown on the multi-information display. The parking brake will then be set automatically.

■ **Brake hold function**

- If the brake pedal is left released for a period of about 3 minutes after the system has started holding the brake, the parking brake will be set automatically. In this case, a warning buzzer sounds and a message is shown on the multi-information display.
- To turn the system off while the system is holding the brake, firmly depress the brake pedal and press the button again.
- The brake hold function may not hold the vehicle when the vehicle is on a steep incline. In this situation, it may be necessary for the driver to apply the brakes. A warning buzzer will sound and the multi-information display will inform the driver of this situation. If a warning message is shown on the multi-information display, read the message and follow the instructions.

■ **When the parking brake is set automatically while the system is holding the brakes**

Perform any of the following operations to release the parking brake.

- Depress the accelerator pedal. (The parking brake will not be released automatically if the seat belt is not fastened.)
- Operate the parking brake switch with the brake pedal depressed.

Make sure that the parking brake indicator light goes off. (→P.223)

■ **When an inspection at your Lexus dealer is necessary**

When the brake hold standby indicator (green) does not illuminate even when the brake hold switch is pressed with the brake hold system operating conditions met, the system may be malfunctioning. Have the vehicle inspected at your Lexus dealer.

■ **If “Brake Hold Fault Depress Brake to Deactivate Visit Your Dealer” or “Brake Hold Malfunction Visit Your Dealer” is displayed on the multi-information display**

The system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

■ **Warning messages and buzzers**

Warning messages and buzzers are used to indicate a system malfunction or to inform the driver of the need for caution. If a warning message is shown on the multi-information display, read the message and follow the instructions.

■ **If the brake hold operated indicator flashes**

→P.528

 **WARNING**

■ **When the vehicle is on a steep incline**

When using the brake hold system on a steep incline exercise caution. The brake hold function may not hold the vehicle in such a situation.

■ **When stopped on a slippery road**

The system cannot stop the vehicle when the gripping ability of the tires has been exceeded. Do not use the system when stopped on a slippery road.

 **NOTICE**

■ **When parking the vehicle**

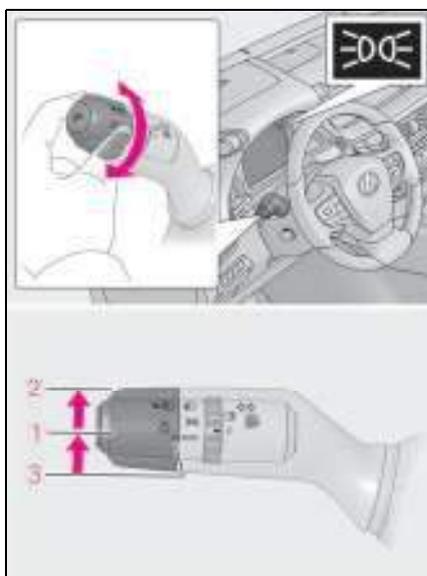
The brake hold system is not designed for use when parking the vehicle for a long period of time. Turning the engine switch off while the system is holding the brake may release the brake, which would cause the vehicle to move. When operating the engine switch, depress the brake pedal, shift the shift position to P and set the parking brake.

## Headlight switch

The headlights can be operated manually or automatically.

### Operating instructions

Operating the  switch turns on the lights as follows:



- 1  The front position, tail, license plate and instrument panel lights turn on.
- 2  The headlights and all the lights listed above turn on.
- 3  The headlights, daytime running lights (→P.227) and all the lights listed above turn on and off automatically.

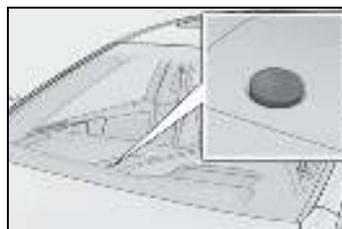
#### ■ AUTO mode can be used when

The engine switch is in IGNITION ON mode.

#### ■ Daytime running light system

To make your vehicle more visible to other drivers during daytime driving, the daytime running lights turn on automatically whenever the engine is started and the parking brake is released with the headlight switch in the **AUTO** position. (Illuminate brighter than the front position lights.) Daytime running lights are not designed for use at night.

#### ■ Headlight control sensor



The sensor may not function properly if an object is placed on the sensor, or anything that blocks the sensor is affixed to the windshield.

Doing so interferes with the sensor detecting the level of ambient light and may cause the automatic headlight system to malfunction.

#### ■ Automatic light off system

- ▶ Except for Korea and Malaysia

The headlights and all lights turn off after the engine switch is turned off and the driver's door is opened.

To turn the lights on again, turn the engine switch to IGNITION ON mode, or turn the light switch off once and then back to the

 or  position.

- ▶ For Korea

- When the headlights are on: The headlights and tail lights turn off 30 seconds after the driver's door is opened and closed if the engine switch is turned to ACCESSORY mode or turned off. (The

lights turn off immediately if  on the key is pressed after all the doors are closed.)

- When only the tail lights are on: The tail lights turn off automatically if the engine switch is turned to ACCESSORY mode or turned off and the driver's door is opened.

To turn the lights on again, turn the engine switch to IGNITION ON mode, or turn the light switch off once and then back to  or .

► For Malaysia

- When the light switch is in  or : The headlights turn off automatically if the engine switch is turned to ACCESSORY mode or turned off, and the driver's door is opened.

- When the light switch is in : The headlights and all lights turn off automatically if the engine switch is turned to ACCESSORY mode or turned off, and the driver's door is opened.

To turn the lights on again, turn the engine switch to IGNITION ON mode, or turn the light switch off once and then back to  or .

■ **Light reminder buzzer**

A buzzer sounds when the engine switch is turned off or turned to ACCESSORY mode and the driver's door is opened while the lights are turned on.

■ **Automatic headlight leveling system**

The level of the headlights is automatically adjusted according to the number of passengers and the loading condition of the vehicle to ensure that the headlights do not interfere with other road users.

■ **Battery-saving function**

► Except for Malaysia

In order to prevent the battery of the vehicle from discharging, if the headlights and/or

tail lights are on when the engine switch is turned off the battery saving function will operate and automatically turn off all the lights after approximately 20 minutes.

When the engine switch is turned to IGNITION ON mode, the battery-saving function will be disabled.

When any of the following are performed, the battery-saving function is canceled once and then reactivated. All the lights will turn off automatically 20 minutes after the Battery-saving function has been reactivated:

- When the headlight switch is operated
- When a door or the trunk is opened or closed

► For Malaysia

In order to prevent the battery of the vehicle from discharging, if the light switch is in the

 or  position when the engine switch is turned off the battery saving function will operate and automatically turn off all the lights after approximately 20 minutes. When the engine switch is turned to IGNITION ON mode, the battery-saving function will be disabled.

When any of the following are performed, the battery-saving function is canceled once and then reactivated. All the lights will turn off automatically 20 minutes after the battery-saving function has been reactivated:

- When the headlight switch is operated
- When a door or the trunk is opened or closed

■ **Welcome light illumination control**

The front position lights automatically turn on at night when the doors are unlocked using the entry function or wireless remote control if the light switch is in the  position.

■ **Customization**

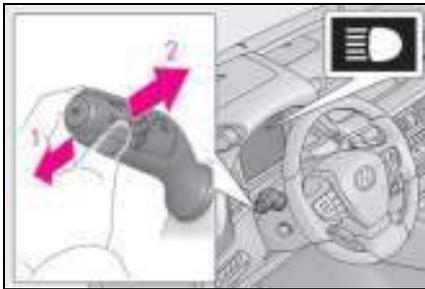
Some functions can be customized. (→P.568)

 NOTICE

■ **To prevent battery discharge**

Do not leave the lights on longer than necessary when the engine is not running.

### Turning on the high beam headlights



- 1 With the headlights on, push the lever away from you to turn on the high beams.

Pull the lever toward you to the center position to turn the high beams off.

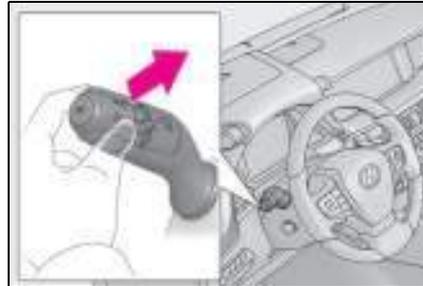
- 2 Pull the lever toward you and release it to flash the high beams once.

You can flash the high beams with the headlights on or off.

### Follow me home system (for Malaysia)

This system allows the headlights to be turned on for 30 seconds when the engine switch is off.

Pull the lever toward you and release it with the light switch in  after turning the engine switch off.



The lights are turned off in the following situations.

- The engine switch is turned to IGNITION ON mode.
- The light switch is turned on.
- The light switch is pulled toward you and then released.

### Cornering lights

- When the steering wheel or turn signal lever is operated while the headlights are on (low beam), a cornering light will turn on and light up the direction of movement of the vehicle. The cornering lights are designed to ensure excellent visibility when making a turn at an intersection.

However, when vehicle speed is more than approximately 35 km/h (22 mph), the cornering lights will not turn on.

- When the shift position is in R while the headlights are on (low beam), both cornering lights will turn on. This is designed to enhance visibility when parking.

■ **Cornering lights**

When the cornering lights are on for more than 30 minutes, they will turn off automatically.

**AHS (Adaptive High-beam System)\***

\*: If equipped

The Adaptive High-beam System uses a camera sensor located behind the upper portion of the windshield to assess the brightness of the lights of vehicles ahead, streetlights, etc., and automatically controls the headlight light distribution as necessary.

 **WARNING**

■ **Limitations of the Adaptive High-beam System**

Do not overly rely on the Adaptive High-beam System. Always drive safely, taking care to observe your surroundings and turning the high beams on or off manually if necessary.

■ **To prevent incorrect operation of the Adaptive High-beam System**

Do not overload the vehicle.

**System functions**

- Adjusts the brightness and illuminated area of the high beams according to the vehicle speed.
- Adjusts the intensity of the high beams, while driving on a curve, so that the area in the direction that the vehicle is turning will be illuminated more brightly than other areas.
- Operates the shaded high beams so that the area around vehicles ahead is partially not illuminated while all other areas continue to be illumi-

nated with the high beams.

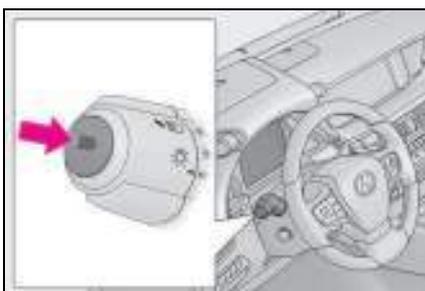
The shaded high beams help optimize forward visibility while reducing the dazzling effect on the drivers of vehicles ahead.



- Adjusts the distance that the low beams are projected according to the distance to a preceding vehicle.
- When driving at low speeds, the cornering lights will illuminate the area around both front corners of the vehicle.

### Activating the Adaptive High-beam System

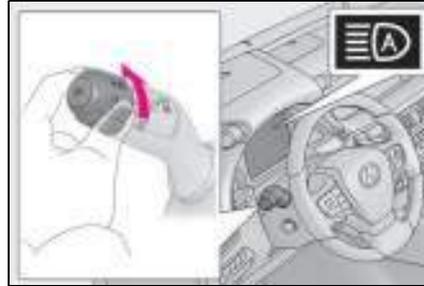
- 1 Press the Adaptive High-beam System switch.



- 2 Turn the headlight switch to the  or  position.

When the headlight switch lever is in the low beam position, the AHS system will be

enabled and the AHS indicator will illuminate.



### Operating conditions of the Adaptive High-beam System

- When all of the following conditions are met, the high beams will be turned on automatically and the system will operate:
  - The vehicle speed is approximately 15 km/h (10 mph) or more.\*
  - The area ahead of the vehicle is dark.
  - \* : When the vehicle speed is approximately 30 km/h (19 mph) or more, the area in the direction that the vehicle is turning will be illuminated more brightly than other areas while driving on a curve.
- When all of the following conditions are met, the shaded high beams will turn on and the distance that the low beams are projected will be adjusted automatically, depending on the location of vehicles ahead:
  - The vehicle speed is approximately 15 km/h (10 mph) or more.
  - The area ahead of the vehicle is dark.
  - There are vehicles ahead with headlights or tail lights turned on.
- If any of the following conditions are met, the high beams or shaded high beams will be changed to the low beams automatically:
  - The vehicle speed is below approximately 15 km/h (10 mph).
  - The area ahead of the vehicle is not dark.
  - There are many vehicles ahead.
  - Vehicles ahead are moving quickly and the high beams may blind the drivers of

the other vehicles.

- When the vehicle speed is between approximately 3 and 15 km/h (1.9 and 9.3 mph), the cornering lights will turn on.

#### ■ Camera sensor detection information

- The high beams may not be automatically changed to the shaded high beams in the following situations:

- When vehicles ahead suddenly appear from a curve
- When the vehicle is cut in front of by another vehicle
- When vehicles ahead are hidden from sight due to repeated curves, road dividers or roadside trees
- When vehicles ahead appear from the faraway lane on wide road
- When vehicles ahead have no lights

- The high beams may be changed to the shaded high beams if a vehicle ahead that is using fog lights without its headlights turned on is detected.

- House lights, street lights, traffic signals, and illuminated billboards or signs and other reflective objects may cause the high beams to change to the shaded high beams, cause the high beams not to change to the shaded high beams, or change the area that is not illuminated.

- The following factors may affect the amount of time taken to turn the high beam on or off, or the speed by which the areas not illuminated change:

- The brightness of headlights, fog lights, and tail lights of vehicles ahead
- The movement and direction of vehicles ahead
- When a vehicle ahead only has operational lights on one side
- When a vehicle ahead is a two-wheeled vehicle
- The condition of the road (gradient, curve, condition of the road surface etc.)
- The number of passengers and amount of luggage

- The light distribution control of the headlights may change unexpectedly.

- Bicycles or similar objects may not be detected.

- In the following situations the system may not be able to correctly detect the surrounding brightness level. This may cause the low beams to remain on or the high beams to flash or dazzle pedestrians or vehicles ahead. In such a case, it is necessary to manually switch between the high and low beams.

- When driving in inclement weather (heavy rain, snow, fog, sandstorms, etc.)
- When the windshield is obscured by fog, mist, ice, dirt, etc.
- When the windshield is cracked or damaged
- When the camera sensor is deformed or dirty
- When the temperature of the camera sensor is extremely high
- When the surrounding brightness level is equal to that of headlights, tail lights or fog lights
- When headlights or tail lights of vehicles ahead are turned off, dirty, changing color, or not aimed properly
- When the vehicle is hit by water, snow, dust, etc. from a preceding vehicle
- When driving through an area of intermittently changing brightness and darkness
- When frequently and repeatedly driving ascending/descending roads, or roads with rough, bumpy or uneven surfaces (such as stone-paved roads, gravel roads, etc.)
- When frequently and repeatedly taking curves or driving on a winding road
- When there is a highly reflective object ahead of the vehicle, such as a sign or mirror
- When the back of a preceding vehicle is highly reflective, such as a container on a truck
- When the vehicle's headlights are damaged or dirty, or are not aimed properly
- When the vehicle is listing or tilting due to a flat tire, a trailer being towed, etc.
- When the headlights are changed between the high beams and low beams repeatedly in an abnormal manner
- When the driver believes that the high beams may be flashing or dazzling pedestrians or other drivers
- When the vehicle is used in an area in

which vehicles travel on the opposite side of the road of the country for which the vehicle was designed, for example using a vehicle designed for right-hand traffic in a left-hand traffic area, or vice versa

#### ■ Customization

Some functions can be customized.  
(→P.568)

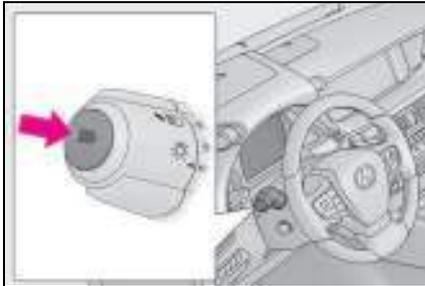
### Turning the high beams on/off manually

#### ■ Switching to the low beams

Press the Adaptive High-beam System switch.

The AHS indicator will turn off.

Press the switch to activate the Adaptive High-beam System again.

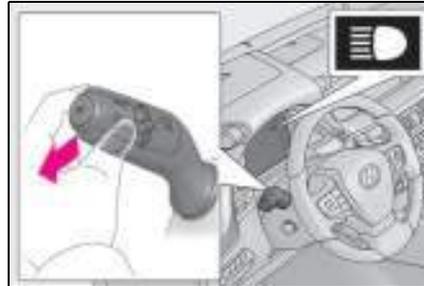


#### ■ Switching to the high beams

Push the lever away from you.

The AHS indicator will turn off and the high beam indicator will turn on.

Pull the lever to its original position to activate the Adaptive High-beam System.



#### ■ Switching to the high beams temporarily

The high beams are turned on while the lever is pulled toward you. Returning the lever to its original position turns the low beams on. A while after the low beams are turned on, the Adaptive High-beam System will be activated again.

### AHB (Automatic High Beam)\*

\*: If equipped

The Automatic High Beam uses a camera sensor located behind the upper portion of the windshield to assess the brightness of the lights of vehicles ahead, streetlights, etc., and automatically turns the high beams on or off as necessary.

#### ⚠ WARNING

##### ■ Limitations of the Automatic High Beam

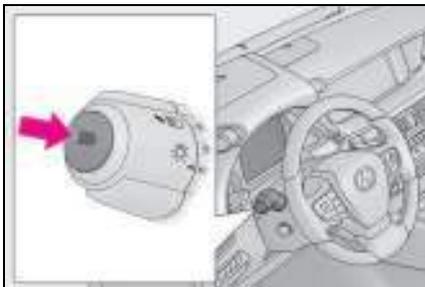
Do not overly rely on the Automatic High Beam. Always drive safely, taking care to observe your surroundings and turning the high beams on or off manually if necessary.

##### ■ To prevent incorrect operation of the Automatic High Beam system

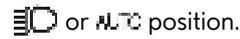
Do not overload the vehicle.

### Activating the Automatic High Beam

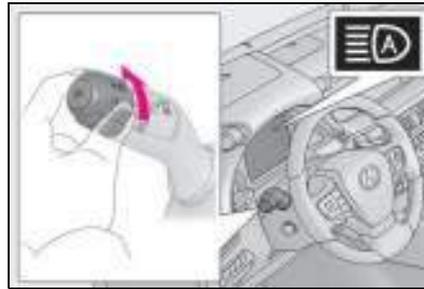
- 1 Press the Automatic High Beam switch.



- 2 Turn the headlight switch to the



When the headlight switch lever is in the low beam position, the AHB system will be enabled and the AHB indicator will illuminate.



#### ■ Conditions to turn the high beams on/off automatically

- When all of the following conditions are met, the high beams will be turned on automatically (after approximately 1 second):
  - The vehicle speed is approximately 30 km/h (19 mph) or more.
  - The area ahead of the vehicle is dark.
  - There are no vehicles ahead with headlights or tail lights turned on.
  - There are few streetlights on the road ahead.
- If any of the following conditions are met, the high beams will turn off automatically:
  - The vehicle speed is below approximately 25 km/h (16 mph).
  - The area ahead of the vehicle is not dark.
  - Vehicles ahead have their headlights or tail lights turned on.
  - There are many streetlights on the road ahead.

#### ■ Camera sensor detection information

- The high beams may not be automatically turned off in the following situations:
  - When a vehicle suddenly appears from around a curve
  - When the vehicle is cut in front of by another vehicle
  - When vehicles ahead cannot be

- detected due to repeated curves, road dividers or roadside trees
- When vehicles ahead appear in a faraway lane on a wide road
  - When the lights of vehicles ahead are not on
  - The high beams may be turned off if a vehicle ahead that is using fog lights without its headlights turned on is detected.
  - House lights, street lights, traffic signals, and illuminated billboards or signs and other reflective objects may cause the high beams to change to the low beams, or the low beams to remain on.
  - The following factors may affect the amount of time taken for the high beams to turn on or off:
    - The brightness of the headlights, fog lights, and tail lights of vehicles ahead
    - The movement and direction of vehicles ahead
    - When a vehicle ahead only has operational lights on one side
    - When a vehicle ahead is a two-wheeled vehicle
    - The condition of the road (gradient, curve, condition of the road surface, etc.)
    - The number of passengers and amount of luggage in the vehicle
  - The high beams may turn on or off unexpectedly.
  - Bicycles or similar vehicles may not be detected.
  - In the following situations the system may not be able to correctly detect the surrounding brightness level. This may cause the low beams to remain on or the high beams to flash or dazzle pedestrians or vehicles ahead. In such a case, it is necessary to manually switch between the high and low beams.
    - When driving in inclement weather (heavy rain, snow, fog, sandstorms, etc.)
    - When the windshield is obscured by fog, mist, ice, dirt, etc.
    - When the windshield is cracked or damaged
    - When the camera sensor is deformed or dirty
    - When the temperature of the camera sensor is extremely high
  - When the surrounding brightness level is equal to that of headlights, tail lights or fog lights
  - When headlights or tail lights of vehicles ahead are turned off, dirty, changing color, or not aimed properly
  - When the vehicle is hit by water, snow, dust, etc. from a preceding vehicle
  - When driving through an area of intermittently changing brightness and darkness
  - When frequently and repeatedly driving ascending/descending roads, or roads with rough, bumpy or uneven surfaces (such as stone-paved roads, gravel roads, etc.)
  - When frequently and repeatedly taking curves or driving on a winding road
  - When there is a highly reflective object ahead of the vehicle, such as a sign or mirror
  - When the back of a preceding vehicle is highly reflective, such as a container on a truck
  - When the vehicle's headlights are damaged or dirty, or are not aimed properly
  - When the vehicle is listing or tilting due to a flat tire, a trailer being towed, etc.
  - When the headlights are changed between the high beams and low beams repeatedly in an abnormal manner
  - When the driver believes that the high beams may be flashing or dazzling pedestrians or other drivers
  - When the vehicle is used in an area in which vehicles travel on the opposite side of the road of the country for which the vehicle was designed, for example using a vehicle designed for right-hand traffic in a left-hand traffic area, or vice versa

### Turning the high beams on/off manually

#### ■ Switching to the low beams

Press the Automatic High Beam switch.

The AHB indicator will turn off.

Press the switch to activate the Automatic High Beam system again.

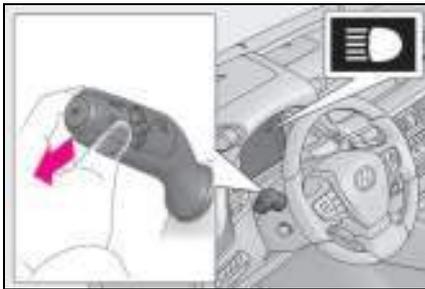


■ **Switching to the high beams**

Push the lever away from you.

The AHB indicator will turn off and the high beam indicator will turn on.

Pull the lever to its original position to activate the Automatic High Beam system.



■ **Switching to the high beams temporarily**

The high beams are turned on while the lever is pulled toward you. Returning the lever to its original position turns the low beams on. A while after the low beams are turned on, the Automatic High Beam system will be activated again.

**Multi Weather Lights\***

\*: If equipped

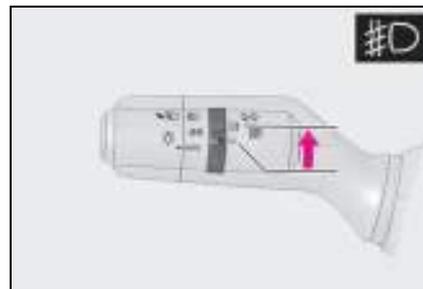
The Multi Weather Lights is a system that illuminates the cornering lights to ensure visibility when driving in inclement weather, such as rain or fog.

**Enabling/disabling the Multi Weather Lights**

- 1 Turn the headlight switch to the or **AUTO** position.
- 2 Turn the switch ring to the position.

When the switch is released, it returns to .

When the Multi Weather Lights system is enabled, the Multi Weather Lights indicator on the meter will illuminate.



Turn the switch ring to the position again to disable the system.

■ **Operating conditions**

The cornering lights will illuminate when the Multi Weather Lights are enabled and both of the following conditions are met:

- The headlights are on
- The vehicle speed is lower than approximately 45 km/h (28 mph).

When the vehicle speed increases to approximately 45 km/h (28 mph) or higher, the lights will be temporarily turned off. The lights will turn on again when the vehicle speed becomes lower than approximately 35 km/h (22 mph).

#### ■ Rear fog lights

When the Multi Weather Lights system is enabled, the rear fog lights may also be illuminated. (→P.237)

#### ■ Customization

Enabling of the Multi Weather Lights system when the rear fog lights are enabled can be turned on/off. (→P.568)

### Rear fog lights

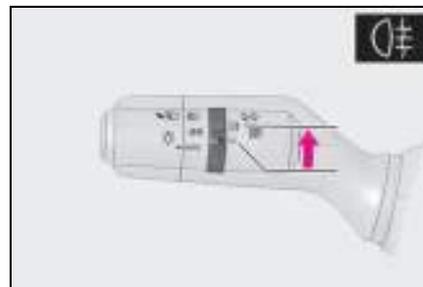
When driving in inclement weather, such as rain or fog, the rear fog lights can be used to make your vehicle more visible to following vehicles.

#### Operating instructions

- 1 Turn the headlight switch to the  or **AUTO** position.
- 2 Turn the switch ring to the  position.

When the switch is released, it returns to .

When the rear fog lights are enabled, the rear fog light indicator on the meter will illuminate.



Turn the switch ring to the  position again to disable the rear fog lights.

#### ■ Illumination conditions

- When enabled, the rear fog lights operate when the headlights are illuminated.
- When illuminated, the rear fog lights will remain on until the tail lights are turned off.

■ **Using the rear fog lights**

Use the rear fog lights only when necessary. If the rear fog lights are used when visibility is not poor, they may impede the visibility of drivers in following vehicles.

■ **Multi Weather Lights system-linked operation (if equipped)**

When the rear fog lights are illuminated, the Multi Weather Lights system may also operate. (→P.236)

■ **Customization**

Enabling of the Multi Weather Lights system when the rear fog lights are enabled can be turned on/off. (→P.568)

**Windshield wipers and washer**

Operating the lever can switch between automatic operation and manual operation, or can use the washer.

 NOTICE

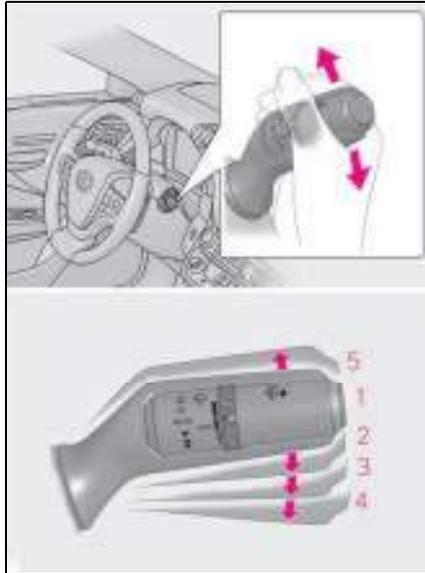
■ **When the windshield is dry**

Do not use the wipers, as they may damage the windshield.

**Operating the wiper lever**

Operate the  lever operates the wipers or washer as follows. When

 is selected, the wipers will operate automatically when the sensor detects falling rain. The system automatically adjusts wiper timing in accordance with rain volume and vehicle speed.



- 1 Off
- 2 Rain-sensing operation
- 3 Low speed operation
- 4 High speed operation
- 5 Temporary operation

When is selected, the sensor sensitivity can be adjusted by turning the switch ring.



- 6 Increases the sensitivity
- 7 Decreases the sensitivity



- 8 Washer/wiper dual operation

Pulling the lever operates the wipers and washer.  
(After operating several times, the wipers operate once more time after a short delay to prevent dripping. However, the dripping prevention does not operate while the vehicle is moving.)

When the engine switch is in IGNITION ON mode and the headlights are on, if the lever is pulled, the headlight cleaners will operate once. After this, the headlight cleaners will operate every 5th time the lever is pulled.

■ **The windshield wiper and washer can be operated when**

The engine switch is in IGNITION ON mode.

■ **Effects of vehicle speed on wiper operation**

Even when the wipers are not in AUTO mode, vehicle speed affects the time until the drip prevention wiper sweep occurs.

With low speed windshield wiper operation selected, wiper operation will be switched from low speed to intermittent wiper operation only when the vehicle is stationary. (However, when the sensor sensitivity is adjusted to the highest level, the mode cannot be switched.)

■ **Raindrop sensor**

- The raindrop sensor judges the amount of raindrops.  
An optical sensor is adopted. It may not operate properly when sunlight from the rising or setting of the sun intermittently strikes the windshield, or if bugs etc. are present on the windshield.



- If the wiper is turned to AUTO mode while the engine switch is in IGNITION ON mode, the wipers will operate once to show that AUTO mode is activated.
- If the temperature of the raindrop sensor is 85°C (185°F) or higher, or -15°C (5°F) or lower, automatic operation may not occur. In this case, operate the wipers in any mode other than AUTO mode.

■ **If no windshield washer fluid sprays**

Check that the washer nozzles are not blocked if there is washer fluid in the windshield washer fluid reservoir.



■ **Front door opening linked windshield wiper stop function**

When **AUTO** is selected and the windshield wipers are operating, if a front door is opened while the vehicle is stopped and the P shift position is selected, operation of the windshield wipers will be stopped to prevent anyone near the vehicle from being sprayed by water from the wipers. When the front door is closed, wiper operation will resume.

■ **When stopping the engine in an emergency while driving**

If the windshield wipers are operating when the engine is stopped, the windshield wipers will operate in high speed operation. After the vehicle is stopped, operation will return to normal when the engine switch is turned to IGNITION ON mode, or operation will stop when the driver's door is opened.

■ **Outside rear view mirror defogger activation linked to windshield wiper operation**

The outside rear view mirror defoggers automatically turn on when you operate the windshield wipers. The outside rear view mirror defoggers automatically turn off approximately 15 minutes after the wipers stop. For details about the outside rear view mirror defoggers: →P.402

**⚠ WARNING****■ Caution regarding the use of windshield wipers in AUTO mode**

The windshield wipers may operate unexpectedly if the sensor is touched or the windshield is subject to vibration in AUTO mode. Take care that your fingers or anything else do not become caught in the windshield wipers.

**■ Caution regarding the use of washer fluid**

When it is cold, do not use the washer fluid until the windshield becomes warm. The fluid may freeze on the windshield and cause low visibility. This may lead to an accident, resulting in death or serious injury.

**⚠ NOTICE****■ When there is no washer fluid spray from the nozzle**

Damage to the washer fluid pump may be caused if the lever is pulled toward you and held continually.

**■ When a nozzle becomes blocked**

In this case, contact your Lexus dealer. Do not try to clear it with a pin or other object. The nozzle will be damaged.

**Changing the windshield wiper rest position/Lifting the windshield wipers**

When the windshield wipers are not being used, they retract to below the hood. To enable the windshield wipers to be lifted when parking in cold conditions or when replacing a windshield wiper insert, change the rest position of the windshield wipers to the service position using the wiper lever.

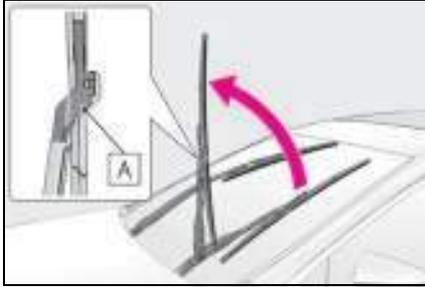
**■ Raising the wipers to the service position**

Within approximately 45 seconds of turning the engine switch off, move the wiper lever to the  position and hold it for approximately 2 seconds or more.

The wipers will move to the service position.

**■ Lifting the windshield wipers**

While holding the hook portion  of the wiper arm, lift the windshield wiper from the windshield.



● Do not operate the wiper lever when the windshield wipers are lifted. Otherwise, the windshield wipers may contact the hood, possibly resulting in damage to the windshield wipers and/or hood.

■ Lowering the windshield wipers to the retracted position

With the windshield wipers placed on the windshield, turn the engine switch to IGNITION ON mode and then move the wiper lever to an operating position. When the wiper switch is turned off, the windshield wipers will stop at the retracted position. Even if the wipers deviate while the engine switch is off, the wipers will return to the normal position.

⚠ NOTICE

■ When lifting the windshield wipers

- Do not lift the windshield wipers when they are in the retracted position below the hood. Otherwise, they may contact the hood, possibly resulting in damage to a windshield wiper and/or the hood.
- Do not lift a windshield wiper by the wiper blade. Otherwise, the wiper blade may be deformed.



**Opening the fuel tank cap**

Perform the following steps to open the fuel tank cap:

**Before refueling the vehicle**

- Close all the doors and windows, and turn the engine switch off.
- Confirm the type of fuel.

■ **Fuel types**

→P.567

■ **Fuel tank opening for unleaded gasoline**

To help prevent incorrect fueling, your vehicle has a fuel tank opening that only accommodates the special nozzle on unleaded fuel pumps.

■ **If the malfunction indicator lamp illuminates (for Korea)**

The malfunction indicator lamp may illuminate erroneously if refueling is performed repeatedly when the fuel tank is nearly full.

 **WARNING**

■ **When refueling the vehicle**

Observe the following precautions while refueling the vehicle. Failure to do so may result in death or serious injury.

- After exiting the vehicle and before opening the fuel door, touch an unpainted metal surface to discharge any static electricity. It is important to discharge static electricity before refueling because sparks resulting from static electricity can cause fuel vapors to ignite while refueling.

- Always hold the grips on the fuel tank cap and turn it slowly to remove it. A whooshing sound may be heard when the fuel tank cap is loosened. Wait until the sound cannot be heard before fully removing the cap. In hot weather, pressurized fuel may spray out the filler neck and cause injury.

- Do not allow anyone that has not discharged static electricity from their body to come close to an open fuel tank.

- Do not inhale vaporized fuel. Fuel contains substances that are harmful if inhaled.

- Do not smoke while refueling the vehicle. Doing so may cause the fuel to ignite and cause a fire.

- Do not return to the vehicle or touch any person or object that is statically charged. This may cause static electricity to build up, resulting in a possible ignition hazard.

■ **When refueling**

Observe the following precautions to prevent fuel overflowing from the fuel tank:

- Securely insert the fuel nozzle into the fuel filler neck.
- Stop filling the tank after the fuel nozzle automatically clicks off.
- Do not top off the fuel tank.

 **NOTICE**

■ **Refueling**

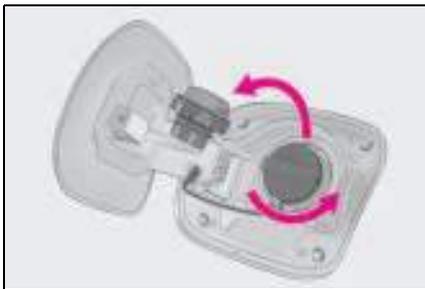
Do not spill fuel during refueling. Doing so may damage the vehicle, such as causing the emission control system to operate abnormally or damaging fuel system components or the vehicle's painted surface.

### Opening the fuel tank cap

- 1 Press the opener switch.



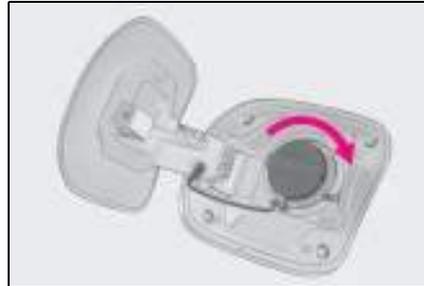
- 2 Turn the fuel tank cap slowly and remove it, then put it into the holder on the fuel filler door.



■ If the fuel filler door cannot be opened  
→P.537

### Closing the fuel tank cap

After refueling, turn the fuel tank cap until you hear a click. Once the cap is released, it will turn slightly in the opposite direction.



### ! WARNING

#### ■ When replacing the fuel tank cap

Do not use anything but a genuine Lexus fuel tank cap designed for your vehicle. Doing so may cause a fire or other incident which may result in death or serious injury.

## Lexus Safety System + A\*

\*: If equipped

The Lexus Safety System + A consists of the following drive assist systems and contributes to a safe and comfortable driving experience:

### Drive assist system

- **PCS (Pre-Collision System) (vehicles with Lexus Safety System + A)**  
→P.260
- **FCTA (Front Cross Traffic Alert)**  
→P.280
- **LTA (Lane Tracing Assist)**  
→P.283
- **AHS (Adaptive High-beam System)**  
→P.230
- **Dynamic radar cruise control with full-speed range**  
→P.301

## ! WARNING

### ■ Lexus Safety System + A

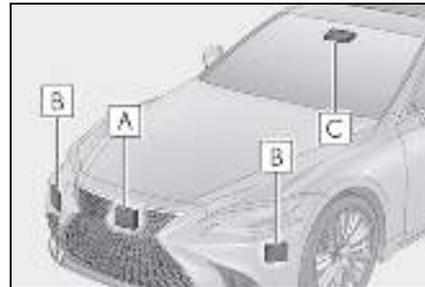
The Lexus Safety System + A is designed to operate under the assumption that the driver will drive safely, and is designed to help reduce the impact to the occupants and the vehicle in the case of a collision or assist the driver in normal driving conditions.

As there is a limit to the degree of recognition accuracy and control performance that this system can provide, do not overly rely on this system. The driver is always responsible for paying attention to the vehicle's surroundings and driving safely.

### Sensors

Four types of sensors, located behind the front grille, front bumper, rear bumper and windshield, detect information necessary to operate the drive assist systems.

#### ● Front



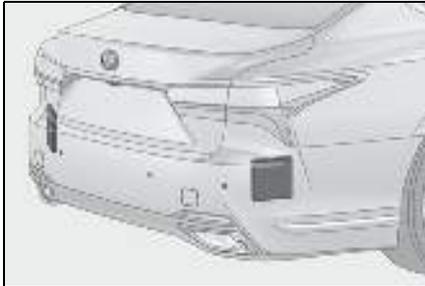
**A** Front radar sensor

**B** Front side radar sensors

**C** Front camera

#### ● Rear

Rear side radar sensors (→P.330)

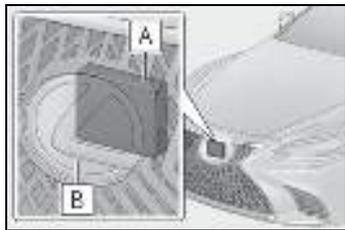


**⚠ WARNING**

**■ To avoid malfunction of the front radar sensor**

Observe the following precautions. Otherwise, the radar sensor may not operate properly, possibly leading to an accident resulting in death or serious injury.

- Keep the radar sensor and the grille cover clean at all times.



**A** Radar sensor

**B** Grille cover

If the front of the radar sensor or the front or back of the grille cover is dirty or covered with water droplets, snow, etc., clean it.

Clean the radar sensor and grille cover with a soft cloth to avoid damage them.

- Do not attach accessories, stickers (including transparent stickers) or other items to the radar sensor, grille cover or surrounding area.

- Do not subject the radar sensor or its surrounding area to a strong impact. If the radar sensor is moved even slightly off position, the system may malfunction and objects may not be detected correctly. If the radar sensor, front grille, or front bumper has been subjected to a strong impact, have the vehicle inspected by your Lexus dealer.

- Do not disassemble the radar sensor.

- Do not modify or paint the radar sensor or grille cover.

- If the radar sensor, front grille, or front bumper needs to be removed and installed, or replaced, contact your Lexus dealer.

**■ To avoid malfunction of the front side radar sensors**

Observe the following precautions. Otherwise, the radar sensor may not operate properly, possibly leading to an accident resulting in death or serious injury.

**⚠ WARNING**

- Keep the radar sensors and their surrounding areas on the front bumper clean at all times.



If a radar sensor or its surrounding area on the front bumper is dirty or covered with snow, the system may not operate and a warning message (→P.533) will be displayed.

If this occurs, clean off the dirt or snow and drive the vehicle for approximately 10 minutes.

If the warning message does not disappear, have your vehicle inspected by your Lexus dealer.

- Do not attach accessories, stickers (including transparent stickers), aluminum tape or other items to the radar sensors or their surrounding area.
- Do not subject a radar sensor or its surrounding area on the front bumper to a strong impact.

If a radar sensor is moved even slightly off position, the system may malfunction and vehicles may not be detected correctly.

In the following situations, have your vehicle inspected by your Lexus dealer.

- If a radar sensor or its surrounding area is subject to a strong impact
- If the area on the front bumper around a radar sensor is scratched or dented, or the front bumper has become partially disengaged

- Do not disassemble the radar sensors.
- Do not modify the radar sensors or their surrounding area on the front bumper.
- If a radar sensor or the front bumper needs to be removed and installed, or replaced, contact your Lexus dealer.
- Do not paint the front bumper any color other than an official Lexus color.

**■ To avoid malfunction of the front camera**

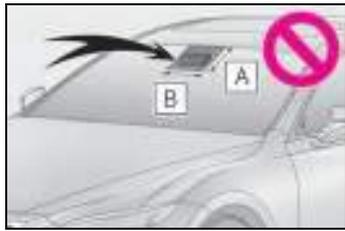
Observe the following precautions.

Otherwise, the front camera may not operate properly, possibly leading to an accident resulting in death or serious injury.

- Keep the windshield clean at all times.
  - If the windshield is dirty or covered with an oily film, water droplets, snow, etc., clean the windshield.
  - As some glass coating agents may affect the detection performance of the front camera, consult your Lexus dealer when using a glass coating agent.
  - If a glass coating agent is applied to the windshield, it will still be necessary to use the windshield wipers to remove water droplets, etc. from the area of the windshield in front of the front camera.
  - If the inner side of the windshield where the front camera is installed is dirty, contact your Lexus dealer.

**⚠ WARNING**

- Do not attach objects, such as stickers, transparent stickers, and so forth, to the outer side of the windshield in front of the front camera (shaded area in the illustration).



- A** From the top of the windshield to approximately 1 cm (0.4 in.) below the bottom of the front camera
- B** Approximately 36 cm (14.2 in.) (Approximately 18 cm [7.1 in.] to the right and left from the center of the front camera)

- If the part of the windshield in front of the front camera is fogged up or covered with condensation or ice, use the windshield defogger to remove the fog, condensation or ice. (→P.402)
- If water droplets cannot be properly removed from the area of the windshield in front of the front camera by the windshield wipers, replace the wiper insert or wiper blade.

If the wiper inserts or wiper blades need to be replaced, contact your Lexus dealer.

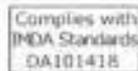
- Do not attach window tint to the windshield.
- Replace the windshield if it is damaged or cracked. If the windshield needs to be replaced, contact your Lexus dealer.
- Do not allow liquids to contact the front camera.

- Do not allow bright lights to shine into the front camera.
- Do not dirty or damage the front camera. When cleaning the inside of the windshield, do not allow glass cleaner to contact the lens of the front camera. Also, do not touch the lens. If the lens is dirty or damaged, contact your Lexus dealer.
- Do not subject the front camera to a strong impact.
- Do not change the installation position or direction of the front camera or remove it.
- Do not disassemble the front camera.
- Do not modify any components of the vehicle around the front camera (inside rear view mirror, etc.) or ceiling.
- Do not attach any accessories to the hood, front grille or front bumper that may obstruct the front camera. Contact your Lexus dealer for details.
- If a surfboard or other long object is to be mounted on the roof, make sure that it will not obstruct the front camera.
- Do not modify the headlights or other lights.

### ■ Certification



상호명/제조사 : DENSO CORPORATION  
 기재재의 명칭 (모델명) : 차량 충돌방지용 레이더 무선기기(DNMWR009)  
 제조연월/제조국 : See Product. / JAPAN  
 식별부호 : MSIP-CRM-DKR-DNMWR009



**DENSO** DNMWR009

Brand Name: DENSO  
 Model: DNMWR009

เครื่องโทรคมนาคมและอุปกรณ์นี้มีความสอดคล้องตามมาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.  
 เพื่อหลีกเลี่ยงอันตรายที่อาจเกิดจากคลื่นแม่เหล็กไฟฟ้า การรบกวนรักษา ระยะห่างจากเซ็นเซอร์เรดาร์ให้มากกว่า 20 ซม. ขณะเซ็นเซอร์ทำงาน  
 เครื่องวิทยุคมนาคมนี้มีระดับการแผ่คลื่นแม่เหล็กไฟฟ้าสอดคล้องตาม มาตรฐานความปลอดภัยต่อสุขภาพของมนุษย์จากการใช้เครื่องวิทยุคมนาคมที่คณะกรรมการกิจการกระจายเสียง กิจการโทรทัศน์ และ กิจการโทรคมนาคมแห่งชาติประกาศกำหนด

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。



For Vehicles sold in Jordan  
TRC approval number: TRC/LPD/2016/506

[Para los vehículos que se venden en Paraguay]  
Nombre del proveedor en Paraguay: Toyotoshi S.A.  
Dirección: Av. Mariscal Lopez 2801/2899 Asuncion, Paraguay

Este equipamento está homologado pela ANATEL de acordo com os procedimentos regulamentados pela Resolução 242/2000 e atende aos requisitos técnicos aplicados.

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

■ **If a warning message is displayed on the multi-information display**

A system may be temporarily unavailable or there may be a malfunction in the system.

- In the following situations, perform the actions specified in the table. When the normal operating conditions are detected, the message will disappear and the system will become operational.

If the message does not disappear, contact your Lexus dealer.

Situation	Actions
When the area around a sensor is covered with dirt, moisture (fogged up, covered with condensation, ice, etc.), or other foreign matter	To clean the part of the windshield in front of the front camera, use the windshield wipers or the windshield defogger of the air conditioning system (→P.402).
When the temperature around the front camera is outside of the operational range, such as when the vehicle is in the sun or in an extremely cold environment	If the front camera is hot, such as after the vehicle had been parked in the sun, use the air conditioning system to decrease the temperature around the front camera.  If a sunshade was used when the vehicle was parked, depending on its type, the sunlight reflected from the surface of the sunshade may cause the temperature of the front camera to become excessively high.
	If the front camera is cold, such as after the vehicle is parked in an extremely cold environment, use the air conditioning system to increase the temperature around the front camera.
The area in front of the front camera is obstructed, such as when the hood is open or a sticker is attached to the part of the windshield in front of the front camera.	Close the hood, remove the sticker, etc. to clear the obstruction.

- In the following situations, if the situation has changed (or the vehicle has been driven for

some time) and the normal operating conditions are detected, the message will disappear and the system will become operational.

If the message does not disappear, contact your Lexus dealer.

- When the temperature around the radar sensor is outside of the operational range, such as when the vehicle is in the sun or in an extremely cold environment
- When the front camera cannot detect objects in front of the vehicle, such as when driving in the dark, snow, or fog, or when bright lights are shining into the front camera

### Lexus Safety System +\*

\*: If equipped

The Lexus Safety System + consists of the following drive assist systems and contributes to a safe and comfortable driving experience:

#### Driving assist system

##### ■ PCS (Pre-Collision System) (vehicles with Lexus Safety System +)

→P.271

##### ■ LTA (Lane Tracing Assist)\*

→P.283

\*: If equipped

##### ■ LDA (Lane Departure Alert with steering control)\*

→P.293

\*: If equipped

##### ■ AHS (Adaptive High-beam System)\*

→P.230

\*: If equipped

##### ■ AHB (Automatic High Beam)\*

→P.234

\*: If equipped

##### ■ Dynamic radar cruise control with full-speed range\*

→P.301

\*: If equipped

##### ■ Dynamic radar cruise control\*

→P.312

\*: If equipped

#### ⚠ WARNING

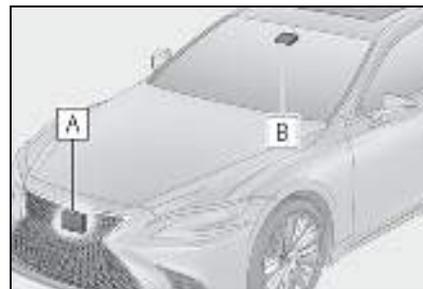
##### ■ Lexus Safety System +

The Lexus Safety System + is designed to operate under the assumption that the driver will drive safely, and is designed to help reduce the impact to the occupants and the vehicle in the case of a collision or assist the driver in normal driving conditions.

As there is a limit to the degree of recognition accuracy and control performance that this system can provide, do not overly rely on this system. The driver is always responsible for paying attention to the vehicle's surroundings and driving safely.

#### Sensors

Two types of sensors, located behind the front grille and windshield, detect information necessary to operate the drive assist systems.



**A** Radar sensor

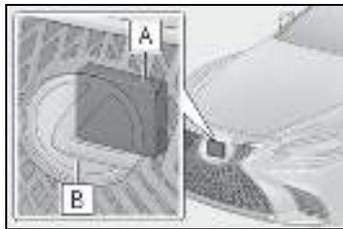
**B** Front camera

**⚠ WARNING**

■ **To avoid malfunction of the radar sensor**

Observe the following precautions. Otherwise, the radar sensor may not operate properly, possibly leading to an accident resulting in death or serious injury.

- Keep the radar sensor and the grille cover clean at all times.



- A** Radar sensor
- B** Grille cover

If the front of the radar sensor or the front or back of the grille cover is dirty or covered with water droplets, snow, etc., clean it.

Clean the radar sensor and grille cover with a soft cloth to avoid damaging them.

- Do not attach accessories, stickers (including transparent stickers) or other items to the radar sensor, grille cover or surrounding area.
- Do not subject the radar sensor or its surrounding area to a strong impact. If the radar sensor, front grille, or front bumper has been subjected to a strong impact, have the vehicle inspected by your Lexus dealer.
- Do not disassemble the radar sensor.
- Do not modify or paint the radar sensor or grille cover.

- If the radar sensor, front grille, or front bumper needs to be removed and installed, or replaced, contact your Lexus dealer.

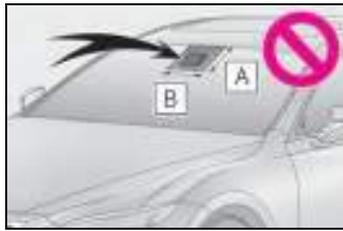
■ **To avoid malfunction of the front camera**

Observe the following precautions. Otherwise, the front camera may not operate properly, possibly leading to an accident resulting in death or serious injury.

- Keep the windshield clean at all times.
  - If the windshield is dirty or covered with an oily film, water droplets, snow, etc., clean the windshield.
  - If a glass coating agent is applied to the windshield, it will still be necessary to use the windshield wipers to remove water droplets, etc. from the area of the windshield in front of the front camera.
  - If the inner side of the windshield where the front camera is installed is dirty, contact your Lexus dealer.

**⚠ WARNING**

- Do not attach objects, such as stickers, transparent stickers, etc., to the outer side of the windshield in front of the front camera (shaded area in the illustration).



- A** From the top of the windshield to approximately 1 cm (0.4 in.) below the bottom of the front camera
- B** Approximately 20 cm (7.9 in.) (Approximately 10 cm [4.0 in.] to the right and left from the center of the front camera)

- If the part of the windshield in front of the front camera is fogged up or covered with condensation, or ice, use the windshield defogger to remove the fog, condensation, or ice. (→P.402)
- If water droplets cannot be properly removed from the area of the windshield in front of the front camera by the windshield wipers, replace the wiper insert or wiper blade.

If the wiper inserts or wiper blades need to be replaced, contact your Lexus dealer.

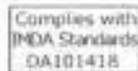
- Do not attach window tint to the windshield.
- Replace the windshield if it is damaged or cracked. If the windshield needs to be replaced, contact your Lexus dealer.
- Do not allow liquids to contact the front camera.

- Do not allow bright lights to shine into the front camera.
- Do not dirty or damage the front camera. When cleaning the inside of the windshield, do not allow glass cleaner to contact the lens of the front camera. Also, do not touch the lens. If the lens is dirty or damaged, contact your Lexus dealer.
- Do not subject the front camera to a strong impact.
- Do not change the installation position or direction of the front camera or remove it.
- Do not disassemble the front camera.
- Do not modify any components of the vehicle around the front camera (inside rear view mirror, etc.) or ceiling.
- Do not attach any accessories to the hood, front grille or front bumper that may obstruct the front camera. Contact your Lexus dealer.
- If a surfboard or other long object is to be mounted on the roof, make sure that it will not obstruct the front camera.
- Do not modify the headlights or other lights.

■ Certification



상호명/제조사 : DENSO CORPORATION  
기차재의 명칭 (모델명) : 차량 충돌방지용 레이더 무선기기(DNMWR009)  
제조연월/제조국 : See Product. / JAPAN  
식별부호 : MSIP-CRM-DKR-DNMWR009



**DENSO** DNMWR009

Brand Name: DENSO  
Model: DNMWR009

เครื่องโทรคมนาคมและอุปกรณ์นี้มีความสอดคล้องตามมาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.  
เพื่อหลีกเลี่ยงอันตรายที่อาจเกิดจากคลื่นแม่เหล็กไฟฟ้า การรบกวนรักษา ระยะห่างจากเซ็นเซอร์เรดาร์ให้มากกว่า 20 ซม. ขณะเซ็นเซอร์ทำงาน  
เครื่องวิทยุคมนาคมนี้มีระดับการแผ่คลื่นแม่เหล็กไฟฟ้าสอดคล้องตาม มาตรฐานความปลอดภัยต่อสุขภาพของมนุษย์จากการใช้เครื่องวิทยุคมนาคมที่คณะกรรมการกิจการกระจายเสียง กิจการโทรทัศน์ และ กิจการโทรคมนาคมแห่งชาติประกาศกำหนด

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。



For Vehicles sold in Jordan  
TRC approval number: TRC/LPD/2016/506

[Para los vehículos que se venden en Paraguay]  
Nombre del proveedor en Paraguay: Toyotoshi S.A.  
Dirección: Av. Mariscal Lopez 2801/2899 Asuncion, Paraguay

Este equipamento está homologado pela ANATEL de acordo com os procedimentos regulamentados pela Resolução 242/2000 e atende aos requisitos técnicos aplicados.

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

■ **If a warning message is displayed on the multi-information display**

A system may be temporarily unavailable or there may be a malfunction in the system.

- In the following situations, perform the actions specified in the table. When the normal operating conditions are detected, the message will disappear and the system will become operational.

If the message does not disappear, contact your Lexus dealer.

Situation	Actions
When the area around a sensor is covered with dirt, moisture (fogged up, covered with condensation, ice, etc.), or other foreign matter	To clean the part of the windshield in front of the front camera, use the windshield wipers or the windshield defogger of the air conditioning system (→P.402).
When the temperature around the front camera is outside of the operational range, such as when the vehicle is in the sun or in an extremely cold environment	If the front camera is hot, such as after the vehicle had been parked in the sun, use the air conditioning system to decrease the temperature around the front camera.  If a sunshade was used when the vehicle was parked, depending on its type, the sunlight reflected from the surface of the sunshade may cause the temperature of the front camera to become excessively high.
	If the front camera is cold, such as after the vehicle is parked in an extremely cold environment, use the air conditioning system to increase the temperature around the front camera.
The area in front of the front camera is obstructed, such as when the hood is open or a sticker is attached to the part of the windshield in front of the front camera.	Close the hood, remove the sticker, etc. to clear the obstruction.

- In the following situations, if the situation has changed (or the vehicle has been driven for

some time) and the normal operating conditions are detected, the message will disappear and the system will become operational.

If the message does not disappear, contact your Lexus dealer.

- When the temperature around the radar sensor is outside of the operational range, such as when the vehicle is in the sun or in an extremely cold environment
- When the front camera cannot detect objects in front of the vehicle, such as when driving in the dark, snow, or fog, or when bright lights are shining into the front camera

**PCS (Pre-Collision System)  
(vehicles with Lexus Safety  
System + A)**

The pre-collision system uses a front radar sensor and front camera to detect vehicles and pedestrians/bicyclists in front of your vehicle and front side radar sensors to detect vehicles approaching from the front left or right side. When the system determines that the possibility of a frontal collision with a vehicle or pedestrian/bicyclist is high, a warning operates to urge the driver to take evasive action and the potential brake pressure is increased to help the driver avoid the collision. If the system determines that the possibility of a frontal collision with a vehicle or pedestrian/bicyclist is extremely high, the brakes are automatically applied to help avoid the collision or help reduce the impact of the collision.

The pre-collision system can be disabled/enabled and the warning timing can be changed. (→P.264)

**System functions**

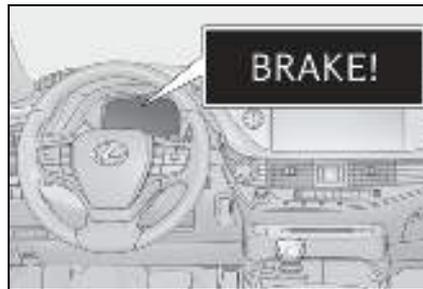
■ **Pedestrian alert**

When the system determines that there is a possibility of a frontal collision with a stationary or moving pedestrian in front of your vehicle, a message will be displayed on the head-up display to warn the driver.



■ **Pre-collision warning**

When the system determines that the possibility of a frontal collision is high, a buzzer will sound and a warning message will be displayed on the multi-information display to urge the driver to take evasive action.



■ **Pre-collision brake assist**

When the system determines that the possibility of a frontal collision is high, the system applies greater braking force in relation to how strongly the brake pedal is depressed.

■ **Pre-collision braking**

If the system determines that the possibility of a frontal collision is extremely high, the brakes are automatically applied to help avoid the collision or reduce the impact of the collision.

#### ■ Active steering assist

If the system determines that the possibility of a collision with an object, such as a guardrail, or pedestrian is high, even though the brakes are applied, and that the collision may be avoidable through steering control, the system will steer the vehicle automatically to help avoid the collision or help reduce the impact of the collision.

#### ■ Pre-collision seat belts (front seat only)

If the system determines that the possibility of a frontal collision is high, the system will retract the seat belts. Additionally, the system may retract the seat belts if the brakes are applied suddenly or control of the vehicle is lost.

#### ■ Pre-collision seatbacks (front passenger's seat / power rear seat [if equipped])

If the system determines that the possibility of a frontal collision is high, it may move the seatbacks of the front passenger's seat and power rear seats to the upright position automatically, if reclined.

If a seat is being adjusted, it may not be moved by the pre-collision seat function.

#### ■ Suspension control

When the system determines that the possibility of a frontal collision is high, the Adaptive Variable Suspension System (→P.381) will control the damping force of the shock absorbers to help maintain an appropriate vehicle posture.

#### ■ Steering control

When the system determines that the possibility of a frontal collision is high and the driver is operating the steering wheel, the LDH system (→P.381) will control the turning angle of the front and rear wheels and effort necessary to turn the steering wheel to help enhance steering responsiveness.

#### WARNING

##### ■ Limitations of the pre-collision system

- The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings. Do not use the pre-collision system instead of normal braking operations under any circumstances. This system will not prevent collisions or lessen collision damage or injury in every situation. Do not overly rely on this system. Failure to do so may lead to an accident, resulting in death or serious injury.
- Although this system is designed to help avoid a collision or help reduce the impact of the collision, its effectiveness may change according to various conditions, therefore the system may not always be able to achieve the same level of performance. Read the following conditions carefully. Do not overly rely on this system and always drive carefully.
  - Conditions under which the system may operate even if there is no possibility of a collision: →P.266
  - Conditions under which the system may not operate properly: →P.268

**WARNING**

- Do not attempt to test the operation of the pre-collision system yourself. Depending on the objects used for testing (dummies, cardboard objects imitating detectable objects, etc.), the system may not operate properly, possibly leading to an accident.

**■ Pre-collision braking**

- When the pre-collision braking function is operating, a large amount of braking force will be applied.
- If the vehicle is stopped by the operation of the pre-collision braking function, the pre-collision braking function operation will be canceled after approximately 2 seconds. Depress the brake pedal as necessary.
- The pre-collision braking function may not operate if certain operations are performed by the driver. If the accelerator pedal is being depressed strongly or the steering wheel is being turned, the system may determine that the driver is taking evasive action and possibly prevent the pre-collision braking function from operating.
- In some situations, while the pre-collision braking function is operating, operation of the function may be canceled if the accelerator pedal is depressed strongly or the steering wheel is turned and the system determines that the driver is taking evasive action.
- If the brake pedal is being depressed, the system may determine that the driver is taking evasive action and possibly delay the operation timing of the pre-collision braking function.

**■ Active steering assist**

- The steering wheel may turn automatically when active steering assist is operating.

- As active steering assist operation will be canceled when the system determines that a collision has been avoided, operate the steering wheel as necessary.

- In the following situations, the system may determine that the driver is taking evasive action. In this case, the active steering assist may not operate or may be canceled.

- If the accelerator pedal is being depressed strongly or the steering wheel is being operated. In this case the system may determine that the driver is taking evasive action and the pre-collision braking may not operate.
- In some situations, while the active steering assist is operating, operation of the function may be canceled if the accelerator pedal is depressed strongly or the steering wheel is turned and the system determines that the driver is taking evasive action.
- When the active steering assist is operating, if the steering wheel is held firmly or is operated in the opposite direction to that which the system is generating torque, the function may be canceled.
- If the brake pedal is depressed, the system may determine that the driver is taking evasive action and the active steering assist operation may be delayed.

**■ Pre-collision seat belts with comfort function**

If the pre-collision seat belts have operated and the seat belts are locked in a retracted position, immediately stop the vehicle in a safe place, release and retract the seat belts to unlock them and then fasten them again.

Also, if a seat belt can be loosened, it can be unlocked by slightly retracting it without releasing it.

**⚠ WARNING****■ When to disable the pre-collision system**

In the following situations, disable the system, as it may not operate properly, possibly leading to an accident resulting in death or serious injury:

- When the vehicle is being towed
- When your vehicle is towing another vehicle
- When transporting the vehicle via truck, boat, train or similar means of transportation
- When the vehicle is raised on a lift with the engine running and the tires are allowed to rotate freely
- When inspecting the vehicle using a drum tester such as a chassis dynamometer or speedometer tester, or when using an on vehicle wheel balancer
- When a strong impact has been applied to the front bumper, rear bumper or front grille, due to an accident or other reasons
- If the vehicle cannot be driven in a stable manner, such as when the vehicle has been in an accident or is malfunctioning
- When the vehicle is driven in a sporty manner or off-road
- When the tires are not properly inflated
- When the tires are very worn
- When tires of a size other than specified are installed
- When tire chains are installed
- When a compact spare tire or an emergency tire puncture repair kit is used

- If equipment (snow plow, etc.) that may obstruct a radar sensor or the front camera is temporarily installed to the vehicle

**Changing settings of the pre-collision system****■ Enabling/disabling the pre-collision system**

The pre-collision system can be enabled/disabled on  (→P.118) of the multi-information display.

The system is automatically enabled each time the engine switch is turned to IGNITION ON mode.

If the system is disabled, the PCS warning light will turn on and a message will be displayed on the multi-information display.

If the pre-collision system is disabled, the pedestrian alert system will also be disabled. At this time, the FCTA (Front Cross Traffic Alert) (→P.280) system will also be disabled.

**■ Enabling/Disabling the pedestrian alert system**

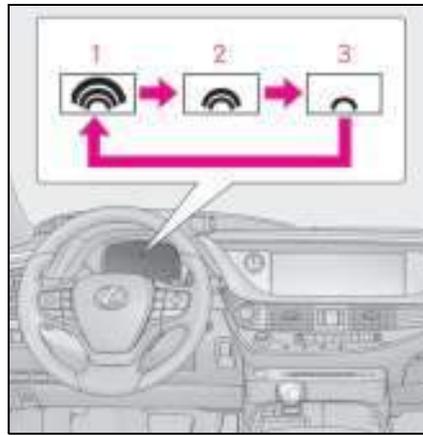
The pedestrian alert can be enabled/disabled on  (→P.118) of the

multi-information display. At this time, the FCTA (Front Cross Traffic Alert) system will also be enabled/disabled.

■ **Changing the pre-collision warning timing**

The pre-collision warning timing can be changed on  (→P.118) of the multi-information display. The warning timing for the pedestrian and FCTA (Front Cross Traffic Alert) system will also be changed.

The warning timing setting is retained when the engine switch is turned off. However, if the pre-collision system is disabled and re-enabled, the operation timing will return to the default setting (middle).



1 Early

2 Middle

This is the default setting.

3 Late

■ **Changing the pedestrian alert timing**

If the pre-collision warning timing is changed, the pedestrian alert and FCTA (Front Cross Traffic Alert) timing will also be changed accordingly.

■ **Operational conditions**

The pre-collision system is enabled and the system determines that the possibility of a frontal collision with a vehicle, pedestrian/bicyclist, guardrail, etc. or a front side collision with a vehicle is high. Each function is operational at the following speeds:

- Pedestrian alert

objects	Vehicle speed
Pedestrians	Approx. 30 to 65 km/h (20 to 40 mph)

## ● Pre-collision warning

objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles	Approx. 5 to 180 km/h (3 to 110 mph)	Approx. 5 to 180 km/h (3 to 110 mph)
Bicyclists and pedestrians	Approx. 5 to 80 km/h (3 to 50 mph)	Approx. 5 to 80 km/h (3 to 50 mph)

objects	Vehicle speed	Approaching vehicle speed
Vehicles approaching from the front left or right side	Approx. 10 to 60 km/h (7 to 37 mph)	Approx. 15 to 60 km/h (10 to 37 mph)

## ● Pre-collision brake assist

objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles	Approx. 30 to 180 km/h (20 to 110 mph)	Approx. 30 to 180 km/h (20 to 110 mph)
Bicyclists and pedestrians	Approx. 30 to 80 km/h (20 to 50 mph)	Approx. 30 to 80 km/h (20 to 50 mph)

objects	Vehicle speed	Approaching vehicle speed
Vehicles approaching from the front left or right side	Approx. 30 to 60 km/h (19 to 37 mph)	Approx. 15 to 60 km/h (10 to 37 mph)

## ● Pre-collision braking

objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles	Approx. 5 to 180 km/h (3 to 110 mph)	Approx. 5 to 180 km/h (3 to 110 mph)
Bicyclists and pedestrians	Approx. 5 to 80 km/h (3 to 50 mph)	Approx. 5 to 80 km/h (3 to 50 mph)

## ● Active steering assist

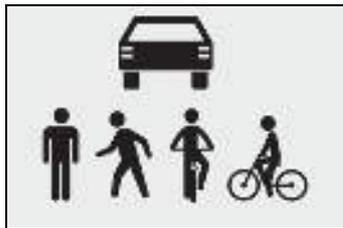
objects	Vehicle speed
Pedestrians	Approx. 40 to 65 km/h (25 to 40 mph)
Guardrail	Approx. 60 to 80 km/h (37 to 50 mph)

The system may not operate in the following situations:

- If a battery terminal has been disconnected and reconnected and then the vehicle has not been driven for a certain amount of time
- If the shift position is in R
- If VSC is disabled (only the pedestrian alert and pre-collision warning function will be operational)
- When there is insufficient safe or unobstructed space for the vehicle to be steered into
- When an object is approaching the area the vehicle is to be steered into

■ **Vehicle, pedestrian or bicyclist detection function**

The pre-collision system detects vehicles, pedestrians and bicyclists based on the size, profile, and motion of the person. However, a vehicle, pedestrian or bicyclist may not be detected depending on the surrounding brightness and the motion, posture, and angle of the person, preventing the system from operating properly. (→P.268)  
The illustration shows an image of vehicles, pedestrians and bicyclists.



■ **Cancellation of pre-collision braking and active steering assist**

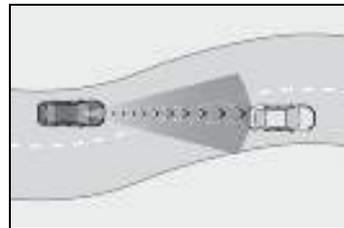
If either of the following occur while the pre-collision braking function is operating, it will be canceled:

- The accelerator pedal is depressed strongly.
- The steering wheel is turned sharply or abruptly.

■ **Conditions under which the system may operate even if there is no possibility of a collision**

- In some situations such as the following, the system may determine that there is a possibility of a frontal collision and operate.
  - When passing a vehicle, pedestrian or bicyclist
  - When changing lanes while overtaking a

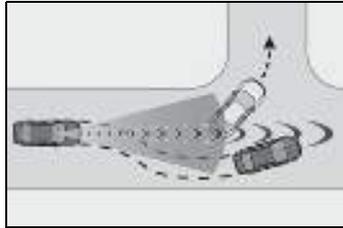
- vehicle, pedestrian or bicyclist
- When approaching a vehicle, pedestrian or bicyclist in an adjacent lane or on the roadside, such as when changing the course of travel or driving on a winding road



- When rapidly closing on a vehicle, pedestrian, bicyclist, etc.
- When approaching objects on the roadside, such as vehicle, pedestrian, bicyclist, guardrails, traffic signs, utility poles, street lights, trees, walls, etc.
- When there is a vehicle, pedestrian, bicyclist or object by the roadside at the entrance of a curve



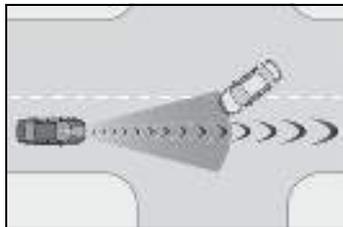
- When there are patterns or paint in front of your vehicle that may be mistaken for a vehicle, pedestrian or bicyclist
- When the front of your vehicle is hit by water, snow, dust, etc.
- When overtaking a vehicle, pedestrian or bicyclist that is changing lanes or making a right/left turn



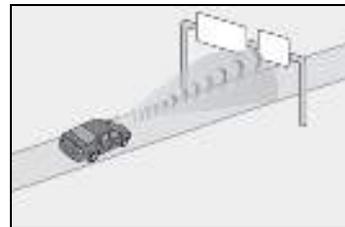
- When passing a vehicle, pedestrian or bicyclist in an oncoming lane that is stopped to make a right/left turn



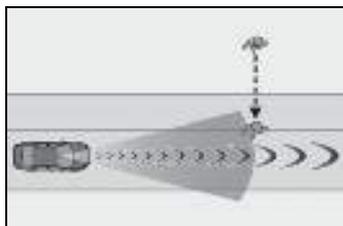
- When passing under an object (road sign, billboard, etc.)



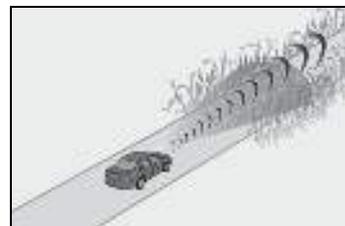
- When a vehicle, pedestrian or bicyclist approaches very close and then stops before entering the path of your vehicle
- If the front of your vehicle is raised or lowered, such as when on an uneven or undulating road surface
- When driving on a road surrounded by a structure, such as in a tunnel or on an iron bridge
- When there is a metal object (manhole cover, steel plate, etc.), steps, dips, or a protrusion on the road surface or roadside
- When a crossing pedestrian or bicyclist approaches very close to the vehicle



- When approaching an electric toll gate barrier, parking area barrier, or other barrier that opens and closes
- When using an automatic car wash
- When driving through or under objects that may contact the vehicle, such as thick grass, tree branches, or a banner

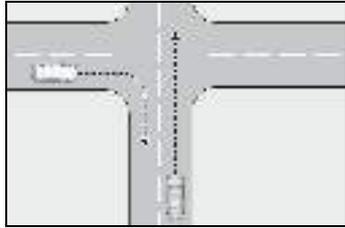


- When passing through a place with a low structure above the road such as a low ceiling, underpass, bridge girder, traffic sign, etc.

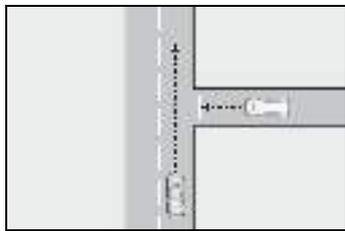


- When driving through steam or smoke
- When driving near an object that reflects radio waves, such as a large truck or guardrail
- When driving near a TV tower, broadcasting station, electric power plant, or other location where strong radio waves or electrical noise may be present
- When passing an oncoming vehicle on a narrow road
- When driving close to objects such as walls or poles on a median
- When passing an oncoming vehicle around a sharp curve
- When passing a vehicle which is making

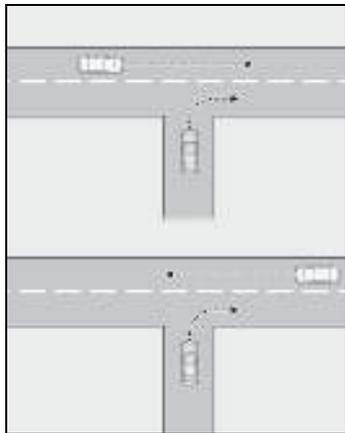
a left/right turn



- When being passed by a vehicle approaching from the left or right side in front of your vehicle



- When making a left/right turn while a vehicle is approaching from the left or right side in front of your vehicle



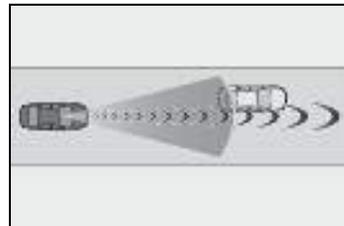
- When passing an object on the side of the road, such as a parked vehicle
- When passing an oncoming vehicle on a S curve
- When there is an object that may be mistaken for a pedestrian, such as a utility pole, tree, or pole on the roadside or at the entrance of a curve
- When there is a bicycle or motorcycle on

the roadside at the entrance of a curve

- If the preceding vehicle is a bicycle or motorcycle
- The system may operate the pedestrian alert unnecessarily if it detects the following:
  - Pedestrians on a sidewalk
  - Bicycles and motorcycles
  - Patterns or paint on the road, a wall, median, billboard, etc. that may be mistaken for a pedestrian or bicyclist

■ **Situations in which the system may not operate properly**

- In some situations, such as the following, a vehicle, pedestrian or bicyclist may not be detected by the sensors, preventing the system from operating properly:
  - When a vehicle, pedestrian or bicyclist is approaching your vehicle
  - When your vehicle or a vehicle, pedestrian or bicyclist is wobbling
  - If a vehicle, pedestrian or bicyclist makes an abrupt maneuver (such as sudden swerving, acceleration or deceleration)
  - When your vehicle approaches a vehicle, pedestrian or bicyclist rapidly
  - When a vehicle, pedestrian or bicyclist is not directly in front of your vehicle



- When a vehicle, pedestrian or bicyclist is near a wall, fence, guardrail, manhole cover, vehicle, steel plate on the road, etc.
- When a vehicle, pedestrian or bicyclist is under a structure
- When part of a vehicle, pedestrian or bicyclist is hidden by an object, such as large baggage, an umbrella, or guardrail
- When multiple vehicles, pedestrians or bicyclists are close together
- If the sun or other light is shining directly on a vehicle, pedestrian, bicyclist or guardrail ahead
- When a vehicle, pedestrian or bicyclist is

- a shade of white and looks extremely bright
- When a vehicle, pedestrian or bicyclist appears to be nearly the same color or brightness as its surroundings
  - If a vehicles, pedestrians or bicyclists cuts or suddenly emerges in front of your vehicle
  - When the front of your vehicle is hit by water, snow, dust, etc.
  - When a very bright light ahead, such as the sun or the headlights of oncoming traffic, shines directly into the front camera
  - When approaching the side or front of a vehicle ahead
  - If a vehicle ahead is a motorcycle
  - If a vehicle ahead is narrow, such as a personal mobility vehicle
  - If a preceding vehicle has a small rear end, such as an unloaded truck
  - If a preceding vehicle has a low rear end, such as a low bed trailer

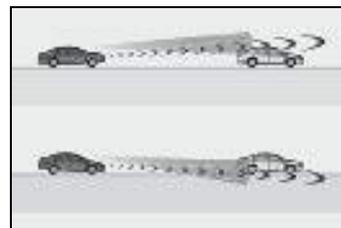


- If a vehicle ahead has extremely high ground clearance



- If a vehicle ahead is carrying a load which protrudes past its rear bumper
- If a vehicle ahead is irregularly shaped, such as a tractor or side car
- If a vehicle ahead is a child sized bicycle, a bicycle that is carrying a large load, a bicycle ridden by more than one person, or a uniquely shaped bicycle (bicycle with

- a child seat, tandem bicycle, etc.)
- If a pedestrian/or the riding height of a bicyclist ahead is shorter than approximately 1 m (3.2 ft.) or taller than approximately 2 m (6.5 ft.)
- If a pedestrian/bicyclist is wearing oversized clothing (a rain coat, long skirt, etc.), making their silhouette obscure
- If a pedestrian is bending forward or squatting or bicyclist is bending forward
- If a pedestrian/bicyclist is moving fast
- If a pedestrian is pushing a stroller, wheelchair, bicycle or other vehicle
- When driving in inclement weather such as heavy rain, fog, snow or a sandstorm
- When driving through steam or smoke
- When the surrounding area is dim, such as at dawn or dusk, or while at night or in a tunnel, making a vehicle, pedestrian or bicyclist appear to be nearly the same color as its surroundings
- When driving in a place where the surrounding brightness changes suddenly, such as at the entrance or exit of a tunnel
- When driving in a location where there are many objects which reflect radar, such as a tunnel or parking garage
- After the engine has started the vehicle has not been driven for a certain amount of time
- While making a left/right turn and for a few seconds after making a left/right turn
- While driving on a curve and for a few seconds after driving on a curve
- If your vehicle is skidding
- If the front of the vehicle is raised or lowered



- If the wheels are misaligned
- If a wiper blade is blocking the front camera
- The vehicle is being driven at extremely high speeds.
- When driving on a hill

- If the radar sensor or front camera is misaligned
- If the headlights are misaligned
- When approaching a guardrail at a wide or narrow angle
- When a vehicle approaches your vehicle from the front left or right side while your vehicle is entering an intersection with poor visibility
- When a vehicle approaches your vehicle from the rear left or right side
- When a vehicle approaches the side of your vehicle at a shallow angle
- When driving on a road with a grade that changes sharply (sharp incline/decline)
- Pedestrians and bicyclists which are not illuminated by the headlights at night, in a tunnel, etc.
- Pedestrians and bicyclists which change speed or direction abruptly
- Pedestrians and bicyclists which suddenly emerge from behind a vehicle or large object
- Pedestrians and bicyclists which are extremely close to the side of the vehicle (outside rear view mirror, etc.)
- In some situations, such as the following, the sensors may not detect the lane lines or a safe space the vehicle can be steered into, preventing the active steering assist from operating properly:
  - When the white (yellow) lane lines are difficult to see, such as when they are faint, diverging/merging, or a shadow is cast upon them
  - When the lane is more wide or narrow than normal
  - When there is a light and dark pattern on the road surface, such as due to road repairs
  - If the system determines that a collision can be avoided by only using the brakes
  - When a pedestrian is detected near the centerline of the vehicle
- In some situations such as the following, sufficient braking force or steering force may not be obtained, preventing the system from performing properly:
  - If the braking functions cannot operate to their full extent, such as when the brake parts are extremely cold, extremely hot, or wet
  - If the vehicle is not properly maintained (brakes or tires are excessively worn, improper tire inflation pressure, etc.)
  - When the vehicle is being driven on a gravel road or other slippery surface
  - If there are deep ruts in the road
  - When driving on a slope
  - When driving on a horizontally slanted road
- Some guardrails, such as the following, may not be detected by the sensors, preventing the system from operating properly:
  - Guardrails which are less than approximately 60 cm (1.9 ft.) tall
  - Short guardrails
  - Irregularly-shaped guardrails (wire cable guardrails, guardrails made of thin poles, etc.)
  - Guardrails which are not illuminated by the headlights at night, in a tunnel, etc.
  - Guardrails which appear to be nearly the same color or brightness as their surroundings
  - Guardrails which appear to be nearly the same shape as their surroundings (walls, etc.)
  - Guardrails which are over a metal object (manhole cover, steel plate, etc.)
  - Guardrails which are hidden behind thick grass
  - Guardrails which are extremely close to the side of the vehicle (outside rear view mirror, etc.)
  - Curved guardrails or guardrails at the entrance of a curve
- In some situations such as the following, the system may detect a pedestrian and display a warning on the head-up display, even though no pedestrian exists:
  - If the front of the vehicle is raised or lowered, such as when the road surface is uneven or undulating (due to ruts, etc.)
  - When driving on a slope
  - When driving on a horizontally slanted road
  - If the driver's posture (driver seat position) is extreme, such as excessively reclined
  - If the head-up display position is set extremely high

- If VSC is disabled
- If VSC is disabled (→P.380), the pre-collision brake assist and pre-collision braking functions are also disabled.
- The PCS warning light will turn on and “VSC Turned Off Pre-Collision Brake System Unavailable” will be displayed on the multi-information display.

### PCS (Pre-Collision System) (vehicles with Lexus Safety System +)

The pre-collision system uses a radar sensor and front camera to detect objects (→P.271) in front of the vehicle. When the system determines that the possibility of a frontal collision with an object is high, a warning operates to urge the driver to take evasive action and the potential brake pressure is increased to help the driver avoid the collision. If the system determines that the possibility of a frontal collision with an object is extremely high, the brakes are automatically applied to help avoid the collision or help reduce the impact of the collision.

The pre-collision system can be disabled/enabled and the warning timing can be changed. (→P.274)

4

Driving

### Detectable objects

Regions	Detectable objects	Countries/areas
A	<ul style="list-style-type: none"> <li>● Vehicles</li> <li>● Bicyclists</li> <li>● Pedestrians</li> </ul>	Korea, Singapore, Brunei, Oman, Qatar, Kuwait, Saudi Arabia, Bahrain, United Arab Emirates, South Africa

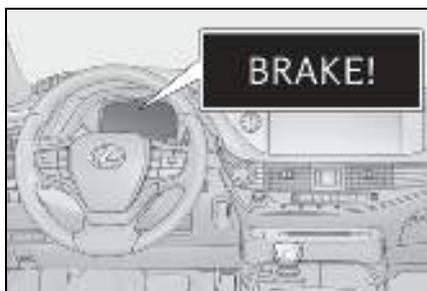
Regions	Detectable objects	Countries/areas
B	<ul style="list-style-type: none"> <li>• Vehicles</li> <li>• Pedestrians</li> </ul>	Taiwan
C	Vehicles	Indonesia, Thailand, Philippines, Viet Nam, Malaysia, Jordan, Lebanon, Guatemala, Costa Rica, Nicaragua, Panama, Paraguay, Peru, Bolivia, Honduras, Dominican Republic

The countries and areas for each region listed in the table are current as of September 2019. However, depending on when the vehicle was sold, the countries and areas of each region may be different. Contact your Lexus dealer for details.

### System functions

#### ■ Pre-collision warning

When the system determines that the possibility of a frontal collision is high, a buzzer will sound and a warning message will be displayed on the multi-information display to urge the driver to take evasive action.



#### ■ Pre-collision brake assist

When the system determines that the possibility of a frontal collision is high, the system applies greater braking force in relation to how strongly the brake pedal is depressed.

#### ■ Pre-collision braking

If the system determines that the possibility of a frontal collision is extremely high, the brakes are automatically applied to help avoid the collision or reduce the impact of the collision.

#### ■ Pre-collision seatbacks (front passenger's seat / power rear seat [if equipped])

If the system determines that the possibility of a frontal collision is high, it may move the seatbacks of the front passenger's seat and power rear seats to the upright position automatically, if reclined.

If a seat is being adjusted, it may not be moved by the pre-collision seat function.

#### ■ Suspension control

When the system determines that the possibility of a frontal collision is high, the AVS (→P.381) will control the damping force of the shock absorbers to help maintain an appropriate vehicle posture.

### ■ Steering control

When the system determines that the possibility of a frontal collision is high and the driver is operating the steering wheel, the LDH system (→P.381) will control the turning angle of the front and rear wheels and effort necessary to turn the steering wheel to help enhance steering responsiveness.

### ⚠ WARNING

#### ■ Limitations of the pre-collision system

- The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings. Do not use the pre-collision system instead of normal braking operations under any circumstances. This system will not prevent collisions or lessen collision damage or injury in every situation. Do not overly rely on this system. Failure to do so may lead to an accident, resulting in death or serious injury.
- Although this system is designed to help avoid a collision or help reduce the impact of the collision, its effectiveness may change according to various conditions, therefore the system may not always be able to achieve the same level of performance. Read the following conditions carefully. Do not overly rely on this system and always drive carefully.
  - Conditions under which the system may operate even if there is no possibility of a collision: →P.276
  - Conditions under which the system may not operate properly: →P.278

- Do not attempt to test the operation of the pre-collision system yourself. Depending on the objects used for testing (dummies, cardboard objects imitating detectable objects, etc.), the system may not operate properly, possibly leading to an accident.

#### ■ Pre-collision braking

- When the pre-collision braking function is operating, a large amount of braking force will be applied.
- If the vehicle is stopped by the operation of the pre-collision braking function, the pre-collision braking function operation will be canceled after approximately 2 seconds. Depress the brake pedal as necessary.
- The pre-collision braking function may not operate if certain operations are performed by the driver. If the accelerator pedal is being depressed strongly or the steering wheel is being turned, the system may determine that the driver is taking evasive action and possibly prevent the pre-collision braking function from operating.
- In some situations, while the pre-collision braking function is operating, operation of the function may be canceled if the accelerator pedal is depressed strongly or the steering wheel is turned and the system determines that the driver is taking evasive action.
- If the brake pedal is being depressed, the system may determine that the driver is taking evasive action and possibly delay the operation timing of the pre-collision braking function.

#### ■ When to disable the pre-collision system

In the following situations, disable the system, as it may not operate properly, possibly leading to an accident resulting in death or serious injury:

**⚠ WARNING**

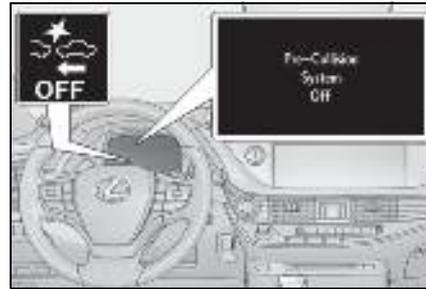
- When the vehicle is being towed
- When your vehicle is towing another vehicle
- When transporting the vehicle via truck, boat, train or similar means of transportation
- When the vehicle is raised on a lift with the engine running and the tires are allowed to rotate freely
- When inspecting the vehicle using a drum tester such as a chassis dynamometer or speedometer tester, or when using an on vehicle wheel balancer
- When a strong impact is applied to the front bumper or front grille, due to an accident or other reasons
- If the vehicle cannot be driven in a stable manner, such as when the vehicle has been in an accident or is malfunctioning
- When the vehicle is driven in a sporty manner or off-road
- When the tires are not properly inflated
- When the tires are very worn
- When tires of a size other than specified are installed
- When tire chains are installed
- When a compact spare tire or an emergency tire puncture repair kit is used
- If equipment (snow plow, etc.) that may obstruct the radar sensor or front camera is temporarily installed to the vehicle

**Changing settings of the pre-collision system****■ Enabling/disabling the pre-collision system**

The pre-collision system can be enabled/disabled on  (→P.118) of the multi-information display.

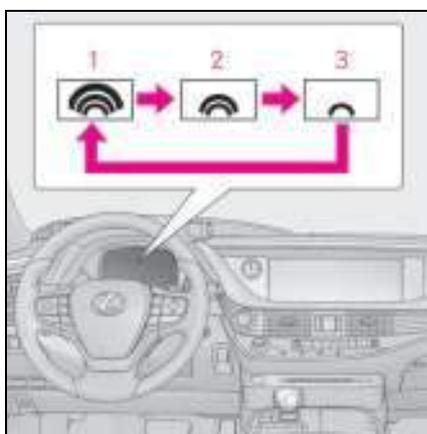
The system is automatically enabled each time the engine switch is turned to IGNITION ON mode.

If the system is disabled, the PCS warning light will turn on and a message will be displayed on the multi-information display.

**■ Changing the pre-collision warning timing**

The pre-collision warning timing can be changed on  (→P.118) of the multi-information display.

The warning timing setting is retained when the engine switch is turned off. However, if the pre-collision system is disabled and re-enabled, the operation timing will return to the default setting (middle).

**2 Middle**

This is the default setting.

**3 Late****1 Early****■ Operational conditions**

The pre-collision system is enabled and the system determines that the possibility of a frontal collision with a detected object is high.

Each function is operational at the following speed

## ● Pre-collision warning

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Vehicles	Approx. 10 to 180 km/h (7 to 110 mph)	Approx. 10 to 180 km/h (7 to 110 mph)
Bicyclists and pedestrians *	Approx. 10 to 80 km/h (7 to 50 mph)	Approx. 10 to 80 km/h (7 to 50 mph)

## ● Pre-collision brake assist

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Vehicles	Approx. 30 to 180 km/h (20 to 110 mph)	Approx. 30 to 180 km/h (20 to 110 mph)
Bicyclists and pedestrians *	Approx. 30 to 80 km/h (20 to 50 mph)	Approx. 30 to 80 km/h (20 to 50 mph)

● Pre-collision braking

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Vehicles	Approx. 10 to 180 km/h (7 to 110 mph)	Approx. 10 to 180 km/h (7 to 110 mph)
Bicyclists and pedestrians *	Approx. 10 to 80 km/h (7 to 50 mph)	Approx. 10 to 80 km/h (7 to 50 mph)

\* : Applicable to vehicles designed for regions that detection of pedestrians and/or bicyclists is possible (→P.271)

The system may not operate in the following situations:

- If a battery terminal has been disconnected and reconnected and then the vehicle has not been driven for a certain amount of time
- If the shift position is in R
- When the VSC OFF indicator is illuminated (only the pre-collision warning function will be operational)

■ Object detection function

The system detects objects based on their size, profile, motion, etc. However, an object may not be detected depending on the surrounding brightness and the motion, posture, and angle of the detected object, preventing the system from operating properly. (→P.278)

The illustration shows an image of detectable objects.

► Region A



► Region B



► Region C



■ Cancellation of the pre-collision braking

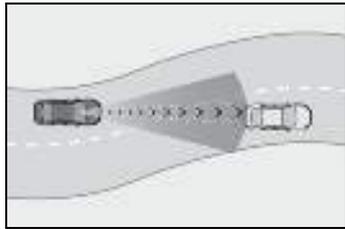
If either of the following occur while the pre-collision braking function is operating, it will be canceled:

- The accelerator pedal is depressed strongly.
- The steering wheel is turned sharply or abruptly.

■ Conditions under which the system may operate even if there is no possibility of a collision

- In some situations such as the following, the system may determine that there is a possibility of a frontal collision and operate.
  - When passing a detectable object, etc.
  - When changing lanes while overtaking a detectable object, etc.

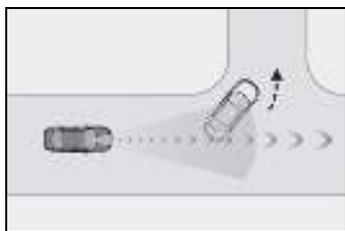
- When approaching a detectable object in an adjacent lane or on the roadside, such as when changing the course of travel or driving on a winding road



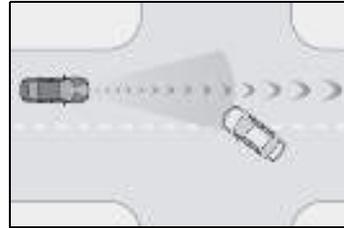
- When rapidly closing on a detectable object, etc.
- When approaching objects on the roadside, such as detectable objects, guardrails, utility poles, trees, or walls
- When there is a detectable object or other object by the roadside at the entrance of a curve



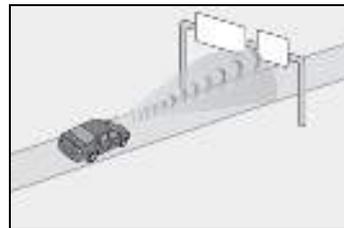
- When there are patterns or paint in front of your vehicle that may be mistaken for a detectable object
- When the front of your vehicle is hit by water, snow, dust, etc.
- When overtaking a detectable object that is changing lanes or making a right/left turn



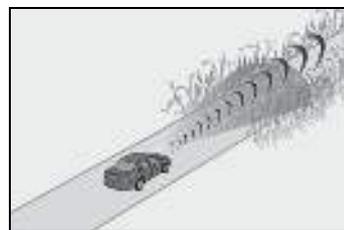
- When passing a detectable object in an oncoming lane that is stopped to make a right/left turn



- When a detectable object approaches very close and then stops before entering the path of your vehicle
- If the front of your vehicle is raised or lowered, such as when on an uneven or undulating road surface
- When driving on a road surrounded by a structure, such as in a tunnel or on an iron bridge
- When there is a metal object (manhole cover, steel plate, etc.), steps, or a protrusion in front of your vehicle
- When passing under an object (road sign, billboard, etc.)



- When approaching an electric toll gate barrier, parking area barrier, or other barrier that opens and closes
- When using an automatic car wash
- When driving through or under objects that may contact your vehicle, such as thick grass, tree branches, or a banner

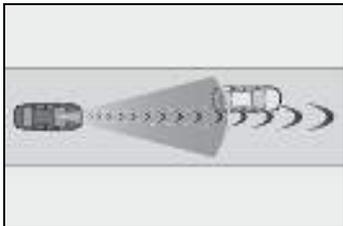


- When driving through steam or smoke
- When driving near an object that reflects radio waves, such as a large truck or

- guardrail
- When driving near a TV tower, broadcasting station, electric power plant, or other location where strong radio waves or electrical noise may be present

■ **Situations in which the system may not operate properly**

- In some situations such as the following, an object may not be detected by the radar sensor and front camera, preventing the system from operating properly:
  - When a detectable object is approaching your vehicle
  - When your vehicle or a detectable object is wobbling
  - If a detectable object makes an abrupt maneuver (such as sudden swerving, acceleration or deceleration)
  - When your vehicle approaches a detectable object rapidly
  - When a detectable object is not directly in front of your vehicle



- When a detectable object is near a wall, fence, guardrail, manhole cover, vehicle, steel plate on the road, etc.
- When a detectable object is under a structure
- When part of a detectable object is hidden by an object, such as large baggage, an umbrella, or guardrail
- When multiple detectable objects are close together
- If the sun or other light is shining directly on a detectable object
- When a detectable object is a shade of white and looks extremely bright
- When a detectable object appears to be nearly the same color or brightness as its surroundings
- If a detectable object cuts or suddenly emerges in front of your vehicle
- When the front of your vehicle is hit by

- water, snow, dust, etc.
- When a very bright light ahead, such as the sun or the headlights of oncoming traffic, shines directly into the front camera
- When approaching the side or front of a vehicle ahead
- If a vehicle ahead is a bicycle<sup>\*1</sup> or motorcycle
- If a vehicle ahead is narrow, such as a personal mobility vehicle
- If a preceding vehicle has a small rear end, such as an unloaded truck
- If a preceding vehicle has a low rear end, such as a low bed trailer

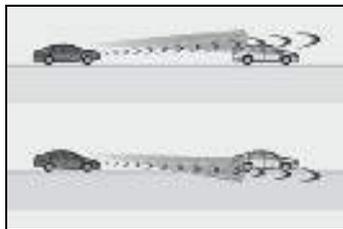


- If a vehicle ahead has extremely high ground clearance



- If a vehicle ahead is carrying a load which protrudes past its rear bumper
- If a vehicle ahead is irregularly shaped, such as a tractor or side car
- If a vehicle ahead is a child sized bicycle, a bicycle that is carrying a large load, a bicycle ridden by more than one person, or a uniquely shaped bicycle (bicycle with a child seat, tandem bicycle, etc.)<sup>\*2</sup>
- If a pedestrian/or the riding height of a bicyclist ahead is shorter than approximately 1 m (3.2 ft.) or taller than approximately 2 m (6.5 ft.)<sup>\*2</sup>
- If a pedestrian/bicyclist is wearing oversized clothing (a rain coat, long skirt,

- etc.), making their silhouette obscure<sup>\*2</sup>
- If a pedestrian is bending forward or squatting or bicyclist is bending forward<sup>\*2</sup>
- If a pedestrian/bicyclist is moving fast<sup>\*2</sup>
- If a pedestrian is pushing a stroller, wheelchair, bicycle or other vehicle<sup>\*2</sup>
- When driving in inclement weather such as heavy rain, fog, snow or a sandstorm
- When driving through steam or smoke
- When the surrounding area is dim, such as at dawn or dusk, or while at night or in a tunnel, making a detectable object appear to be nearly the same color as its surroundings
- When driving in a place where the surrounding brightness changes suddenly, such as at the entrance or exit of a tunnel
- After the engine has started the vehicle has not been driven for a certain amount of time
- While making a left/right turn and for a few seconds after making a left/right turn
- While driving on a curve and for a few seconds after driving on a curve
- If your vehicle is skidding
- If the front of the vehicle is raised or lowered



- If the wheels are misaligned
- If a wiper blade is blocking the front camera
- The vehicle is being driven at extremely high speeds
- When driving on a hill
- If the radar sensor or front camera is misaligned
- In some situations such as the following, sufficient braking force may not be obtained, preventing the system from performing properly:
  - If the braking functions cannot operate to

their full extent, such as when the brake parts are extremely cold, extremely hot, or wet

- If the vehicle is not properly maintained (brakes or tires are excessively worn, improper tire inflation pressure, etc.)
- When the vehicle is being driven on a gravel road or other slippery surface

<sup>\*1</sup>: Applicable to vehicles designed for countries/areas that detection of bicyclists is not possible (→P.271)

<sup>\*2</sup>: Applicable to vehicles designed for countries/areas that detection of pedestrians and/or bicyclists is possible (→P.271)

#### ■ If VSC is disabled

- If VSC is disabled (→P.382), the pre-collision brake assist and pre-collision braking functions are also disabled.
- The PCS warning light will turn on and "VSC Turned Off Pre-Collision Brake System Unavailable" will be displayed on the multi-information display.

### FCTA (Front Cross Traffic Alert)\*

\*: If equipped

When approaching an intersection at low speed, the radar sensors on the front side of the vehicle can detect approaching vehicles to the left and right of the front of the vehicle. In this case, the head-up display is used to inform the driver of detected vehicles.

### FCTA system functions

When the system detects a vehicle approaching from the left or right in front of your vehicle when approaching an intersection, a notification will be displayed on the head-up display and panoramic view monitor\*.

\*: Refer to "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".

When the system determines that your vehicle may be about to enter an intersection even though a vehicle is approaching from the left or right in front of your vehicle, a buzzer will sound and a message will be displayed on the multi-information display to urge you to depress the brake pedal.

- Head-up display



- Multi-information display



### ⚠ WARNING

#### ■ Cautions regarding the use of the function

The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings.

The FCTA system is a supplementary system that informs the driver of vehicles approaching from the left and right of the front of the vehicle.

Do not overly rely on the FCTA system. Over reliance on the system may lead to an accident, resulting in death or serious injury.

The details of the warning display may differ from the actual traffic conditions.

Although the warning display will stop being displayed after a certain amount of time, this does not indicate that vehicles or pedestrians are no longer around your vehicle.

### ■ The FCTA function is operational when

The system operates when all of the following conditions are met.

- Setting for "PCS" and "CAUTION" in  (→P.118) of the multi-information display are set to "ON".
- A shift position other than P or R is selected.
- Vehicle speed is approximately 15 km/h (9 mph) or lower.
- A vehicle is approaching from the left or right in front of your vehicle at a speed between approximately 10 km/h (6 mph) and 60 km/h (37 mph).
- There are no preceding vehicles ahead of your vehicle.
- The accelerator pedal is not strongly depressed.
- The brake pedal is not being strongly depressed.

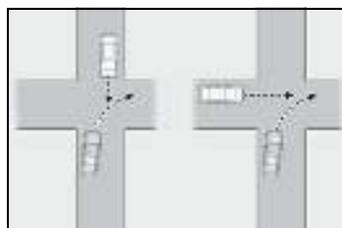
### ■ Situations in which the system may operate even though no vehicles are approaching

In certain situations, such as the following, the system may operate even though no vehicles are approaching:

- When approaching objects on the roadside, such as guardrails, traffic signs, utility poles, street lights, trees, or walls
- When driving near a TV tower, broadcasting station, electric power plant, or other location where strong radio waves or electrical noise may be present
- When passing an object on the side of the road, such as a parked vehicle
- When a vehicle or pedestrian is approaching from the left or right in front of your vehicle from far away
- When a vehicle or pedestrian is moving within a parking spot, etc. next to the lane your vehicle is driving in
- When a pedestrian or bicyclist is moving on a sidewalk
- When a vehicle or pedestrian is moving

away from your vehicle

- When a vehicle approaching from the left or right in front of your vehicle is decelerating or stops
- When a vehicle approaching from the left or right in front of your vehicle makes a left/right turn immediately in front of your vehicle
- When a pedestrian is approaching your vehicle
- When an oncoming vehicle makes a left/right turn
- When your vehicle enters an intersection before a vehicle approaching from the left or right in front of your vehicle
- When stopped at traffic light and a vehicle approaches from the left or right in front of your vehicle
- When driving in a location where there are objects which reflect radar, such as vehicles, guardrails, walls, traffic signs, etc.
- When making a left/right turn in front of an approaching vehicle



- When passing an oncoming vehicle
- When being overtaken by another vehicle
- When driving next to another vehicle or a pedestrian
- When a vehicle or pedestrian approaches the side of your vehicle

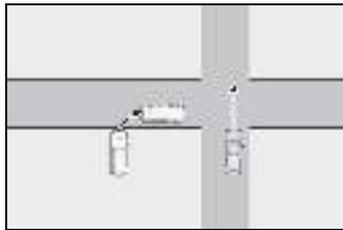
Some objects, such as the following, may be detected and cause the FCTA system to operate:

- Pedestrians

■ **Situations in which the system may not operate properly**

In some situations, such as the following, a vehicle may not be detected by a front side radar sensor, preventing the system from operating properly:

- If the front end or side of an approaching vehicle is small (sports cars, etc.)
- If the front end of an approaching vehicle is low (low-slung sports cars, etc.)
- If the ground clearance of an approaching vehicle is extremely high
- If the shape of an approaching vehicle is unusual (tractors, motorcycles with side-cars, etc.)
- If a vehicle suddenly enters the detection area on the left or right in front of your vehicle from a parking lot, etc.



- If an approaching vehicle moves suddenly (sudden steering, acceleration, deceleration, etc.)
- When driving in inclement weather such as heavy rain, fog, snow or a sandstorm
- After the engine has been started and the vehicle has not been driven for a certain amount of time
- When driving on a road with a grade that changes sharply (sharp incline/decline)
- When driving around a sharp curve or on an undulating road
- If a vehicle is approaching from the left or right of the front of your vehicle diagonally
- When a vehicle is approaching from the left or right in front of your vehicle from far away
- When there is an object between your vehicle and an approaching vehicle

- When driving in a location where there are objects which reflect radar, such as guardrails, walls, vehicles, etc.
- When a group of vehicles which are close together approach
- Immediately after the FCTA system has been enabled

■ **If the PCS warning light illuminates and a message is displayed on the multi-information display**

The system may be temporarily unavailable or may be malfunctioning.

**LTA (Lane Tracing Assist)\***

\*: If equipped

**Summary of function**

When driving on highways and free-ways with white (yellow) lane lines, this function alerts the driver when the vehicle might depart from its lane or course\* and provides assistance by operating the steering wheel to keep the vehicle in its lane or course\*. Furthermore, the system provides steering assistance when dynamic radar cruise control with full-speed range is operating to keep the vehicle in its lane.

The LTA system recognizes white (yellow) lane lines or a course\* using the front camera. Additionally, it detects preceding vehicles using the front camera and radar.

\*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

**! WARNING****■ Before using LTA system**

- Do not rely solely upon the LTA system. The LTA system does not automatically drive the vehicle or reduce the amount of attention that must be paid to the area in front of the vehicle. The driver must always assume full responsibility for driving safely by paying careful attention to the surrounding conditions and operating the steering wheel to correct the path of the vehicle. Also, the driver must take adequate breaks when fatigued, such as from driving for a long period of time.
  - Failure to perform appropriate driving operations and pay careful attention may lead to an accident, resulting in death or serious injury.
  - When not using the LTA system, use the LTA switch to turn the system off.
- Situations unsuitable for LTA system**
- In the following situations, use the LTA switch to turn the system off. Failure to do so may lead to an accident, resulting in death or serious injury.
- Vehicle is driven on a road surface which is slippery due to rainy weather, fallen snow, freezing, etc.
  - Vehicle is driven on a snow-covered road.
  - White (yellow) lines are difficult to see due to rain, snow, fog, dust, etc.
  - Vehicle is driven in a temporary lane or restricted lane due to construction work.
  - Vehicle is driven in a construction zone.
  - A spare tire, tire chains, etc. are equipped.

**⚠ WARNING**

- When the tires have been excessively worn, or when the tire inflation pressure is low.
- When tires of a size other than specified are installed.
- Vehicle is driven in traffic lanes other than that highways and freeways.
- During emergency towing.

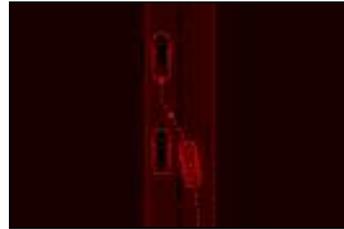
**■ Preventing LTA system malfunctions and operations performed by mistake**

- Do not modify the headlights or place stickers, etc. on the surface of the lights.
- Do not modify the suspension etc. If the suspension etc. needs to be replaced, contact your Lexus dealer.
- Do not install or place anything on the hood or grille. Also, do not install a grille guard (bull bars, kangaroo bar, etc.).
- If your windshield needs repairs, contact your Lexus dealer.

**■ Conditions in which functions may not operate properly**

In the following situations, the functions may not operate properly and the vehicle may depart from its lane. Drive safely by always paying careful attention to your surroundings and operate the steering wheel to correct the path of the vehicle without relying solely on the functions.

- When the follow-up cruising display is displayed (→P.288) and the preceding vehicle changes lanes. (Your vehicle may follow the preceding vehicle and also change lanes.)

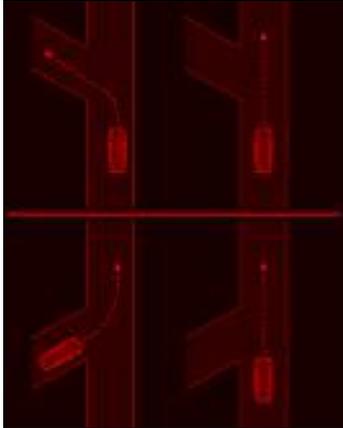


- When the follow-up cruising display is displayed (→P.288) and the preceding vehicle is swaying. (Your vehicle may sway accordingly and depart from the lane.)
- When the follow-up cruising display is displayed (→P.288) and the preceding vehicle departs from its lane. (Your vehicle may follow the preceding vehicle and depart from the lane.)
- When the follow-up cruising display is displayed (→P.288) and the preceding vehicle is being driven extremely close to the left/right lane line. (Your vehicle may follow the preceding vehicle and depart from the lane.)
- Vehicle is being driven around a sharp curve.
- Objects or patterns that could be mistaken for white (yellow) lines are present on the side of the road (guardrails, reflective poles, etc.).



**⚠ WARNING**

- Vehicle is driven where the road diverges, merges, etc.



- Repair marks of asphalt, white (yellow) lines, etc. are present due to road repair.



- There are shadows on the road that run parallel with, or cover, the white (yellow) lines.
- The vehicle is driven in an area without white (yellow) lines, such as in front of a tollgate or checkpoint, or at an intersection, etc.
- The white (yellow) lines are cracked, "Raised pavement marker" or stones are present.
- The white (yellow) lines cannot be seen or are difficult to see due to sand, etc.

- The vehicle is driven on a road surface that is wet due to rain, puddles, etc.
- The traffic lines are yellow (which may be more difficult to recognize than lines that are white).
- The white (yellow) lines cross over a curb, etc.
- The vehicle is driven on a bright surface, such as concrete.
- If the edge of the road is not clear or straight.
- The vehicle is driven on a surface that is bright due to reflected light, etc.
- The vehicle is driven in an area where the brightness changes suddenly, such as at the entrances and exits of tunnels, etc.
- Light from the headlights of an oncoming vehicle, the sun, etc. enters the camera.
- The vehicle is driven on a slope.
- The vehicle is driven on a road which tilts left or right, or a winding road.
- The vehicle is driven on an unpaved or rough road.
- The traffic lane is excessively narrow or wide.
- The vehicle is extremely tilted due to carrying heavy luggage or having improper tire pressure.
- The distance to the preceding vehicle is extremely short.
- The vehicle is moving up and down a large amount due to road conditions during driving (poor roads or road seams).
- When driving in a tunnel or at night with the headlights off or when a headlight is dim due to its lens being dirty or it being misaligned.

**⚠ WARNING**

- The vehicle is struck by a crosswind.
- The vehicle is affected by wind from a vehicle driven in a nearby lane.
- The vehicle has just changed lanes through operation of the steering wheel by the driver or crossed an intersection.
- Tires which differ by structure, manufacturer, brand or tread pattern are used.
- Snow tires, etc. are equipped.
- The vehicle is being driven at extremely high speeds.

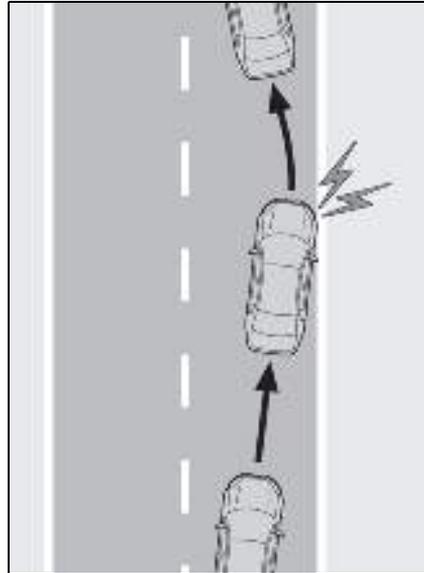
**Functions included in LTA system****■ Lane departure alert function**

When the system determines that the vehicle might depart from its lane or course<sup>\*</sup>, a warning is displayed on the multi-information display, and either a warning buzzer will sound or the steering wheel will vibrate to alert the driver.

When the warning buzzer sounds or the steering wheel vibrates, check the area around your vehicle and carefully operate the steering wheel to move the vehicle back to the center of the lane.

Vehicle with BSM: When the system determines that the vehicle might depart from its lane and that the possibility of a collision with an overtaking vehicle in the adjacent lane is high, the lane departure alert will operate even if the turn signals are operating.

<sup>\*</sup>: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

**■ Steering assist function**

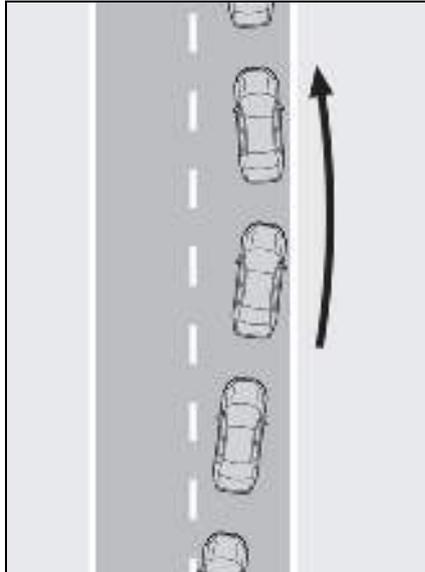
When the system determines that the vehicle might depart from its lane or course<sup>\*</sup>, the system provides assistance as necessary by operating the steering wheel in small amounts for a short period of time to keep the vehicle in its lane.

If the system detects that the steering wheel has not been operated for a fixed amount of time or the steering wheel is not being firmly gripped, a warning is displayed on the multi-information display and the function is temporarily canceled. If the steering assist function is canceled, release the steering wheel and then grip it again to enable the function.

Vehicle with BSM: When the system determines that the vehicle might depart from its lane and that the possibility of a collision with an overtaking vehicle in the adjacent lane is high, the steering assist function will operate even if the turn signals are operating.

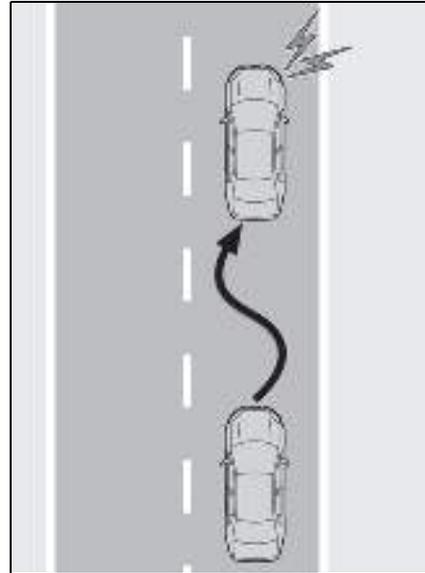
ing.

\*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb



#### ■ Vehicle sway warning function

When the vehicle is swaying within a lane, the warning buzzer will sound and a message will be displayed on the multi-information display to alert the driver.



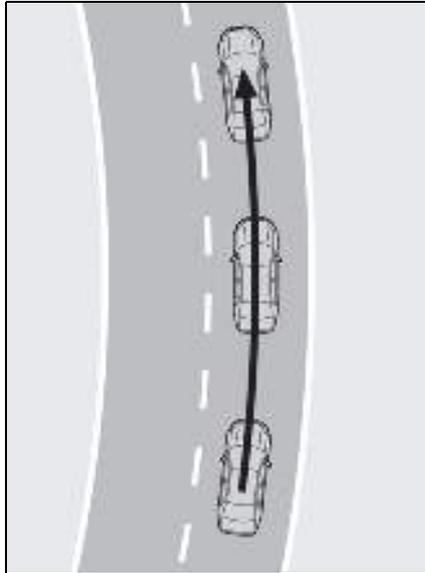
#### ■ Lane centering function

This function is linked with dynamic radar cruise control with full-speed range and provides the required assistance by operating the steering wheel to keep the vehicle in its current lane.

When dynamic radar cruise control with full-speed range is not operating, the lane centering function does not operate.

In situations where the white (yellow) lane lines are difficult to see or are not visible, such as when in a traffic jam, this function will operate to help follow a preceding vehicle by monitoring the position of the preceding vehicle.

If the system detects that the steering wheel has not been operated for a fixed amount of time or the steering wheel is not being firmly gripped, a warning is displayed on the multi-information display and the function is temporarily canceled.



### Turning LTA system on

Press the LTA switch to turn the LTA system on.

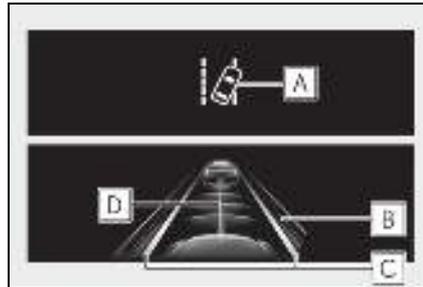
The LTA indicator illuminates and a message is displayed on the multi-information display.

Press the LTA switch again to turn the LTA system off.

When the LTA system is turned on or off, operation of the LTA system continues in the same condition the next time the engine is started.



### Indications on multi-information display



#### A LTA indicator

The illumination condition of the indicator informs the driver of the system operation status.

Illuminated in white: LTA system is operating.

Illuminated in green: Steering wheel assistance of the steering assist function or lane centering function is operating.

Flashing in orange: Lane departure alert function is operating.

#### B Operation display of steering wheel operation support

Displayed when the multi-information display is switched to the driving support system information display.

Indicates that steering wheel assistance of the steering assist function or lane centering function is operating.

Both outer sides of the lane are displayed: Indicates that steering wheel assist of the lane centering function is operating.

One outer side of the lane is displayed: Indicates that steering wheel assist of the steering assist function is operating.

Both outer sides of the lane are flashing: Alerts the driver that their input is necessary to stay in the center of the lane (lane

centering function).

**C** Lane departure alert function display

Displayed when the multi-information display is switched to the driving support system information display.

- ▶ Inside of displayed lines is white



Indicates that the system is recognizing white (yellow) lines or a course\*. When the vehicle departs from its lane, the white line displayed on the side the vehicle departs from flashes orange.

- ▶ Inside of displayed lines is black



Indicates that the system is not able to recognize white (yellow) lines or a course\* or is temporarily canceled.

\*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

**D** Follow-up cruising display

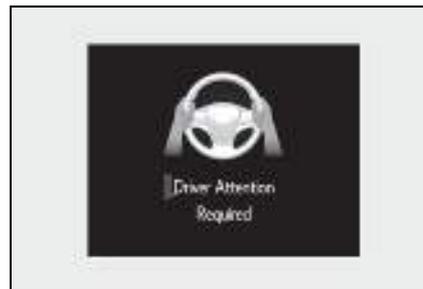
Displayed when the multi-information display is switched to the driving support system information display.

play is switched to the driving support system information display.

Indicates that steering assist of the lane centering function is operating by monitoring the position of a preceding vehicle.

When the follow-up cruising display is displayed, if the preceding vehicle moves, your vehicle may move in the same way. Always pay careful attention to your surroundings and operate the steering wheel as necessary to correct the path of the vehicle and ensure safety.

■ **Warning display (vehicles with Lexus Safety System + A)**



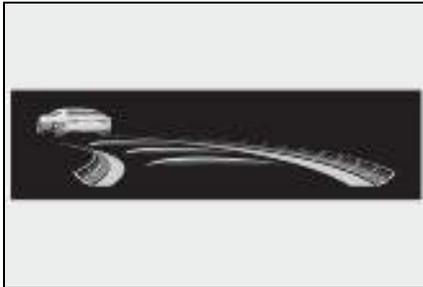
When the lane centering function is operating and the system determines that the vehicle may depart from its lane due to a sharp curve, etc., a warning display urging the driver to operate the steering wheel, will be displayed.

In some situations a warning display may not be displayed.

**Indications on head-up display (vehicles with Lexus Safety System + A)**

Some displays, which are the same as those displayed on the multi-information display, will be displayed.

■ LTA system curve display on the head-up display



The curve display on the head-up display changes according to the direction and curvature of the curve.

■ Operation conditions of each function

● Lane departure alert function

This function operates when all of the following conditions are met.

- LTA is turned on.
- Vehicle speed is approximately 50 km/h (32 mph) or more.<sup>\*1</sup>
- System recognizes white (yellow) lane lines or a course<sup>\*2</sup>. (When a white [yellow] line or course<sup>\*2</sup> is recognized on only one side, the system will operate only for the recognized side.)
- Width of traffic lane is approximately 3 m (9.8 ft.) or more.
- Turn signal lever is not operated. (Vehicle with BSM: Except when another vehicle is in the lane on the side where the turn signal was operated)
- Vehicle is not being driven around a sharp curve.
- No system malfunctions are detected. (→P.292)

<sup>\*1</sup>: The function operates even if the vehicle speed is less than approximately 50 km/h (32 mph) when the lane centering function is operating.

<sup>\*2</sup>: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

● Steering assist function

This function operates when all of the following conditions are met in addition to the operation conditions for the lane departure alert function.

- Setting for “Steering Assist” in  of the multi-information display is set to “ON”. (→P.118)
- Vehicle is not accelerated or decelerated by a fixed amount or more.
- Steering wheel is not operated with a steering force level suitable for changing lanes.
- ABS, VSC, TRC and PCS are not operating.
- TRC or VSC is not turned off.
- Hands off steering wheel warning is not displayed. (→P.291)

● Vehicle sway warning function

This function operates when all of the following conditions are met.

- Setting for “Sway Warning” in  of the multi-information display is set to “ON”. (→P.118)
- Vehicle speed is approximately 50 km/h (32 mph) or more.
- Width of traffic lane is approximately 3 m (9.8 ft.) or more.
- No system malfunctions are detected. (→P.292)

● Lane centering function

This function operates when all of the following conditions are met.

- LTA is turned on.
- Setting for “Steering Assist” and “Lane Centre” in  of the multi-information display are set to “ON”. (→P.118)
- This function recognizes white (yellow) lane lines or the position of a preceding vehicle (except when the preceding vehicle is small, such as a motorcycle).
- The dynamic radar cruise control with full-speed range is operating in vehicle-to-vehicle distance control mode.
- Width of traffic lane is approximately 3 to 4 m (10 to 13 ft.).
- Turn signal lever is not operated.
- Vehicle is not being driven around a sharp curve.
- No system malfunctions are detected.

- (→P.292)
- Vehicle does not accelerate or decelerate by a fixed amount or more.
  - Steering wheel is not operated with a steering force level suitable for changing lanes.
  - ABS, VSC, TRC and PCS are not operating.
  - TRC or VSC is not turned off.
  - Hands off steering wheel warning is not displayed. (→P.291)
  - The driver has one or both hands on the steering wheel. (vehicles with Lexus Safety System + A)
  - The vehicle is being driven in the center of a lane.
  - Steering assist function is not operating.
- **Temporary cancelation of functions**
- When operation conditions are no longer met, a function may be temporarily canceled. However, when the operation conditions are met again, operation of the function is automatically restored. (→P.290)
  - If the operation conditions (→P.290) are no longer met while the lane centering function is operating, the steering wheel may vibrate and the buzzer may sound to indicate that the function has been temporarily canceled. However, if the "Alert" customization setting is set to , the system will notify the driver by vibrating the steering wheel instead of sounding the buzzer.
- If a message urging operation of the steering wheel is displayed, operate the steering wheel.
- **Steering assist function/lane centering function**
- Depending on the vehicle speed, lane departure situation, road conditions, etc., the driver may not feel the function is operating or the function may not operate at all.
  - Even if the curve speed reduction function (→P.307) operates, the lane centering function may not be able to drive the vehicle around a curve successfully. (vehicles with Lexus Safety System + A)
- The steering control of the function is overridden by the driver's steering wheel operation.
  - When the vehicle speed is approximately 50 km/h (31 mph) or less, the warning display of the lane centering function will not operate.
  - Do not attempt to test the operation of the steering assist function.
  - The steering assist function may operate when attempting to cut closely in front of another vehicle while changing lanes.
- **Lane departure alert function**
- The warning buzzer may be difficult to hear due to external noise, audio playback, etc. Also, it may be difficult to feel steering wheel vibrations due to the road conditions, etc.
  - If the edge of the course\* is not clear or straight, the lane departure alert function may not operate.
  - Vehicle with BSM: It may not be possible for the system to determine if there is a danger of a collision with a vehicle in an adjacent lane.
  - Do not attempt to test the operation of the lane departure alert function.
  - This function may operate if, when changing lanes, your vehicle cuts closely in front of another vehicle.
- \*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb
- **Hands off steering wheel warning**
- In the following situations, a warning message urging the driver to hold the steering wheel and the symbol shown in the illustration are displayed on the multi-information display to warn the driver. The warning stops when the system determines that the driver holds the steering wheel. Always keep your hands on the steering wheel when using this system, regardless of warnings.
- Depending on the vehicle condition and road conditions, the warning may not operate. Also, if the system determines that the

vehicle is driving around a curve, warnings will occur earlier than during straight-lane driving.



- When the system determines that the driver is driving without holding the steering wheel while the system is operating

If the driver continues to keep their hands off of the steering wheel, the buzzer sounds, the driver is warned and the function is temporarily canceled. This warning also operates in the same way when the driver continuously operates the steering wheel only a small amount.

The buzzer also sounds even if the alert type is set to .

- When the system determines that the vehicle may not turn and instead depart from its lane while driving around a curve (vehicles with Lexus Safety System +)
- When the system determines that the driver is driving without holding the steering wheel while the steering wheel assist of the steering assist function is operating (vehicles with Lexus Safety System +)

If the driver continues to keep their hands off of the steering wheel and the steering wheel assist is operating, the buzzer sounds and the driver is warned. Each time the buzzer sounds, the continuing time of the buzzer becomes longer.

The buzzer also sounds even if the alert type is set to .

In situations such as the following, the system may not be able to detect when the driver's hands are on the steering wheel (vehicles with Lexus Safety System + A):

- If a steering wheel cover is installed.
- If the driver is wearing gloves.
- If something is attached to the steering wheel.
- If the driver is gripping the wood trim, stitched area, spokes, or other part of the steering wheel that does not have sensors.

In situations such as the following, the hands off steering wheel alert may not operate and the steering assist function and lane centering function may operate even if the driver's hands are off the steering wheel (vehicles with Lexus Safety System + A):

- If an object contacts the steering wheel.
- If a wide object or arms are held in front of the steering wheel.

■ **Vehicle sway warning function**

When the system determines that the vehicle is swaying while the vehicle sway warning function is operating, a buzzer sounds and a warning message urging the driver to rest and the symbol shown in the illustration are simultaneously displayed on the multi-information display.



Depending on the vehicle and road conditions, the warning may not operate.

■ **Warning message**

If the following warning message is displayed on the multi-information display and the LTA indicator illuminates in orange, follow the appropriate troubleshooting procedure. Also, if a different warning message is displayed, follow the instructions displayed on the screen.

- "LTA Malfunction Visit Your Dealer"

The system may not be operating properly. Have the vehicle inspected by your Lexus

dealer.

- “LTA Unavailable”

The system is temporarily canceled due to a malfunction in a sensor other than the front camera. Turn the LTA system off, wait for a little while, and then turn the LTA system back on.

- “LTA Unavailable at Current Speed”

The function cannot be used as the vehicle speed exceeds the LTA operation range. Drive slower.

- **Customization**

Function settings can be changed.  
(Customizable features:→P.568)

### LDA (Lane Departure Alert with steering control)\*

\* : If equipped

#### Summary of function

When driving on highways and free-ways with white (yellow) lane lines, this function alerts the driver when the vehicle might depart from its lane or course\* and provides assistance by operating the steering wheel to keep the vehicle in its lane or course\*.

The LDA system recognizes white (yellow) lane lines or a course\* using the front camera. Additionally, it detects preceding vehicles using the front camera and radar.

\* : Boundary between asphalt and the side of the road, such as grass, soil, or a curb



**⚠ WARNING**

■ **Before using LDA system**

- Do not rely solely upon the LDA system. The LDA system does not automatically drive the vehicle or reduce the amount of attention that must be paid to the area in front of the vehicle. The driver must always assume full responsibility for driving safely by paying careful attention to the surrounding conditions and operating the steering wheel to correct the path of the vehicle. Also, the driver must take adequate breaks when fatigued, such as from driving for a long period of time.
- Failure to perform appropriate driving operations and pay careful attention may lead to an accident, resulting in death or serious injury.
- When not using the LDA system, use the LDA switch to turn the system off.

■ **Situations unsuitable for LDA system**

In the following situations, use the LDA switch to turn the system off. Failure to do so may lead to an accident, resulting in death or serious injury.

- Vehicle is driven on a road surface which is slippery due to rainy weather, fallen snow, freezing, etc.
- Vehicle is driven on a snow-covered road.
- White (yellow) lines are difficult to see due to rain, snow, fog, dust, etc.
- A spare tire, tire chains, etc. are equipped.
- When the tires have been excessively worn, or when the tire inflation pressure is low.
- When tires of a size other than specified are installed.

- Vehicle is driven in traffic lanes other than that highways and freeways.

- During emergency towing.

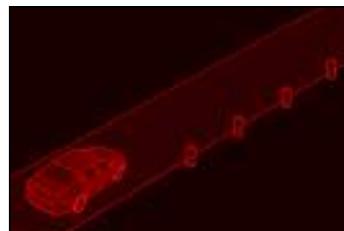
■ **Preventing LDA system malfunctions and operations performed by mistake**

- Do not modify the headlights or place stickers, etc. on the surface of the lights.
- Do not modify the suspension etc. If the suspension etc. needs to be replaced, contact your Lexus dealer.
- Do not install or place anything on the hood or grille. Also, do not install a grille guard (bull bars, kangaroo bar, etc.).
- If your windshield needs repairs, contact your Lexus dealer.

■ **Conditions in which functions may not operate properly**

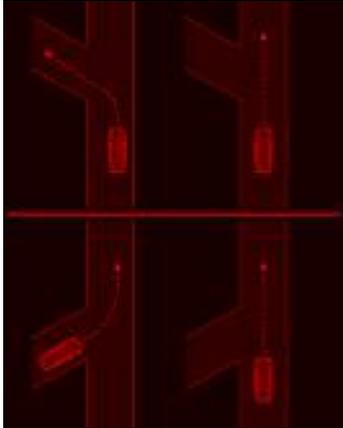
In the following situations, the functions may not operate properly and the vehicle may depart from its lane. Drive safely by always paying careful attention to your surroundings and operate the steering wheel to correct the path of the vehicle without relying solely on the functions.

- Vehicle is being driven around a sharp curve.
- Objects or patterns that could be mistaken for white (yellow) lines are present on the side of the road (guardrails, reflective poles, etc.).



 **WARNING**

- Vehicle is driven where the road diverges, merges, etc.



- Repair marks of asphalt, white (yellow) lines, etc. are present due to road repair.



- There are shadows on the road that run parallel with, or cover, the white (yellow) lines.
- The vehicle is driven in an area without white (yellow) lines, such as in front of a tollgate or checkpoint, or at an intersection, etc.
- The white (yellow) lines are cracked, "Raised pavement marker" or stones are present.
- The white (yellow) lines cannot be seen or are difficult to see due to sand, etc.

- The vehicle is driven on a road surface that is wet due to rain, puddles, etc.
- The traffic lines are yellow (which may be more difficult to recognize than lines that are white).
- The white (yellow) lines cross over a curb, etc.
- The vehicle is driven on a bright surface, such as concrete.
- If the edge of the road is not clear or straight.
- The vehicle is driven on a surface that is bright due to reflected light, etc.
- The vehicle is driven in an area where the brightness changes suddenly, such as at the entrances and exits of tunnels, etc.
- Light from the headlights of an oncoming vehicle, the sun, etc. enters the camera.
- The vehicle is driven on a slope.
- The vehicle is driven on a road which tilts left or right, or a winding road.
- The vehicle is driven on an unpaved or rough road.
- The traffic lane is excessively narrow or wide.
- The vehicle is extremely tilted due to carrying heavy luggage or having improper tire pressure.
- The distance to the preceding vehicle is extremely short.
- The vehicle is moving up and down a large amount due to road conditions during driving (poor roads or road seams).
- When driving in a tunnel or at night with the headlights off or when a headlight is dim due to its lens being dirty or it being misaligned.

**⚠ WARNING**

- The vehicle is struck by a crosswind.
- The vehicle has just changed lanes or crossed an intersection.
- Tires which differ by structure, manufacturer, brand or tread pattern are used.
- Snow tires, etc. are equipped.

**Functions included in LDA system**

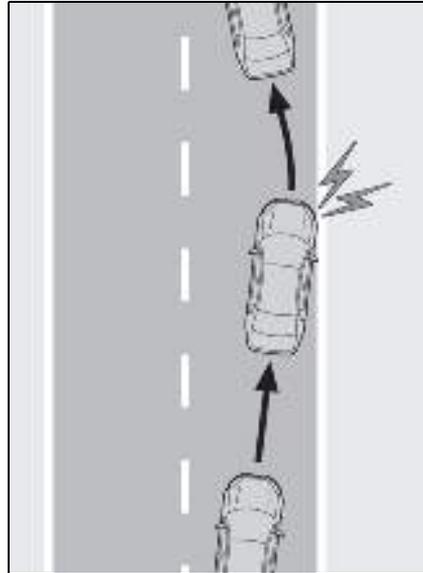
■ **Lane departure alert function**

When the system determines that the vehicle might depart from its lane or course<sup>\*</sup>, a warning is displayed on the multi-information display, and either a warning buzzer will sound or the steering wheel will vibrate to alert the driver.

When the warning buzzer sounds or the steering wheel vibrates, check the area around your vehicle and carefully operate the steering wheel to move the vehicle back to the center of the lane.

When the system determines that the vehicle might depart from its lane and that the possibility of a collision with an overtaking vehicle in the adjacent lane is high, the lane departure alert will operate even if the turn signals are operating.

\*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb



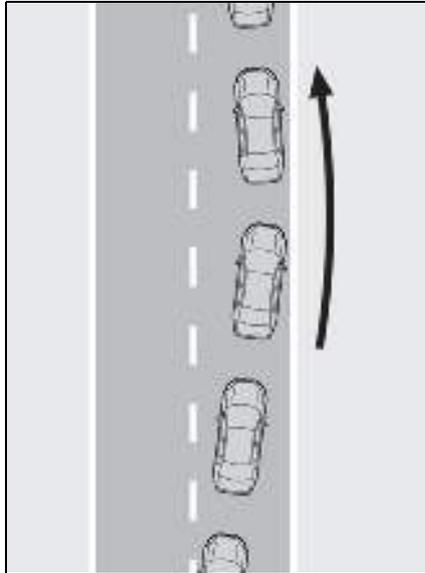
■ **Steering assist function**

When the system determines that the vehicle might depart from its lane or course<sup>\*</sup>, the system provides assistance as necessary by operating the steering wheel in small amounts for a short period of time to keep the vehicle in its lane.

If the system detects that the steering wheel has not been operated for a fixed amount of time or the steering wheel is not being firmly gripped, a warning is displayed on the multi-information display and the function is temporarily canceled.

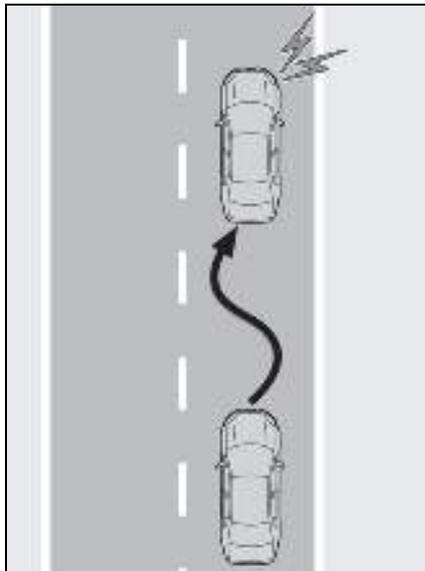
When the system determines that the vehicle might depart from its lane and that the possibility of a collision with an overtaking vehicle in the adjacent lane is high, the steering assist function will operate even if the turn signals are operating.

\*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb



#### ■ Vehicle sway warning function

When the vehicle is swaying within a lane, the warning buzzer will sound and a message will be displayed on the multi-information display to alert the driver.



#### Turning LDA system on

Press the LDA switch to turn the LDA system on.

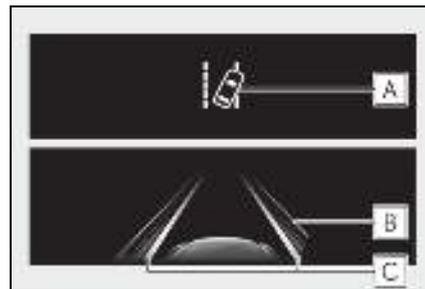
The LDA indicator illuminates and a message is displayed on the multi-information display.

Press the LDA switch again to turn the LDA system off.

When the LDA system is turned on or off, operation of the LDA system continues in the same condition the next time the engine is started.



#### Indications on multi-information display



#### A LDA indicator

The illumination condition of the indicator informs the driver of the system operation status.

Illuminated in white: LDA system is operat-

ing.

Illuminated in green: Steering wheel assistance of the steering assist function is operating.

Flashing in orange: Lane departure alert function is operating.

**B** Operation display of steering wheel operation support

Displayed when the multi-information display is switched to the driving support system information display.

Indicates that steering wheel assistance of the steering assist function is operating.

**C** Lane departure alert function display

Displayed when the multi-information display is switched to the driving support system information display.

▶ Inside of displayed lines is white



Indicates that the system is recognizing white (yellow) lines or a course\*. When the vehicle departs from its lane, the white line displayed on the side the vehicle departs from flashes orange.

▶ Inside of displayed lines is black



Indicates that the system is not able to recognize white (yellow) lines or a course\* or is temporarily canceled.

\*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

■ Operation conditions of each function

● Lane departure alert function

This function operates when all of the following conditions are met.

- LDA is turned on.
- Vehicle speed is approximately 50 km/h (32 mph) or more.
- System recognizes white (yellow) lane lines or a course\*. (When a white [yellow] line or course\* is recognized on only one side, the system will operate only for the recognized side.)
- Width of traffic lane is approximately 3 m (9.8 ft.) or more.
- Turn signal lever is not operated. (Except when another vehicle is in the lane on the side where the turn signal was operated)
- Vehicle is not being driven around a sharp curve.
- No system malfunctions are detected. (→P.300)

\*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

● Steering assist function

This function operates when all of the following conditions are met in addition to the operation conditions for the lane departure alert function.

- Setting for “Steering Assist” in  of the multi-information display is set to “ON”. (→P.118)
- Vehicle is not accelerated or decelerated by a fixed amount or more.
- Steering wheel is not operated with a steering force level suitable for changing lanes.
- ABS, VSC, TRC and PCS are not operating.
- TRC or VSC is not turned off.
- Hands off steering wheel warning is not displayed. (→P.299)
- Vehicle sway warning function

This function operates when all of the following conditions are met.

- Setting for “Sway Warning” in  of the multi-information display is set to “ON”. (→P.118)
- Vehicle speed is approximately 50 km/h (32 mph) or more.
- Width of traffic lane is approximately 3 m (9.8 ft.) or more.
- No system malfunctions are detected. (→P.300)

■ **Temporary cancelation of functions**

When operation conditions are no longer met, a function may be temporarily canceled. However, when the operation conditions are met again, operation of the function is automatically restored. (→P.298)

■ **Steering assist function**

- Depending on the vehicle speed, lane departure situation, road conditions, etc., the driver may not feel the function is operating or the function may not operate at all.
- The steering control of the function is overridden by the driver’s steering wheel operation.
- Do not attempt to test the operation of the steering assist function.

■ **Lane departure alert function**

- The warning buzzer may be difficult to hear due to external noise, audio playback, etc. Also, it may be difficult to feel

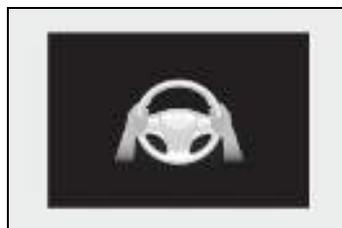
steering wheel vibrations due to the road conditions, etc.

- If the edge of the course\* is not clear or straight, the lane departure alert function may not operate.
- It may not be possible for the system to determine if there is a danger of a collision with a vehicle in an adjacent lane.
- Do not attempt to test the operation of the lane departure alert function.

\*: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

■ **Hands off steering wheel warning**

In the following situations, a warning message urging the driver to hold the steering wheel and the symbol shown in the illustration are displayed on the multi-information display to warn the driver. The warning stops when the system determines that the driver holds the steering wheel. Always keep your hands on the steering wheel when using this system, regardless of warnings.



- When the system determines that the driver is driving without holding the steering wheel while the system is operating

If the driver continues to keep their hands off of the steering wheel, the buzzer sounds, the driver is warned and the function is temporarily canceled. This warning also operates in the same way when the driver continuously operates the steering wheel only a small amount.

The buzzer also sounds even if the alert type is set to .

- When the system determines that the

vehicle may not turn and instead depart from its lane while driving around a curve. Depending on the vehicle condition and road conditions, the warning may not operate. Also, if the system determines that the vehicle is driving around a curve, warnings will occur earlier than during straight-lane driving.

- When the system determines that the driver is driving without holding the steering wheel while the steering wheel assist of the steering assist function is operating.

If the driver continues to keep their hands off of the steering wheel and the steering wheel assist is operating, the buzzer sounds and the driver is warned. Each time the buzzer sounds, the continuing time of the buzzer becomes longer.

The buzzer also sounds even if the alert type is set to .

■ **Vehicle sway warning function**

When the system determines that the vehicle is swaying while the vehicle sway warning function is operating, a buzzer sounds and a warning message urging the driver to rest and the symbol shown in the illustration are simultaneously displayed on the multi-information display.



Depending on the vehicle and road conditions, the warning may not operate.

■ **Warning message**

If the following warning message is displayed on the multi-information display and the LDA indicator illuminates in orange, follow the appropriate troubleshooting procedure.

Also, if a different warning message is displayed, follow the instructions displayed on the screen.

- “Lane Departure Alert Malfunction Visit Your Dealer”

The system may not be operating properly. Have the vehicle inspected by your Lexus dealer.

- “Lane Departure Alert Unavailable”

The system is temporarily canceled due to a malfunction in a sensor other than the front camera. Turn the LDA system off, wait for a little while, and then turn the LDA system back on.

- “Lane Departure Alert Unavailable at Current Speed”

The function cannot be used as the vehicle speed exceeds the LDA operation range. Drive slower.

- “Lane Departure Alert Unavailable Below Approx. 50km/h”

The LDA system cannot be used as the vehicle speed is less than approximately 50 km/h (32 mph). Drive the vehicle at approximately 50 km/h (32 mph) or more.

■ **Customization**

Function settings can be changed. (Customizable features:→P.568)

## Dynamic radar cruise control with full-speed range\*

\*: If equipped

### Summary of function

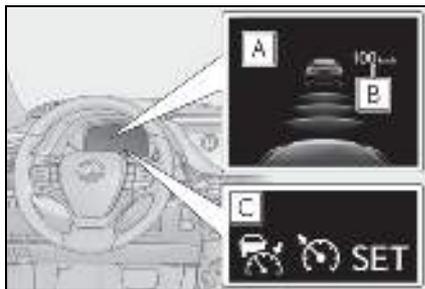
In vehicle-to-vehicle distance control mode, the vehicle automatically accelerates, decelerates and stops to match the speed changes of the preceding vehicle even if the accelerator pedal is not depressed. In constant speed control mode, the vehicle runs at a fixed speed.

Use the dynamic radar cruise control with full-speed range on freeways and highways.

- Vehicle-to-vehicle distance control mode (→P.303)
- Constant speed control mode (→P.308)

### System Components

#### ■ Meter display

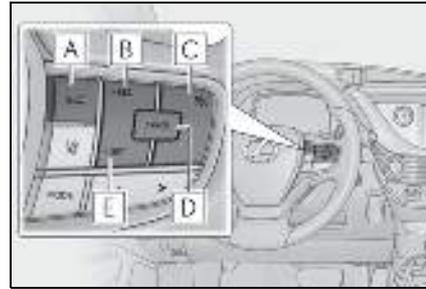


**A** Multi-information display

**B** Set speed

**C** Indicators

#### ■ Operation switches



**A** Vehicle-to-vehicle distance switch

**B** "+RES" switch

**C** Cruise control main switch

**D** Cancel switch

**E** "-SET" switch

#### ⚠ WARNING

##### ■ Before using dynamic radar cruise control with full-speed range

- Driving safely is the sole responsibility of the driver. Do not rely solely on the system, and drive safely by always paying careful attention to your surroundings.
- The dynamic radar cruise control with full-speed range provides driving assistance to reduce the driver's burden. However, there are limitations to the assistance provided. Read the following conditions carefully. Do not overly rely on this system and always drive carefully.
  - When the sensor may not be correctly detecting the vehicle ahead: →P.310
  - Conditions under which the vehicle-to-vehicle distance control mode may not function correctly: →P.311

**⚠ WARNING**

- Set the speed appropriately depending on the speed limit, traffic flow, road conditions, weather conditions, etc. The driver is responsible for checking the set speed.
- Even when the system is functioning normally, the condition of the preceding vehicle as detected by the system may differ from the condition observed by the driver. Therefore, the driver must always remain alert, assess the danger of each situation and drive safely. Relying solely on this system or assuming the system ensures safety while driving can lead to an accident, resulting in death or serious injury.
- Switch the dynamic radar cruise control with full-speed range setting to off, using the cruise control main switch when not in use.

**■ Cautions regarding the driving assist systems**

Observe the following precautions, as there are limitations to the assistance provided by the system. Failure to do so may cause an accident resulting in death or serious injury.

- Assisting the driver to measure following distance

The dynamic radar cruise control with full-speed range is only intended to help the driver in determining the following distance between the driver's own vehicle and a designated vehicle traveling ahead. It is not a mechanism that allows careless or inattentive driving, and it is not a system that can assist the driver in low-visibility conditions.

It is still necessary for driver to pay close attention to the vehicle's surroundings.

- Assisting the driver to judge proper following distance

The dynamic radar cruise control with full-speed range determines whether the following distance between the driver's own vehicle and a designated vehicle traveling ahead is within a set range. It is not capable of making any other type of judgement. Therefore, it is absolutely necessary for the driver to remain vigilant and to determine whether or not there is a possibility of danger in any given situation.

- Assisting the driver to operate the vehicle

The dynamic radar cruise control with full-speed range does not include functions which will prevent or avoid collisions with vehicles ahead of your vehicle. Therefore, if there is ever any possibility of danger, the driver must take immediate and direct control of the vehicle and act appropriately in order to ensure the safety of all involved.

**■ Situations unsuitable for dynamic radar cruise control with full-speed range**

Do not use dynamic radar cruise control with full-speed range in any of the following situations. Doing so may result in inappropriate speed control and could cause an accident resulting in death or serious injury.

- Roads where there are pedestrians, cyclists, etc.
- In heavy traffic
- On roads with sharp bends
- On winding roads
- On slippery roads, such as those covered with rain, ice or snow

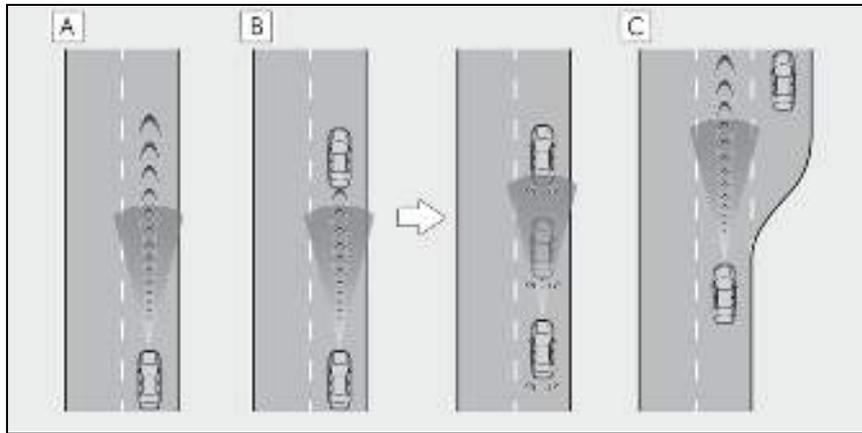
 **WARNING**

- On steep downhill, or where there are sudden changes between sharp up and down gradients  
Vehicle speed may exceed the set speed when driving down a steep hill.
- At entrances to freeways and highways
- When weather conditions are bad enough that they may prevent the sensors from detecting correctly (fog, snow, sandstorm, heavy rain, etc.)
- When there is rain, snow, etc. on the front surface of the radar or front camera
- In traffic conditions that require frequent repeated acceleration and deceleration
- During emergency towing
- When an approach warning buzzer is heard often

**Driving in vehicle-to-vehicle distance control mode**

This mode employs a radar to detect the presence of vehicles up to approximately 100 m (328 ft.) ahead, determines the current vehicle-to-vehicle following distance, and operates to maintain a suitable following distance from the vehicle ahead. The desired vehicle-to-vehicle distance can also be set by operating the vehicle-to-vehicle distance switch.

When driving on downhill slopes, the vehicle-to-vehicle distance may become shorter.



**A** Example of constant speed cruising

When there are no vehicles ahead

The vehicle travels at the speed set by the driver.

**B** Example of deceleration cruising and follow-up cruising

When a preceding vehicle driving slower than the set speed appears

When a vehicle is detected running ahead of you, the system automatically decelerates your vehicle. When a greater reduction in vehicle speed is necessary, the system applies the brakes (the stop lights will come on at this time). The system will respond to changes in the speed of the vehicle ahead in order to maintain the vehicle-to-vehicle distance set by the driver. Approach warning warns you when the system cannot decelerate sufficiently to prevent your vehicle from closing in on the vehicle ahead.

When the vehicle ahead of you stops, your vehicle will also stop (vehicle is stopped by system control). After the vehicle ahead starts off, pressing the “+RES” switch or depressing the accelerator pedal (start-off operation) will resume follow-up cruising. If the start-off operation is not performed, system control continues to keep your vehicle stopped.

When the turn signal lever is operated and your vehicle moves to a right lane<sup>\*1</sup>/left lane<sup>\*2</sup> while driving at 80 km/h (50 mph) or more, the vehicle will quickly accelerate to help to overtake a passing vehicle.

**C** Example of acceleration

When there are no longer any preceding vehicles driving slower than the set speed

The system accelerates until the set speed is reached. The system then returns to constant speed cruising.

<sup>\*1</sup>: Right-hand drive vehicles

<sup>\*2</sup>: Left-hand drive vehicles

### Setting the vehicle speed (vehicle-to-vehicle distance control mode)

- 1 Press the cruise control main switch to activate the cruise control.

Dynamic radar cruise control indicator will come on and a message will be displayed on the multi-information display. Press the switch again to deactivate the cruise control.

If the cruise control main switch is pressed and held for 1.5 seconds or more, the system turns on in constant speed control mode. (→P.308)



- 2 Accelerate or decelerate, with accelerator pedal operation, to the desired vehicle speed (at or above approximately 30 km/h [20 mph]) and press the “-SET” switch to set the speed.

Cruise control “SET” indicator will come on.

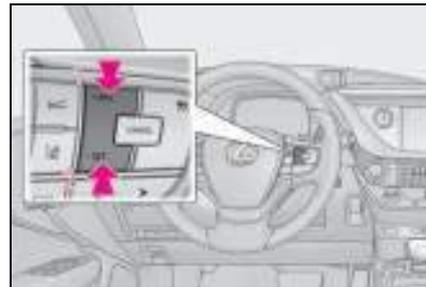
The vehicle speed at the moment the

switch is released becomes the set speed.



### Adjusting the set speed

To change the set speed, press the “+RES” or “-SET” switch until the desired set speed is displayed.



- 1 Increases the speed (Except when the vehicle has been stopped by system control in vehicle-to-vehicle distance control mode)
- 2 Decreases the speed

Fine adjustment: Press the switch.

Large adjustment: Press and hold the switch to change the speed, and release when the desired speed is reached.

In the vehicle-to-vehicle distance control mode, the set speed will be increased or decreased as follows:

Fine adjustment: By 1 km/h (0.6 mph)<sup>\*1</sup> or 1 mph (1.6 km/h)<sup>\*2</sup> each time the switch is

pressed  
 Large adjustment: Increases or decreases in 5 km/h (3.1 mph)<sup>\*1</sup> or 5 mph (8 km/h)<sup>\*2</sup> increments for as long as the switch is held

In the constant speed control mode (→P.308), the set speed will be increased or decreased as follows:

Fine adjustment: By 1 km/h (0.6 mph)<sup>\*1</sup> or 1 mph (1.6 km/h)<sup>\*2</sup> each time the switch is pressed

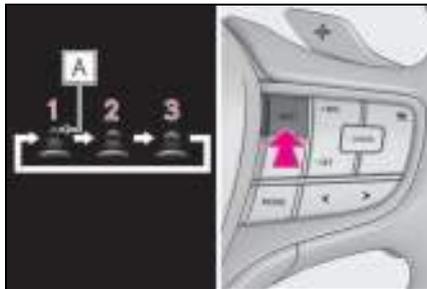
Large adjustment: The speed will continue to change while the switch is held.

<sup>\*1</sup>: When the set speed is shown in “km/h”

<sup>\*2</sup>: When the set speed is shown in “MPH”

**Changing the vehicle-to-vehicle distance (vehicle-to-vehicle distance control mode)**

Pressing the switch changes the vehicle-to-vehicle distance as follows:



- 1 Long
- 2 Medium
- 3 Short

The vehicle-to-vehicle distance is set automatically to long mode when the engine switch is turned to IGNITION ON mode. If a vehicle is running ahead of you, the

preceding vehicle mark **A** will also be displayed.

**Vehicle-to-vehicle distance settings (vehicle-to-vehicle distance control mode)**

Select a distance from the table below. Note that the distances shown correspond to a vehicle speed of 80 km/h (50 mph). Vehicle-to-vehicle distance increases/decreases in accordance with vehicle speed. When the vehicle is stopped by system control, the vehicle stops at a certain vehicle-to-vehicle distance depending on the situation.

Distance options	Vehicle-to-vehicle distance
Long	Approximately 50 m (160 ft.)
Medium	Approximately 40 m (130 ft.)
Short	Approximately 30 m (100 ft.)

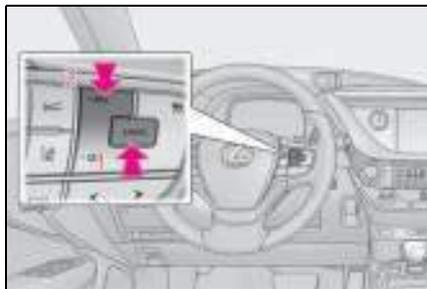
**Resuming follow-up cruising when the vehicle has been stopped by system control (vehicle-to-vehicle distance control mode)**

After the vehicle ahead of you starts off, press the “+RES” switch.

Your vehicle will also resume follow-up cruising if the accelerator pedal is depressed after the vehicle ahead of you starts off.



**Canceling and resuming the speed control**



- 1** Pressing the cancel switch cancels the speed control.

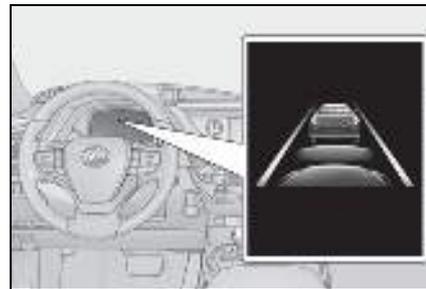
The speed control is also canceled when the brake pedal is depressed. (When the vehicle has been stopped by system control, depressing the brake pedal does not cancel the setting.)

- 2** Pressing the “+RES” switch resumes the cruise control and returns vehicle speed to the set speed.

**Approach warning (vehicle-to-vehicle distance control mode)**

When your vehicle is too close to a vehicle ahead, and sufficient automatic deceleration via the cruise control is

not possible, the display will flash and the buzzer will sound to alert the driver. An example of this would be if another driver cuts in front of you while you are following a vehicle. Depress the brake pedal to ensure an appropriate vehicle-to-vehicle distance.



**Warnings may not occur when**

In the following instances, warnings may not occur even when the vehicle-to-vehicle distance is small.

- When the speed of the preceding vehicle matches or exceeds your vehicle speed
- When the preceding vehicle is traveling at an extremely slow speed
- Immediately after the cruise control speed was set
- When depressing the accelerator pedal

**Curve speed reduction function (vehicles with Lexus Safety System + A)**

While driving in vehicle-to-vehicle distance control mode, this function will reduce the vehicle speed, if it is determined to be necessary.

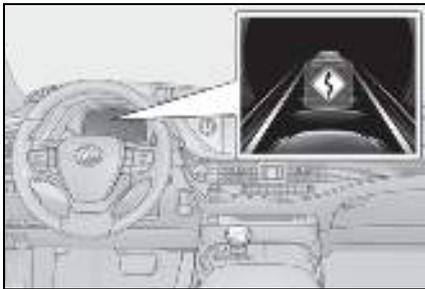
■ **Function operation**

When the steering wheel begins to be turned, the vehicle speed will begin being reduced. When the steering wheel is returned to the center position, the vehicle speed reduction will end.

Depending on the situation, the vehicle speed will then return to the vehicle-to-vehicle distance control mode set speed.

In situations where vehicle-to-vehicle distance control needs to operate, such as when a preceding vehicle cuts in front of your vehicle, the curve speed reduction function will be canceled.

■ **Operation display**



Displayed when the vehicle speed is being reduced.

When the vehicle speed reduction ends, the display will disappear.

■ **Changing the settings of the curve speed reduction function**

The curve speed reduction function can be enabled/disabled and the vehicle speed reduction strength can be adjusted.

Press the or meter control

switch to select . Press or to select “Curve Spd. Reduction” and then press .

Each time is pressed, the setting changes as follows:

“High”: The vehicle speed is strongly reduced when the function operates.

“Low”: The vehicle speed is weakly reduced when the function operates.

“OFF”: The function is disabled.

**Selecting constant speed control mode**

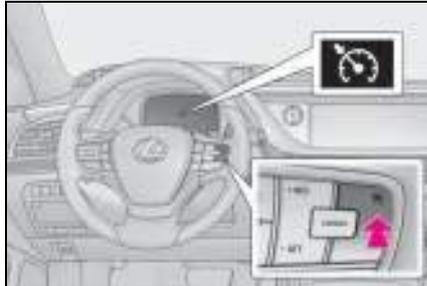
When constant speed control mode is selected, your vehicle will maintain a set speed without controlling the vehicle-to-vehicle distance. Select this mode only when vehicle-to-vehicle distance control mode does not function correctly due to a dirty radar, etc.

- 1 With the cruise control off, press and hold the cruise control main switch for 1.5 seconds or more.

Immediately after the switch is pressed, the dynamic radar cruise control indicator will come on. Afterwards, it switches to the cruise control indicator.

Switching to constant speed control mode is only possible when operating the switch

with the cruise control off.



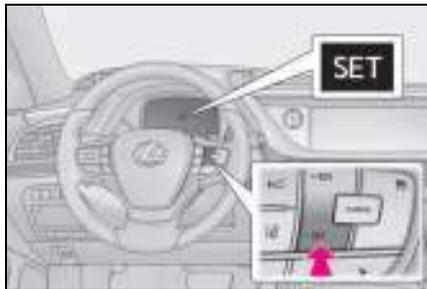
- 2 Accelerate or decelerate, with accelerator pedal operation, to the desired vehicle speed (at or above approximately 30 km/h [20 mph]) and press the “-SET” switch to set the speed.

Cruise control “SET” indicator will come on.

The vehicle speed at the moment the switch is released becomes the set speed.

Adjusting the speed setting: →P.305

Canceling and resuming the speed setting: →P.307



■ **Dynamic radar cruise control with full-speed range can be set when**

- The shift position is in D.
- The desired set speed can be set when the vehicle speed is approximately 30 km/h (20 mph) or more. (However, when the vehicle speed is set while driving at below approximately 30 km/h [20 mph], the set speed will be set

to approximately 30 km/h [20 mph].)

■ **Accelerating after setting the vehicle speed**

The vehicle can accelerate by operating the accelerator pedal. After accelerating, the set speed resumes. However, during vehicle-to-vehicle distance control mode, the vehicle speed may decrease below the set speed in order to maintain the distance to the preceding vehicle.

■ **When the vehicle stops while follow-up cruising**

- Pressing the “+RES” switch while the vehicle ahead stops will resume follow-up cruising if the vehicle ahead starts off within approximately 3 seconds after the switch is pressed.
- If the vehicle ahead starts off within 3 seconds after your vehicle stops, follow-up cruising will be resumed.

■ **Automatic cancelation of vehicle-to-vehicle distance control mode**

Vehicle-to-vehicle distance control mode is automatically canceled in the following situations.

- VSC is activated.
- TRC is activated for a period of time.
- When the VSC or TRC system is turned off.
- When snow mode (if equipped) is set.
- The sensor cannot detect correctly because it is covered in some way.
- Pre-collision braking is activated.
- The parking brake is operated.
- The vehicle is stopped by system control on a steep incline.
- The following are detected when the vehicle has been stopped by system control:
  - The driver is not wearing a seat belt.
  - The driver’s door is opened.
  - The vehicle has been stopped for about 3 minutes.

If vehicle-to-vehicle distance control mode is automatically canceled for any reasons

other than the above, there may be a malfunction in the system. Contact your Lexus dealer.

■ **Automatic cancelation of constant speed control mode**

Constant speed control mode is automatically canceled in the following situations:

- Actual vehicle speed is more than approximately 16 km/h (10 mph) below the set vehicle speed.
- Actual vehicle speed falls below approximately 30 km/h (20 mph).
- VSC is activated.
- TRC is activated for a period of time.
- When the VSC or TRC system is turned off.
- Pre-collision braking is activated.

If constant speed control mode is automatically canceled for any reasons other than the above, there may be a malfunction in the system. Contact your Lexus dealer.

■ **Situations in which the curve speed reduction function may not operate (vehicles with Lexus Safety System + A)**

In situations such as the following, the curve speed reduction function may not operate:

- When the vehicle is being driven around a gentle curve
- When the accelerator pedal is being depressed
- When the vehicle is being driven around an extremely short curve

■ **Brake operation**

A brake operation sound may be heard and the brake pedal response may change, but these are not malfunctions.

■ **Warning messages and buzzers for dynamic radar cruise control with full-speed range**

Warning messages and buzzers are used to indicate a system malfunction or to inform the driver of the need for caution while driving. If a warning message is shown on the multi-information display, read the message and follow the instructions.(→P.251, 258,

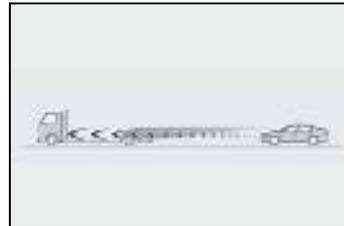
530)

■ **When the sensor may not be correctly detecting the vehicle ahead**

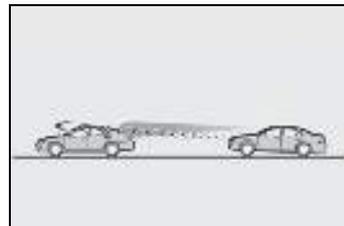
In the case of the following and depending on the conditions, operate the brake pedal when deceleration of the system is insufficient or operate the accelerator pedal when acceleration is required.

As the sensor may not be able to correctly detect these types of vehicles, the approach warning (→P.307) may not be activated.

- Vehicles that cut in suddenly
- Vehicles traveling at low speeds
- Vehicles that are not moving in the same lane
- Vehicles with small rear ends (trailers with no load on board, etc.)



- Motorcycles traveling in the same lane
- When water or snow thrown up by the surrounding vehicles hinders the detecting of the sensor
- When your vehicle is pointing upwards (caused by a heavy load in the luggage compartment, etc.)



- Preceding vehicle has an extremely high ground clearance



■ **Conditions under which the vehicle-to-vehicle distance control mode may not function correctly**

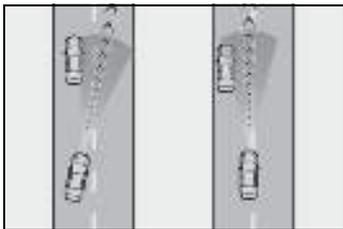
In the case of the following conditions, operate the brake pedal (or accelerator pedal, depending on the situation) as necessary.

As the sensor may not be able to correctly detect vehicles ahead, the system may not operate properly.

- When the road curves or when the lanes are narrow



- When steering wheel operation or your position in the lane is unstable



- When the vehicle ahead of you decelerates suddenly
- When driving on a road surrounded by a structure, such as in a tunnel or on a bridge
- While the vehicle speed is decreasing to the set speed after the vehicle accelerates by depressing the accelerator pedal

■ **Situations in which the curve speed reduction function may not operate properly (vehicles with Lexus Safety System + A)**

In situations such as the following, the curve speed reduction function may not operate properly:

- When the vehicle is being driven around a curve on an incline/decline
- When the course of the vehicle differs from the shape of the curve
- When the vehicle speed is excessively high when entering a curve
- When the steering wheel is suddenly operated

## Dynamic radar cruise control\*

\*: If equipped

### Summary of function

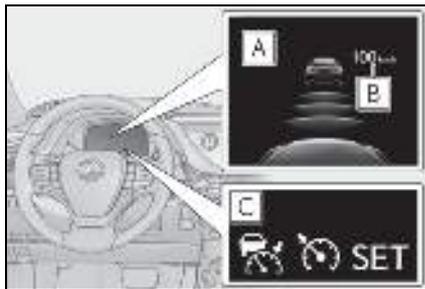
In vehicle-to-vehicle distance control mode, the vehicle automatically accelerates and decelerates to match the speed changes of the preceding vehicle even if the accelerator pedal is not depressed. In constant speed control mode, the vehicle runs at a fixed speed.

Use the dynamic radar cruise control on freeways and highways.

- Vehicle-to-vehicle distance control mode (→P.314)
- Constant speed control mode (→P.318)

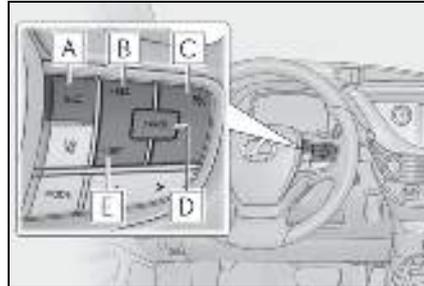
### System Components

#### ■ Meter display



- A** Multi-information display
- B** Set speed
- C** Indicators

#### ■ Operation switches



- A** Vehicle-to-vehicle distance switch
- B** "+RES" switch
- C** Cruise control main switch
- D** Cancel switch
- E** "-SET" switch

#### ⚠ WARNING

##### ■ Before using dynamic radar cruise control

- Driving safely is the sole responsibility of the driver. Do not rely solely on the system, and drive safely by always paying careful attention to your surroundings.
- The dynamic radar cruise control provides driving assistance to reduce the driver's burden. However, there are limitations to the assistance provided. Read the following conditions carefully. Do not overly rely on this system and always drive carefully.
  - When the sensor may not be correctly detecting the vehicle ahead: →P.319
  - Conditions under which the vehicle-to-vehicle distance control mode may not function correctly: →P.320
- Set the speed appropriately depending on the speed limit, traffic flow, road conditions, weather conditions, etc. The driver is responsible for checking the set speed.

**⚠ WARNING**

- Even when the system is functioning normally, the condition of the preceding vehicle as detected by the system may differ from the condition observed by the driver. Therefore, the driver must always remain alert, assess the danger of each situation and drive safely. Relying solely on this system or assuming the system ensures safety while driving can lead to an accident, resulting in death or serious injury.

- Switch the dynamic radar cruise control setting to off, using the cruise control main switch when not in use.

**■ Cautions regarding the driving assist systems**

Observe the following precautions, as there are limitations to the assistance provided by the system. Failure to do so may cause an accident resulting in death or serious injury.

- Assisting the driver to measure following distance

The dynamic radar cruise control is only intended to help the driver in determining the following distance between the driver's own vehicle and a designated vehicle traveling ahead. It is not a mechanism that allows careless or inattentive driving, and it is not a system that can assist the driver in low-visibility conditions.

It is still necessary for driver to pay close attention to the vehicle's surroundings.

- Assisting the driver to judge proper following distance

The dynamic radar cruise control determines whether the following distance between the driver's own vehicle and a designated vehicle traveling ahead is within a set range. It is not capable of making any other type of judgement. Therefore, it is absolutely necessary for the driver to remain vigilant and to determine whether or not there is a possibility of danger in any given situation.

- Assisting the driver to operate the vehicle

The dynamic radar cruise control does not include functions which will prevent or avoid collisions with vehicles ahead of your vehicle. Therefore, if there is ever any possibility of danger, the driver must take immediate and direct control of the vehicle and act appropriately in order to ensure the safety of all involved.

**■ Situations unsuitable for dynamic radar cruise control**

Do not use dynamic radar cruise control in any of the following situations. Doing so may result in inappropriate speed control and could cause an accident resulting in death or serious injury.

- Roads where there are pedestrians, cyclists, etc.

- In heavy traffic

- On roads with sharp bends

- On winding roads

- On slippery roads, such as those covered with rain, ice or snow

- On steep downhills, or where there are sudden changes between sharp up and down gradients

Vehicle speed may exceed the set speed when driving down a steep hill.

- At entrances to freeways and highways

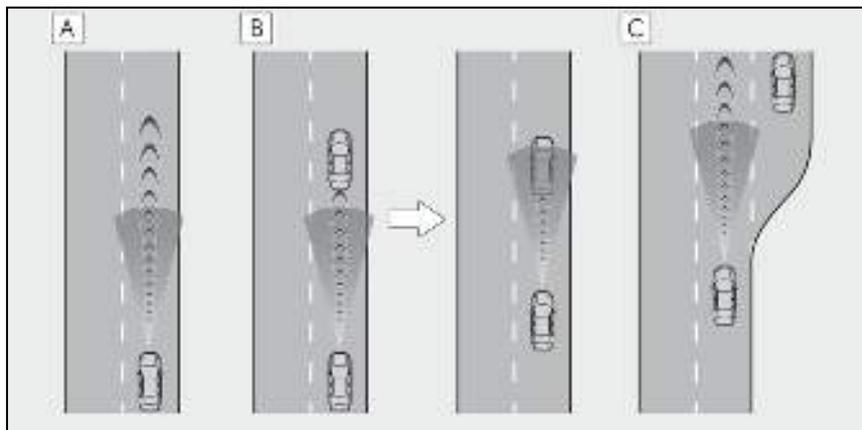
**⚠ WARNING**

- When weather conditions are bad enough that they may prevent the sensors from detecting correctly (fog, snow, sandstorm, heavy rain, etc.)
- When there is rain, snow, etc. on the front surface of the radar or front camera
- In traffic conditions that require frequent repeated acceleration and deceleration
- During emergency towing
- When an approach warning buzzer is heard often

**Driving in vehicle-to-vehicle distance control mode**

This mode employs a radar to detect the presence of vehicles up to approximately 100 m (328 ft.) ahead, determines the current vehicle-to-vehicle following distance, and operates to maintain a suitable following distance from the vehicle ahead. The desired vehicle-to-vehicle distance can also be set by operating the vehicle-to-vehicle distance switch.

When driving on downhill slopes, the vehicle-to-vehicle distance may become shorter.



- A** Example of constant speed cruising  
When there are no vehicles ahead  
The vehicle travels at the speed set by the driver.

**B** Example of deceleration cruising and follow-up cruising

When a preceding vehicle driving slower than the set speed appears

When a vehicle is detected running ahead of you, the system automatically decelerates your vehicle. When a greater reduction in vehicle speed is necessary, the system applies the brakes (the stop lights will come on at this time). The system will respond to changes in the speed of the vehicle ahead in order to maintain the vehicle-to-vehicle distance set by the driver. Approach warning warns you when the system cannot decelerate sufficiently to prevent your vehicle from closing in on the vehicle ahead.

When the turn signal lever is operated and your vehicle moves to a right lane <sup>\*1</sup>/left lane <sup>\*2</sup> while driving at 80 km/h (50 mph) or more, the vehicle will quickly accelerate to help to overtake a passing vehicle.

**C** Example of acceleration

When there are no longer any preceding vehicles driving slower than the set speed

The system accelerates until the set speed is reached. The system then returns to constant speed cruising.

<sup>\*1</sup>: Right-hand drive vehicles

<sup>\*2</sup>: Left-hand drive vehicles

### Setting the vehicle speed (vehicle-to-vehicle distance control mode)

- 1 Press the cruise control main switch to activate the cruise control.

Dynamic radar cruise control indicator will come on and a message will be displayed on the multi-information display. Press the switch again to deactivate the cruise control.

If the cruise control main switch is pressed and held for 1.5 seconds or more, the system turns on in constant speed control

mode. (→P.317)



- 2 Accelerate or decelerate, with accelerator pedal operation, to the desired vehicle speed (at or above approximately 30 km/h [20 mph]) and press the "-SET" switch to set the speed.

Cruise control "SET" indicator will come on.

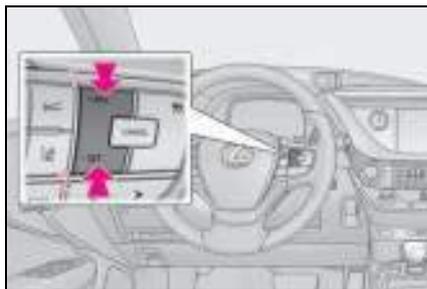
The vehicle speed at the moment the

switch is released becomes the set speed.



### Adjusting the set speed

To change the set speed, press the “+RES” or “-SET” switch until the desired set speed is displayed.



- 1 Increases the speed
- 2 Decreases the speed

Fine adjustment: Press the switch.

Large adjustment: Press and hold the switch to change the speed, and release when the desired speed is reached.

In the vehicle-to-vehicle distance control mode, the set speed will be increased or decreased as follows:

- Fine adjustment: By 1 km/h (0.6 mph)<sup>\*1</sup> or 1mph (1.6 km/h)<sup>\*2</sup> each time the switch is pressed
- Large adjustment: Increases or decreases

in 5 km/h (3.1 mph)<sup>\*1</sup> or 5 mph (8 km/h)<sup>\*2</sup> increments for as long as the switch is held

In the constant speed control mode (→P.318), the set speed will be increased or decreased as follows:

Fine adjustment: By 1 km/h (0.6 mph)<sup>\*1</sup> or 1 mph (1.6 km/h)<sup>\*2</sup> each time the switch is pressed

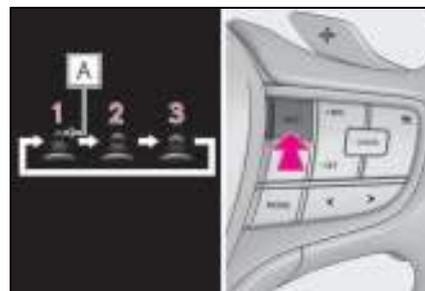
Large adjustment: The speed will continue to change while the switch is held.

<sup>\*1</sup>: When the set speed is shown in “km/h”

<sup>\*2</sup>: When the set speed is shown in “MPH”

### Changing the vehicle-to-vehicle distance (vehicle-to-vehicle distance control mode)

Pressing the switch changes the vehicle-to-vehicle distance as follows:



- 1 Long
- 2 Medium
- 3 Short

The vehicle-to-vehicle distance is set automatically to long mode when the engine switch is turned to IGNITION ON mode.

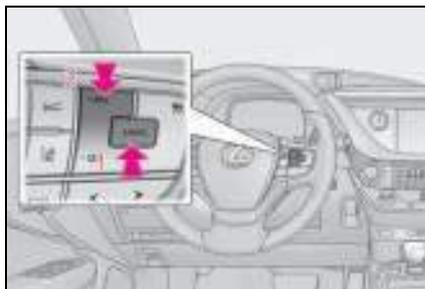
If a vehicle is running ahead of you, the preceding vehicle mark **A** will also be displayed.

### Vehicle-to-vehicle distance settings (vehicle-to-vehicle distance control mode)

Select a distance from the table below. Note that the distances shown correspond to a vehicle speed of 80 km/h (50 mph). Vehicle-to-vehicle distance increases/decreases in accordance with vehicle speed.

Distance options	Vehicle-to-vehicle distance
Long	Approximately 50 m (160 ft.)
Medium	Approximately 40 m (130 ft.)
Short	Approximately 30 m (100 ft.)

### Canceling and resuming the speed control



- 1 Pressing the cancel switch cancels the speed control.

The speed control is also canceled when the brake pedal is depressed.

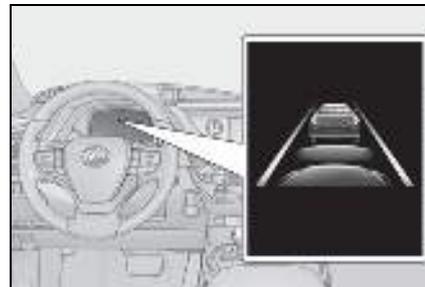
- 2 Pressing the "+RES" switch resumes the cruise control and returns vehicle speed to the set

speed.

However, cruise control does not resume when the vehicle speed is approximately 25 km/h (16 mph) or less.

### Approach warning (vehicle-to-vehicle distance control mode)

When your vehicle is too close to a vehicle ahead, and sufficient automatic deceleration via the cruise control is not possible, the display will flash and the buzzer will sound to alert the driver. An example of this would be if another driver cuts in front of you while you are following a vehicle. Depress the brake pedal to ensure an appropriate vehicle-to-vehicle distance.



#### ■ Warnings may not occur when

In the following instances, warnings may not occur even when the vehicle-to-vehicle distance is small.

- When the speed of the preceding vehicle matches or exceeds your vehicle speed
- When the preceding vehicle is traveling at an extremely slow speed
- Immediately after the cruise control

speed was set

- When depressing the accelerator pedal

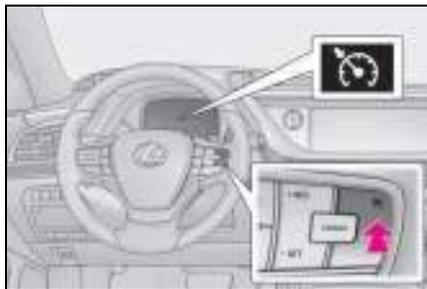
**Selecting constant speed control mode**

When constant speed control mode is selected, your vehicle will maintain a set speed without controlling the vehicle-to-vehicle distance. Select this mode only when vehicle-to-vehicle distance control mode does not function correctly due to a dirty radar, etc.

- 1 With the cruise control off, press and hold the cruise control main switch for 1.5 seconds or more.

Immediately after the switch is pressed, the dynamic radar cruise control indicator will come on. Afterwards, it switches to the cruise control indicator.

Switching to constant speed control mode is only possible when operating the switch with the cruise control off.



- 2 Accelerate or decelerate, with accelerator pedal operation, to the desired vehicle speed (at or above approximately 30 km/h [20 mph]) and press the “-SET” switch to set the speed.

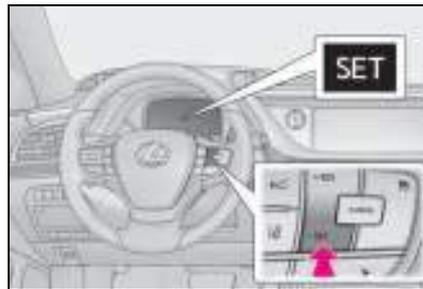
Cruise control “SET” indicator will come

on.

The vehicle speed at the moment the switch is released becomes the set speed.

Adjusting the speed setting: (→P.316)

Canceling and resuming the speed setting: (→P.317)



■ **Dynamic radar cruise control can be set when**

- The shift position is in D.
- Depending on the control mode, this item can be set at the following speeds.
  - Vehicle-to-vehicle distance control mode: Approximately 30 km/h (20 mph) or more
  - Constant speed control mode: Approximately 30 km/h (20 mph) or more

■ **Accelerating after setting the vehicle speed**

The vehicle can accelerate by operating the accelerator pedal. After accelerating, the set speed resumes. However, during vehicle-to-vehicle distance control mode, the vehicle speed may decrease below the set speed in order to maintain the distance to the preceding vehicle.

■ **Automatic cancelation of vehicle-to-vehicle distance control mode**

Vehicle-to-vehicle distance control mode is automatically canceled in the following situations.

- Actual vehicle speed falls below approximately 25 km/h (16 mph).
- VSC is activated.
- TRC is activated for a period of time.

- When the VSC or TRC system is turned off.
- When snow mode (if equipped) is set.
- The sensor cannot detect correctly because it is covered in some way.
- Pre-collision braking is activated.

If vehicle-to-vehicle distance control mode is automatically canceled for any reasons other than the above, there may be a malfunction in the system. Contact your Lexus dealer.

#### ■ Automatic cancelation of constant speed control mode

Constant speed control mode is automatically canceled in the following situations:

- Actual vehicle speed is more than approximately 16 km/h (10 mph) below the set vehicle speed.
- Actual vehicle speed falls below approximately 30 km/h (20 mph).
- VSC is activated.
- TRC is activated for a period of time.
- When the VSC or TRC system is turned off.
- Pre-collision braking is activated.

If constant speed control mode is automatically canceled for any reasons other than the above, there may be a malfunction in the system. Contact your Lexus dealer.

#### ■ Brake operation

A brake operation sound may be heard and the brake pedal response may change, but these are not malfunctions.

#### ■ Warning messages and buzzers for dynamic radar cruise control

Warning messages and buzzers are used to indicate a system malfunction or to inform the driver of the need for caution while driving. If a warning message is shown on the multi-information display, read the message and follow the instructions. (→P.251, 258, 530)

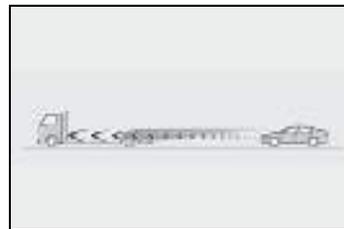
#### ■ When the sensor may not be correctly detecting the vehicle ahead

In the case of the following and depending

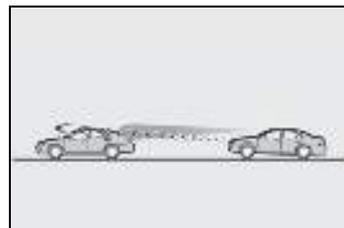
on the conditions, operate the brake pedal when deceleration of the system is insufficient or operate the accelerator pedal when acceleration is required.

As the sensor may not be able to correctly detect these types of vehicles, the approach warning (→P.317) may not be activated.

- Vehicles that cut in suddenly
- Vehicles traveling at low speeds
- Vehicles that are not moving in the same lane
- Vehicles with small rear ends (trailers with no load on board, etc.)



- Motorcycles traveling in the same lane
- When water or snow thrown up by the surrounding vehicles hinders the detecting of the sensor
- When your vehicle is pointing upwards (caused by a heavy load in the luggage compartment, etc.)



- Preceding vehicle has an extremely high ground clearance

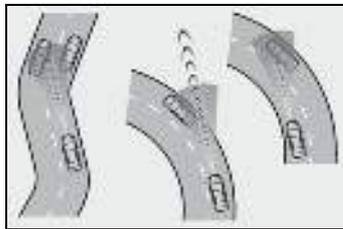


■ **Conditions under which the vehicle-to-vehicle distance control mode may not function correctly**

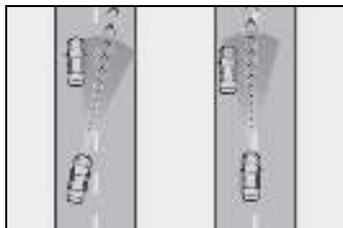
In the case of the following conditions, operate the brake pedal (or accelerator pedal, depending on the situation) as necessary.

As the sensor may not be able to correctly detect vehicles ahead, the system may not operate properly.

- When the road curves or when the lanes are narrow



- When steering wheel operation or your position in the lane is unstable



- When the vehicle ahead of you decelerates suddenly
- When driving on a road surrounded by a structure, such as in a tunnel or on a bridge
- While the vehicle speed is decreasing to the set speed after the vehicle accelerates by depressing the accelerator pedal.

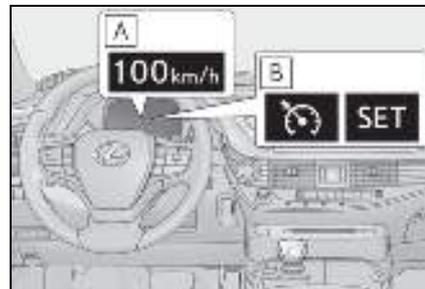
**Cruise control\***

\*: If equipped

**Use the cruise control to maintain a set speed without depressing the accelerator pedal.**

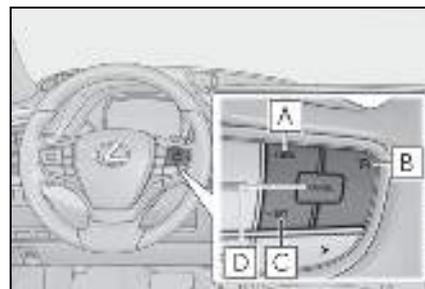
**System components**

■ **Meter display**



- A** Set speed
- B** Indicators

■ **Operation switches**



- A** "+RES" switch
- B** Cruise control main switch
- C** "-SET" switch
- D** Cancel switch

### Setting the vehicle speed

- 1 Press the cruise control main switch to activate the cruise control.

Cruise control indicator will come on.

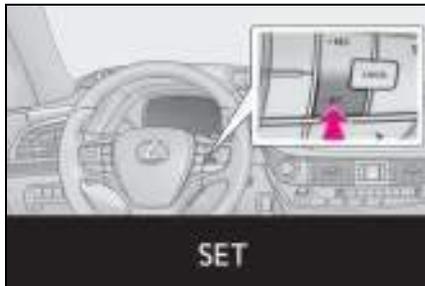
Press the switch again to deactivate the cruise control.



- 2 Accelerate or decelerate the vehicle to the desired speed, and press the "-SET" switch to set the speed.

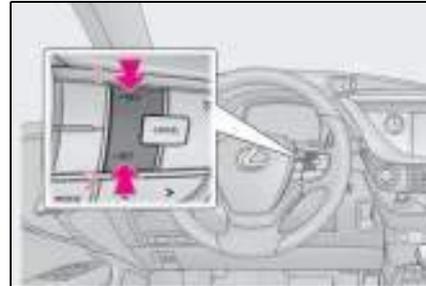
Cruise control "SET" indicator will come on.

The vehicle speed at the moment the switch is released becomes the set speed.



### Adjusting the set speed

To change the set speed, press the "+RES" or "-SET" switch until the desired set speed is obtained.



- 1 Increases the speed
- 2 Decreases the speed

Fine adjustment: Press the switch in the desired direction.

Large adjustment: Press and hold switch.

The set speed will be increased or decreased as follows:

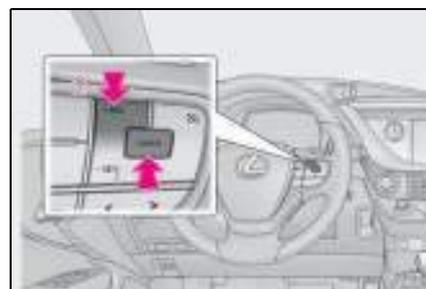
Fine adjustment: By 1 km/h (0.6 mph)<sup>\*1</sup> or 1 mph (1.6 km/h)<sup>\*2</sup> each time the switch is pressed

Large adjustment: The set speed can be increased or decreased continually until the switch is released.

<sup>\*1</sup>: When the set speed is shown in "km/h"

<sup>\*2</sup>: When the set speed is shown in "MPH"

### Canceling and resuming the constant speed control



- 1 Pressing the cancel switch cancels the constant speed control.

The speed setting is also canceled when the brakes are applied.

- 2 Pressing the “+RES” switch resumes the constant speed control.

Resuming is available when the vehicle speed is more than approximately 30km/h (20 mph).

■ **Cruise control can be set when**

- The shift position is in D.
- Range 4 or higher of D has been selected by using the paddle shift.
- Vehicle speed is above approximately 30 km/h (20 mph).

■ **Accelerating after setting the vehicle speed**

- The vehicle can be accelerated normally. After acceleration, the set speed resumes.
- Even without canceling the cruise control, the set speed can be increased by first accelerating the vehicle to the desired speed and then pressing the “-SET” switch to set the new speed.

■ **Automatic cruise control cancelation**

Cruise control will stop maintaining the vehicle speed in any of the following situations.

- Actual vehicle speed falls more than approximately 16 km/h (10 mph) below the preset vehicle speed. At this time, the memorized set speed is not retained.
- Actual vehicle speed is below approximately 30 km/h (20 mph).
- VSC is activated.
- TRC is activated for a period of time.
- When the VSC or TRC system is turned off.

■ **If the warning message for the cruise control is shown on the multi-information display**

Press the cruise control main switch once to deactivate the system, and then press the switch again to reactivate the system. If the cruise control speed cannot be set or if the cruise control cancels immediately after being activated, there may be a malfunction in the cruise control system. Have the vehicle inspected by your Lexus dealer.

 **WARNING**

■ **To avoid operating the cruise control by mistake**

Switch the cruise control off using the cruise control main switch when not in use.

■ **Situations unsuitable for cruise control**

Do not use cruise control in any of the following situations. Doing so may result in loss of control and could cause an accident resulting in death or serious injury.

- In heavy traffic
- On roads with sharp bends
- On winding roads
- On slippery roads, such as those covered with rain, ice or snow
- On steep hills  
Vehicle speed may exceed the set speed when driving down a steep hill.
- During emergency towing

### Stop & Start system \*

\*: If equipped

The Stop & Start system stops and restarts the engine according to the brake pedal or shift lever operation when the vehicle is stopped.

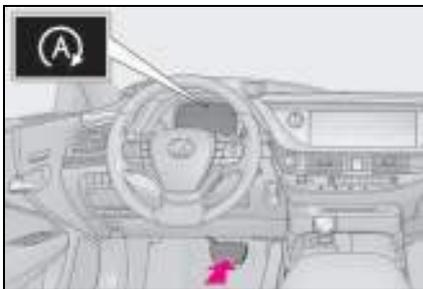
### Stop & Start system operation

#### ■ When the brake hold system is not operating with the shift position in D

##### ▶ Stopping the engine

While driving with the shift position in D, depress the brake pedal and stop the vehicle.

The Stop & Start indicator will come on.



##### ▶ Restarting the engine

Release the brake pedal.

The Stop & Start indicator will turn off.

#### ■ When the brake hold system is operating with the shift position in D

The Stop & Start system is operational when the brake hold system is operating. (→P.225)

##### ▶ Stopping the engine

While driving with the shift position in D, depress the brake pedal and stop the vehicle.

The Stop & Start indicator will come on.

While the brake hold system is operating, the brake hold operated indicator will come on. If the brake pedal is released, the engine will remain stopped by the Stop & Start system.



##### ▶ Restarting the engine

Depress the accelerator pedal. (Releasing the brake pedal will not restart the engine.)

The Stop & Start indicator and brake hold operated indicator will turn off.

#### ■ When the dynamic radar cruise control with full-speed range is operating with the shift position in D (if equipped)

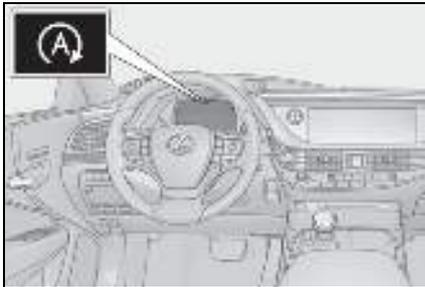
The Stop & Start system is operational during a controlled stop by the dynamic radar cruise control with full-speed range. (→P.303)

##### ▶ Stopping the engine

While driving with the dynamic radar cruise control with full-speed range in vehicle-to-vehicle distance control

mode, the engine will stop automatically if the vehicle comes to a complete stop through a controlled stop. (The engine will stop automatically even though the brake pedal is not depressed.)

The Stop & Start indicator will come on.



▶ Restarting the engine

When the preceding vehicle starts off, the engine will restart automatically.

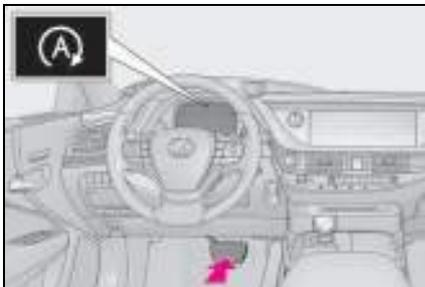
The Stop & Start indicator will turn off.

■ When the shift position is shifted to P

▶ Stopping the engine

- 1 While driving with the shift position in D, depress the brake pedal and stop the vehicle.

The engine will be stopped by the Stop & Start system and the Stop & Start indicator will come on.



- 2 Shift the shift position to P. (→P.218)

The engine will remain stopped.

The engine may restart if the shift position is shifted from D to P immediately after the engine is stopped by the Stop & Start system. Additionally, if the engine is not stopped by the Stop & Start system when vehicle is stopped with the shift position in D, it may be stopped by the Stop & Start system when the shift position is shifted to P.

▶ Restarting the engine

With the brake pedal depressed, shift the shift position to any position other than P. (→P.218)

If the brake pedal was released after the engine was stopped by the Stop & Start system, the engine will restart when the brake pedal is depressed again. If the brake pedal was not released after the engine was stopped by the Stop & Start system, the engine will restart when the shift position is shifted to any position other than P.

The Stop & Start indicator will turn off.

■ Operating conditions

- The Stop & Start system is operational when all of the following conditions are met:
  - The brake pedal is being depressed firmly. (Except when the vehicle comes to a controlled stop while driving with the dynamic radar cruise control with full-speed range in vehicle-to-vehicle distance control mode)
  - The engine is adequately warmed up.
  - The outside temperature is -5°C (23°F) or higher.
  - The shift position is in D or P.
  - The windshield defogger is off.
  - The hood is closed.
  - The driver's seat belt is fastened.
  - The driver's door is closed.
  - The accelerator pedal is not being

depressed.

- In the following situations the engine may not be stopped by the Stop & Start system. This is not a malfunction of the Stop & Start system.
  - The air conditioning system is being used when the ambient temperature is high or low.
  - The battery is not sufficiently charged, such as if the vehicle has been parked for a long time and the battery charge has decreased, the electric load is large, the battery fluid temperature is excessively low or the battery has deteriorated, or is undergoing a periodic recharge.
  - The brake booster vacuum is low.
  - The vehicle is stopped on a steep incline.
  - The steering wheel is being operated.
  - Due to traffic or other circumstances the vehicle is stopped repeatedly.
  - The vehicle is being driven in a high altitude area.
  - Engine coolant temperature or transmission fluid temperature is extremely low or high.
  - The battery fluid temperature is extremely low or high.
  - For a while after the battery terminals have been disconnected and reconnected.
  - For a while after the battery has been replaced.
- In the following situations, the engine will restart automatically if the engine is stopped by the Stop & Start system. (To enable stopping of the engine by the Stop & Start system, drive the vehicle.)
  - The air conditioning system is turned on.
  - The pollen removal mode is turned on.
  - The windshield defogger is turned on.
  - The steering wheel is operated.
  - The shift position is shifted to M, N or R from D.
  - The shift position is shifted from P.
  - The driver's seat belt is unfastened.
  - The driver's door is opened.
  - The accelerator pedal is depressed.
  - The Stop & Start cancel switch is pressed.
  - The vehicle starts to roll on an incline.
- In the following situations, the engine may restart automatically if the engine is

stopped by the Stop & Start system. (To enable stopping of the engine by the Stop & Start system, drive the vehicle.)

- The brake pedal is pumped or strongly depressed.
- The air conditioning system is being used.
- The battery is not sufficiently charged.

#### ■ Stop & Start system operation when the brake hold system is operating

- If the engine is restarted automatically by the Stop & Start system when the brake hold system is operating, the brake hold system will continue to apply the brakes.
- If the operation conditions of the brake hold system are no longer met (→P.225) while the engine is stopped by the Stop & Start system, the brake hold system will stop operating.

At this time, the parking brake will be applied automatically and the engine will be restarted automatically.

#### ■ Stop & Start system operation during a controlled stop by the dynamic radar cruise control with full-speed range (if equipped)

If the engine is restarted automatically by the Stop & Start system during a controlled stop by the dynamic radar cruise control with full-speed range, the controlled stop will continue. (Resuming follow-up cruising after a controlled stop:→P.306)

#### ■ Hood

- If the hood is opened while the engine is stopped by the Stop & Start system, the engine will stall and will not be able to be restarted by the automatic engine start function. In this case, restart the engine using the normal engine starting procedure. (→P.212)
- Even if the hood is closed after the engine is started with the hood open, the Stop & Start system will not operate. Close the hood, turn the engine switch off, wait 30 seconds or more, and then start the engine.

#### ■ When to use the Stop & Start system

- When stopping the vehicle for a longer

period of time, turn the engine switch off and stop the engine completely.

- When the system does not operate, is canceled, or is malfunctioning, warning messages and a warning buzzer are used to inform the driver. (→P.327)
- If the engine switch is pressed when the engine is stopped by the Stop & Start system, the engine will stall and will not be able to be restarted by the automatic engine start function. In this case, restart the engine using the normal engine starting procedure. (→P.212)
- When the engine is restarted by the Stop & Start system, the power outlet may be temporarily unusable, but this is not a malfunction.
- Installation and removal of electrical components and wireless devices may affect the Stop & Start system. Contact your Lexus dealer for details.

■ **If the windshield is fogged up while the engine is stopped by the Stop & Start system**

Turn the windshield defogger on. (The engine will start due to the automatic engine start function.): →P.401  
If the windshield fogs up frequently, press the Stop & Start cancel switch to disable the system.

■ **Air conditioning system operation while the engine is stopped by the Stop & Start system**

- If the air conditioning system is being used in automatic mode, the fan speed may be reduced or the fan may be stopped while the engine is stopped by the Stop & Start system in order to reduce changes in the cabin temperature.
- To ensure air conditioning system performance when the vehicle is stopped, disable the Stop & Start system by pressing the Stop & Start cancel switch.

■ **If an odor comes from the air conditioning system while the engine is stopped by the Stop & Start system**

Press the Stop & Start cancel switch to

deactivate the Stop & Start system.

■ **Changing the idling stop time with the air conditioning system on**

The length of time the Stop & Start system will operate when the air conditioning system is on can be changed by performing the following operation. (The length of time the Stop & Start system will operate when the air conditioning system is off cannot be changed.)

- Setting by pressing and holding the Stop & Start cancel switch  
Each time the Stop & Start cancel switch is pressed and held for 3 seconds or more, the system changes between standard and extended. The system status can be confirmed on the multi-information display screen. (→P.121)

- Settings using the multi-information display

 (→P.121) or  (→P.119).

■ **The Stop & Start system protection function**

- When the volume of the audio system is excessively high, sound output from the audio system may suddenly be cut off in order to reduce battery consumption. To prevent the audio system from being cut off, keep the volume of audio system at a moderate level.  
If the audio system has been cut off, turn the engine switch off, wait for 3 seconds or more and then turn it to ACCESSORY mode or IGNITION ON mode to re-enable the audio system.
- The audio system may not be activated if the battery terminals are disconnected and then reconnected. If this occurs, turn the engine switch off and then repeat the following operation twice to activate the audio system normally.
  - Turn the engine switch to IGNITION ON mode and then to off.

■ **Replacing the battery**

→P.545

#### ■ Displaying the Stop & Start system status

→P.121

#### ■ Multi-information display messages

If the following situations,  and a message may be displayed on the multi-information display.

- When the engine cannot be stopped by the Stop & Start system

#### "Depress Brake Firmly to Activate"

- The brake pedal is not depressed enough.

→ If the brake pedal is depressed further, the system will operate.

#### "For Climate Control"

- The air conditioning system is being used when the ambient temperature is high or low.

→ If the difference between the set temperature and cabin temperature is small, the system will be enabled.

- The windshield defogger is ON.

#### "Battery Charging"

- The battery charge amount may be low.

→ Engine stop is temporarily prohibited to prioritize charging of the battery, but if the engine is operated for a short while, engine stop is allowed.

- A refresh charge may be occurring, such as when the battery is undergoing a periodic recharge, for a while after the battery terminals have been disconnected and reconnected, for a while after the battery has been replaced, etc.

→ After a refresh charge of approximately 5 to 60 minutes completes, the system can be operated.

- Continuously displayed for a long term

→ The battery may be deteriorated. Contact your Lexus dealer for details.

#### "In Preparation"

- The vehicle is being driven in a high altitude area.
- The brake booster vacuum is low.

→ When the brake booster vacuum reaches a predetermined level, the system will be enabled.

#### "Steering Wheel Turned"

- The steering wheel was operated.

#### "Driver Seat Belt Unbuckled"

- The driver seat belt is not fastened.

#### "Stop & Start Unavailable"

- The Stop & Start system is temporarily disabled.

→ Operate the engine for a short while.

- The engine may have been started with the hood open.

→ Close the hood, turn the engine switch off, wait for 30 seconds or more, and then start the engine.

#### "System Temperature Low"

- The battery may be cold.

→ Operate the engine for a short while allows the system to recover due to the temperature increase in the trunk.

#### "System Temperature High"

- The battery may be extremely hot.

→ If the engine compartment is allowed to cool sufficiently, the system recovers.

#### "Non-Dedicated Battery."

- A non-dedicated battery for the Stop & Start system may have been installed.

→ The Stop & Start system does not operate. Have the vehicle inspected by your Lexus dealer.

- When the engine automatically restarts while stopped by the Stop & Start system

 "For Climate Control"

- The air conditioning system has been turned on or is being used.
- The windshield defogger has been turned on.

 "In Preparation"

- The brake pedal has been depressed further or pumped.
- The system will be enabled after the engine runs and the brake booster vacuum reaches a predetermined level.

 "Battery Charging"

- The battery charge amount may be low.
- The engine is restarted to prioritize battery charging. Operating the engine for a short while allows the system to recover.

 "Steering Wheel Turned"

- The steering wheel was operated.

 "Driver Seat Belt Unbuckled"

- The driver seat belt has been unfastened.

■ **Stop & Start system warning messages**

If a system malfunction occurs, a warning message will be displayed on the multi-information display to inform the driver of the need for caution. (→P.530)

■ **If the Stop & Start cancel indicator continues to flash**

The system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

 **WARNING**

■ **When the Stop & Start system is operating**

- Depress the brake pedal and apply the parking brake when necessary while the engine is stopped by the Stop & Start system (while the Stop & Start indicator is on). (Except when the brake hold system is operating or when the vehicle comes to a controlled stop while driving with the dynamic radar cruise control with full-speed range in vehicle-to-vehicle distance control mode)
- Do not allow anyone to leave the vehicle while the engine is stopped by the Stop & Start system (while the Stop & Start indicator is on). An accident may occur due to the automatic engine start function.
- Ensure that the engine is not stopped by the Stop & Start system while the vehicle is in a poorly ventilated area. The engine may restart due to the automatic engine start function, causing exhaust gases to collect and enter the vehicle, possibly resulting in death or a serious health hazard.

 **NOTICE**

■ **To ensure the system operates correctly**

If any of the following situations occur, the Stop & Start system may not operate correctly. Have your vehicle checked by your Lexus dealer.

- While the driver's seat belt is fastened, the driver's and front passenger's seat belt reminder light flashes.
- Even though the driver's seat belt is not fastened, the driver's and front passenger's seat belt reminder light does not illuminate.

**NOTICE**

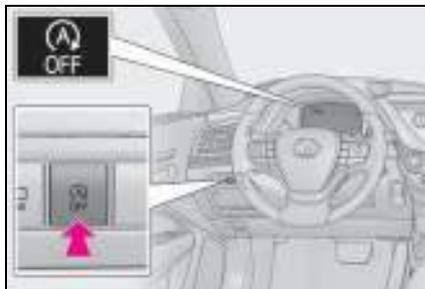
- Even though the driver's door is closed, the open door warning light is illuminated or the interior light is illuminated when the interior light switch is in the door position.
- Even though the driver's door is open, the open door warning light does not illuminate or the interior light does not illuminate when the interior light switch is in the door position.

### Disabling the Stop & Start system

Press the Stop & Start cancel switch to disable the Stop & Start system.

The Stop & Start cancel indicator will come on.

Pressing the switch again will enable the Stop & Start system and the Stop & Start cancel indicator will turn off.



### Automatic reactivation of the Stop & Start system

Even if the Stop & Start system is disabled by the Stop & Start cancel switch, it will be automatically re-enabled once the engine switch is turned off and then the engine is started.

### If the Stop & Start cancel switch is pressed while the vehicle is stopped

- When the engine is stopped by the Stop

& Start system, pressing the Stop & Start cancel switch will restart the engine.

- With the Stop & Start system disabled, pressing the Stop & Start cancel switch will re-enable the system but not stop the engine. From the next time the vehicle is stopped (after Stop & Start system has been enabled), the engine will be stopped.

### Hill-start assist control (when the shift position is in D)

After the engine is stopped by the Stop & Start system when the vehicle is on an incline, brake force is temporarily maintained to prevent rolling backwards until the engine is restarted and drive force is generated.

When drive force is generated, the maintained brake force is automatically canceled.

- This function operates on flat surfaces as well as steep inclines.
- Sound may be generated from the brakes, but this is not a malfunction.
- Brake pedal response may change and vibration may occur, but these are not malfunctions.

### BSM (Blind Spot Monitor)\*

\*: If equipped

The Blind Spot Monitor is a system that uses rear side radar sensors installed on the inner side of the rear bumper on the left and right side to assist the driver in confirming safety when changing lanes.

#### WARNING

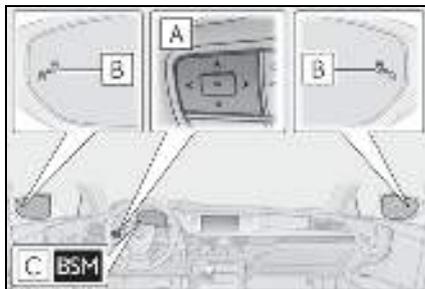
##### ■ Cautions regarding the use of the system

The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings.

The Blind Spot Monitor is a supplementary function which alerts the driver that a vehicle is in a blind spot of the outside rear view mirrors or is approaching rapidly from behind into a blind spot. Do not overly rely on the Blind Spot Monitor. As the function cannot judge if it is safe to change lanes, over reliance could lead to an accident resulting in death or serious injury.

As the system may not function correctly under certain conditions, the driver's own visual confirmation of safety is necessary.

#### System components



A | Meter control switches

Turning the Blind Spot Monitor on/off.

#### B | Outside rear view mirror indicators

When a vehicle is detected in a blind spot of the outside rear view mirrors or approaching rapidly from behind into a blind spot, the outside rear view mirror indicator on the detected side will illuminate. If the turn signal lever is operated toward the detected side, the outside rear view mirror indicator flashes.

#### C | BSM indicator

Illuminates when the Blind Spot Monitor is enabled

#### ■ Outside rear view mirror indicator visibility

In strong sunlight, the outside rear view mirror indicator may be difficult to see.

#### ■ When "BSM Not Available" is shown on the multi-information display

Ice, snow, mud, etc., may be attached to the rear bumper around the sensors. (→P.334) The system should return to normal operation after removing the ice, snow, mud, etc. from the rear bumper. Additionally, the sensors may not operate normally when driving in extremely hot or cold environments.

#### ■ Customization

Some functions can be customized. (→P.568)

**■ Certification**

- For vehicles sold in El Salvador

FCC ID : QAYSRR3A

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC Warning**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

- For vehicles sold in the United Arab Emirates



- For vehicles sold in Bahrain

The Equipment Identified hereon is approved for use under the following rules:

- 1- This equipment must not cause harmful interference to other services.
- 2- This equipment is subject to harmful interference, and the owner of this equipment must not claim for protection.

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- ▶ For vehicles sold in Qatar



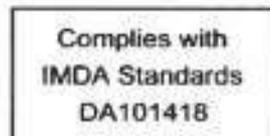
- ▶ For vehicles sold in Jordan

TRC's type approval certificate number: TRC/LPD/2014/254

- ▶ For vehicles sold in Lebanon

**From the Lebanese Telecommunications Ministry:**  
**Type Approval Number : 12421/O&M/2014**

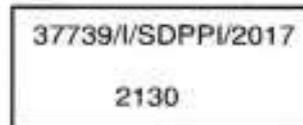
- ▶ For vehicles sold in Singapore



- ▶ For vehicles sold in Korea



- ▶ For vehicles sold in Indonesia



- ▶ For vehicles sold in Taiwan

**第十二條**

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

**第十四條**

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

► For vehicles sold in Vietnam



► For vehicles sold in the Philippines



► For vehicles sold in South Africa



**! WARNING**

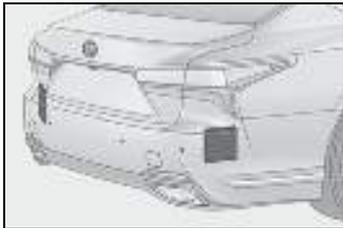
**■ Handling the rear side radar sensor**

Blind Spot Monitor sensors are installed behind the left and right sides of the rear bumper respectively. Observe the following to ensure the Blind Spot Monitor can operate correctly.

**⚠ WARNING**

- Keep the sensors and the surrounding areas on the rear bumper clean at all times.

If a sensor or its surrounding area on the rear bumper is dirty or covered with snow, the Blind Spot Monitor may not operate and a warning message (→P.330) will be displayed. In this situation, clear off the dirt or snow and drive the vehicle with the operation conditions of the BSM function (→P.337) satisfied for approximately 10 minutes. If the warning message does not disappear, have the vehicle inspected by your Lexus dealer.



- Do not attach accessories, stickers (including transparent stickers), aluminum tape, etc. to a sensor or its surrounding area on the rear bumper.
- Do not subject a sensor or its surrounding area on the rear bumper to a strong impact. If a sensor is moved even slightly off position, the system may malfunction and vehicles may not be detected correctly. In the following situations, have your vehicle inspected by your Lexus dealer.
  - A sensor or its surrounding area is subject to a strong impact.
  - If the surrounding area of a sensor is scratched or dented, or part of them has become disconnected.

- Do not disassemble the sensor.
- Do not modify the sensor or surrounding area on the rear bumper.
- If a sensor or the rear bumper needs to be removed/installed or replaced, contact your Lexus dealer.
- Do not paint the rear bumper any color other than an official Lexus color.

**Turning the Blind Spot Monitor on/off**

Use the meter control switches to turn on/off the function.

- 1 Press or to select .
- 2 Press or to select and then press .

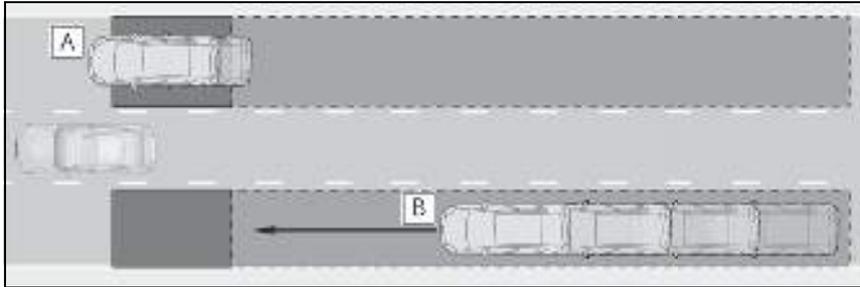
4

Driving

### Blind Spot Monitor operation

#### ■ Vehicles that can be detected by the Blind Spot Monitor

The Blind Spot Monitor uses rear side radar sensors to detect the following vehicles traveling in adjacent lanes and advises the driver of the presence of such vehicles via the indicators on the outside rear view mirrors.



- A** Vehicles that are traveling in areas that are not visible using the outside rear view mirrors (the blind spots)
- B** Vehicles that are approaching rapidly from behind in areas that are not visible using the outside rear view mirrors (the blind spots)

#### ■ The Blind Spot Monitor detection areas

The areas that vehicles can be detected in are outlined below.



The range of each detection area is:

- A** Approximately 0.5 m (1.6 ft.) to 3.5 m (11.5 ft.) from either side of the vehicle <sup>\*1</sup>
- B** Approximately 1 m (3.3 ft.) forward of the rear bumper
- C** Approximately 3 m (9.8 ft.) from the rear bumper
- D** Approximately 3 m (9.8 ft.) to 60 m (197 ft.) from the rear bumper <sup>\*2</sup>

<sup>\*1</sup>: The area between the side of the vehicle and 0.5 m (1.6 ft.) from the side of the vehicle cannot be detected.

\*2: The greater the difference in speed between your vehicle and the detected vehicle is, the farther away the vehicle will be detected, causing the outside rear view mirror indicator to illuminate or flash.

#### ■ The Blind Spot Monitor is operational when

The Blind Spot Monitor is operational when all of the following conditions are met:

- The Blind Spot Monitor is on.
- The shift position is in a position other than R.
- The vehicle speed is greater than approximately 16 km/h (10 mph).

#### ■ The Blind Spot Monitor will detect a vehicle when

The Blind Spot Monitor will detect a vehicle present in the detection area in the following situations:

- A vehicle in an adjacent lane overtakes your vehicle.
- You overtake a vehicle in an adjacent lane slowly.
- Another vehicle enters the detection area when it changes lanes.

#### ■ Conditions under which the Blind Spot Monitor will not detect a vehicle

The Blind Spot Monitor is not designed to detect the following types of vehicles and/or objects:

- Small motorcycles, bicycles, pedestrians, etc.\*
- Vehicles traveling in the opposite direction
- Guardrails, walls, signs, parked vehicles and similar stationary objects\*
- Following vehicles that are in the same lane\*
- Vehicles traveling 2 lanes away from your vehicle\*
- Vehicles which are being overtaken rapidly by your vehicle\*

\*: Depending on the conditions, detection of a vehicle and/or object may occur.

#### ■ Conditions under which the Blind Spot Monitor may not function correctly

- The Blind Spot Monitor may not detect vehicles correctly in the following situations:
  - When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
  - When mud, snow, ice, a sticker, etc. is covering the sensor or surrounding area on the rear bumper
  - When driving on a road surface that is wet with standing water during bad weather, such as heavy rain, snow, or fog
  - When multiple vehicles are approaching with only a small gap between each vehicle
  - When the distance between your vehicle and a following vehicle is short
  - When there is a significant difference in speed between your vehicle and the vehicle that enters the detection area
  - When the difference in speed between your vehicle and another vehicle is changing
  - When a vehicle enters a detection area traveling at about the same speed as your vehicle
  - As your vehicle starts from a stop, a vehicle remains in the detection area
  - When driving up and down consecutive steep inclines, such as hills, dips in the road, etc.
  - When driving on roads with sharp bends, consecutive curves, or uneven surfaces
  - When vehicle lanes are wide, or when driving on the edge of a lane, and the vehicle in an adjacent lane is far away from your vehicle
  - When an accessory (such as a bicycle carrier) is installed to the rear of the vehicle
  - When there is a significant difference in height between your vehicle and the vehicle that enters the detection area
  - Immediately after the Blind Spot Monitor is turned on
- Instances of the Blind Spot Monitor

unnecessarily detecting a vehicle and/or object may increase in the following situations:

- When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
- When the distance between your vehicle and a guardrail, wall, etc. that enters the detection area is short
- When driving up and down consecutive steep inclines, such as hills, dips in the road, etc.
- When vehicle lanes are narrow, or when driving on the edge of a lane, and a vehicle traveling in a lane other than the adjacent lanes enters the detection area
- When driving on roads with sharp bends, consecutive curves, or uneven surfaces
- When the tires are slipping or spinning
- When the distance between your vehicle and a following vehicle is short
- When an accessory (such as a bicycle carrier) is installed to the rear of the vehicle

### PKSA (Parking Support Alert)

The Parking Support Alert system consists of the following functions that operate when driving at a low speed or backing up, such as when parking. When the system determines that a collision with a detected object, such as a wall, or pedestrian is high, a warning operates to urge the driver to take evasive action.

### PKSA (Parking Support Alert) system

#### ■ Lexus parking assist-sensor

Ultrasonic sensors are used to detect static objects in the detection area when driving at a low speed or backing up. (→P.340)

#### ■ RCTA (Rear Cross Traffic Alert) function (if equipped)

Radar sensors are used to detect approaching vehicles in the detection areas behind the vehicle when backing up. (→P.346)

#### ■ RCD (Rear camera detection) function (if equipped)

A rear camera sensor is used to detect pedestrians in the detection area behind the vehicle when backing up. (→P.351)

### Setting the buzzer volume

#### ■ Adjusting the buzzer volume

The buzzer volume can be adjusted on the multi-information display. The volume of buzzers for the Lexus parking assist-sensor, RCTA function and RCD function will be adjusted simultaneously.

Use the meter control switches to change settings. (→P.119)

- 1 Press  or  to select .
- 2 Press  or  to select "PKSA" and then press .
- 3 Press  or  to select  and then press .

Each time the switch is pressed, the volume level will change between 1, 2, and 3.

#### ■ Muting a buzzer

A mute button will be displayed on the multi-information display when an object or pedestrian is detected. To mute the buzzer, press .

The buzzers for the Lexus parking assist-sensor, RCTA function and RCD function will be muted simultaneously.

Mute will be canceled automatically in the following situations:

- When the shift position is changed.
- When the vehicle speed exceeds a certain speed.
- When the operating function is temporarily canceled.
- When the operating function is dis-

bled manually.

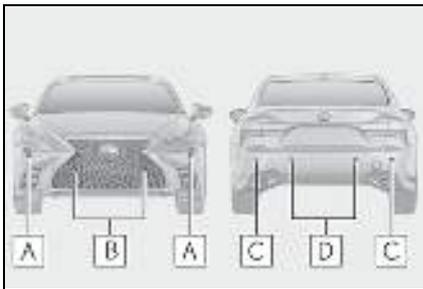
- When the engine switch is turned off.

### Lexus parking assist-sensor

The distance from your vehicle to objects, such as a wall, when parallel parking or maneuvering into a garage is measured by the sensors and communicated via the multi-information display, head-up display (if equipped), Center Display and a buzzer. Always check the surrounding area when using this system.

#### System components

##### Types of sensors



- A** Front corner sensors
- B** Front center sensors
- C** Rear corner sensors
- D** Rear center sensors

##### Display

When the sensors detect an object, such as a wall, a graphic is shown on the multi-information display, head-up display (if equipped) and Center Display depending on the position and distance to the object.

- Multi-information display and

head-up display

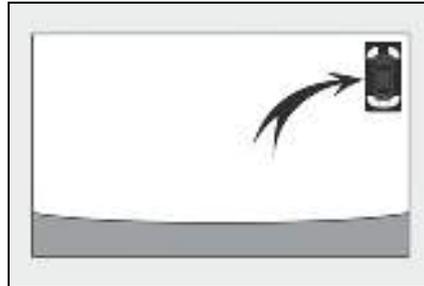


- A** Front corner sensor detection
- B** Front center sensor detection
- C** Rear corner sensor detection
- D** Rear center sensor detection
- Center Display

A graphic is shown when the Lexus parking assist monitor (if equipped) is displayed.

A simplified image is displayed on the Center Display when an object is detected.

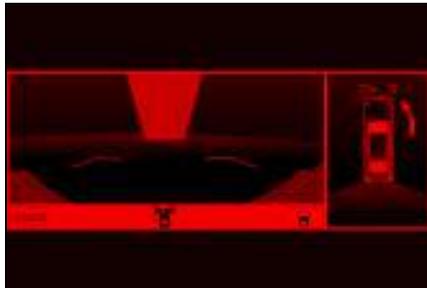
- When the R shift position is selected



- When the N, M or D shift position is selected (vehicle moving forward)



When an object is detected, a graphic will be displayed on the panoramic view monitor (if equipped).



### Turning Lexus parking assist-sensor on/off

Use the meter control switches to enable/disable the Lexus parking assist-sensor. (→P.119)

- 1 Press or to select .
- 2 Press or to select "PKSA" and then press .
- 3 Press or to select and then press .

When the Lexus parking assist-sensor function is disabled, the Lexus parking assist-sensor OFF indicator (→P.106) illuminates.

To re-enable the system when it was

disabled, select on the multi-information display, select and then On. If disabled using this method, the system will not be re-enabled by turning the engine switch off and then to IGNITION ON mode.

### WARNING

#### When using the Lexus parking assist-sensor

Observe the following precautions. Failing to do so may result in the vehicle being unable to be driven safely and possibly cause an accident.

- Do not use the sensor at speeds in excess of 10 km/h (6 mph).
- The sensors' detection areas and reaction times are limited. When moving forward or reversing, check the areas surrounding the vehicle (especially the sides of the vehicle) for safety, and drive slowly, using the brake to control the vehicle's speed.
- Do not install accessories within the sensors' detection areas.
- The area directly under the bumpers is not detected. Thin posts or objects lower than the sensor may not be detected when approached, even if they have been detected once.

#### When to disable the function

In the following situations, disable the function as it may operate even though there is no possibility of a collision.

- The vehicle is equipped with a fender pole, wireless antenna or fog lights.
- The front or rear bumper or a sensor receives a strong impact.
- A non-genuine Lexus suspension (lowered suspension, etc.) is installed.
- Towing eyelets are installed.

**⚠ WARNING**

- A backlit licence plate is installed.

- **When using Lexus parking assist-sensor**

In the following situations, the system may not function correctly due to a sensor malfunction, etc. Have the vehicle checked by your Lexus dealer.

- The Lexus parking assist-sensor operation display flashes or shows continuously, and a beep sounds when no objects are detected.
- If the area around a sensor collides with something, or is subjected to strong impact.
- If the bumper or grille collides with something.
- If the display flashes or is displayed continuously and a buzzer does not sound, except when the mute function has been turned on.
- If a display error occurs, first check the sensor.  
If the error occurs even when there is no ice, snow or mud on the sensor, it is likely that the sensor is malfunctioning.

- **Notes when washing the vehicle**

Do not apply intensive bursts of water or steam to the sensor area.

Doing so may result in the sensor malfunctioning.

- When using a high pressure washer to wash the vehicle, do not spray the sensors directly, as doing so may cause a sensor to malfunction.
- When using steam to clean the vehicle, do not direct steam too close to the sensors as doing so may cause a sensor to malfunction.

- **The system can be operated when**

- The engine switch is in IGNITION ON mode.
- Lexus parking assist-sensor function is on.
- The vehicle speed is less than about 10 km/h (6 mph).
- A shift position other than P is selected.

- **Setting the buzzer volume**

The buzzer volume can be adjusted on the multi-information display. (→P.339)

- **If "Parking Assist Unavailable Clean Parking Assist Sensor" is displayed on the multi-information display**

A sensor may be covered with ice, snow, dirt, etc. Remove the ice, snow, dirt, etc., from the sensor to return the system to normal.

Also, due to ice forming on a sensor at low temperatures, a warning message may be displayed or the sensor may not be able to detect an object. Once the ice melts, the system will return to normal.

- **If "Parking Assist Unavailable" is displayed on the multi-information display**

- Water may be continuously flowing over the sensor surface, such as in a heavy rain. When the system determines that it is normal, the system will return to normal.
- Initialization may not have been performed after a battery terminal was disconnected and reconnected. Initialize the system. (→P.342)  
If this message continues to be displayed even after initialization, have the vehicle inspected by your Lexus dealer.

- **If a battery terminal has been disconnected and reconnected**

The system needs to be initialized. To initialize the system, drive the vehicle straight ahead for 5 seconds or more at a speed of approximately 35 km/h (22 mph) or more. Additionally, for vehicles with the Parking Support Brake function, turn the steering wheel fully to the left and right with the vehi-

cle stopped.

■ **Sensor detection information**

- The following situations may occur during use.
- The sensors may be able to only detect objects near the front and rear bumpers.
- Depending on the shape of the object and other factors, the detection distance may shorten, or detection may be impossible.
- There will be a short delay between object detection and display. Even at low speeds, there is a possibility that the object will come within the sensor's detection areas before the display is shown and the warning beep sounds.
- It might be difficult to hear the buzzer due to the volume of the audio system or air flow noise of the air conditioning system.
- It may be difficult to hear the buzzer if buzzers for other systems are sounding.

■ **Conditions under which the function may not function correctly**

Certain vehicle conditions and the surrounding environment may affect the ability of a sensor to correctly detect objects. Particular instances where this may occur are listed below.

- There is dirt, snow or ice on a sensor. (Cleaning the sensors will resolve this problem.)
- A sensor is frozen. (Thawing the area will resolve this problem.)  
In especially cold weather, if a sensor is frozen the sensor display may be displayed abnormally, or objects, such as a wall, may not be detected.
- A sensor is covered in any way.
- When a sensor or the area around a sensor is extremely hot or cold.
- On an extremely bumpy road, on an incline, on gravel, or on grass.
- The vicinity of the vehicle is noisy due to vehicle horns, motorcycle engines, air brakes of large vehicles, or other loud noises producing ultrasonic waves.
- There is another vehicle equipped with parking assist sensors in the vicinity.

- A sensor is coated with a sheet of spray or heavy rain.
- If a sensor is hit by a large amount of water, such as when driving on a flooded road.
- If the vehicle is significantly tilted.
- The vehicle is approaching a tall or curved curb.
- If objects draw too close to the sensor.

■ **Objects which may not be properly detected**

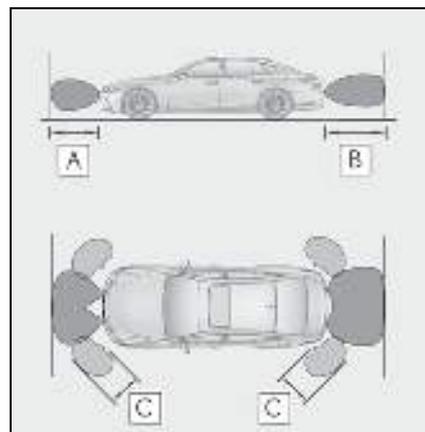
The shape of the object may prevent the sensor from detecting it. Pay particular attention to the following objects:

- Wires, fences, ropes, etc.
- Cotton, snow and other materials that absorb sound waves
- Sharply-angled objects
- Low objects
- Tall objects with upper sections projecting outwards in the direction of your vehicle

People may not be detected if they are wearing certain types of clothing.

**Sensor detection display, object distance**

■ **Detection range of the sensors**



- A** Approximately 100 cm (3.3 ft)
  - B** Approximately 150 cm (4.9 ft)
  - C** Approximately 65 cm (1.9 ft)
- The diagram shows the detection range of the sensors. Note that the sensors cannot detect objects that are extremely close to the vehicle. The range of the sensors may change depending on the shape of the object, etc.

■ **Multi-information display, head-up display (if equipped) and Center Display**

When an object is detected by a sensor, the approximate distance to the object will be displayed on the multi-information display, Center Display, and head-up display (if equipped). (As the distance to the object becomes short, the distance segments may blink.)

- Approximate distance to object: 150 cm (4.9 ft.) to 65 cm (1.9 ft.)\* (Rear center sensor)

Multi-information display	Center Display	Head-up display
		

\*: Automatic buzzer mute function is enabled. (→P.345)

- Approximate distance to object: 100 cm (3.3 ft.) to 65 cm (1.9 ft.)\* (Front center sensor)

Multi-information display	Center Display	Head-up display
		

\*: Automatic buzzer mute function is enabled. (→P.345)

- Approximate distance to object: 65 cm (1.9 ft.) to 45 cm (1.5 ft.)\*

Multi-information display	Center Display	Head-up display
		

\*: Automatic buzzer mute function is enabled. (→P.345)

- Approximate distance to object: 45 cm (1.5 ft.) to 30 cm (1.0 ft.)\*

Multi-information display	Center Display	Head-up display

\*: Automatic buzzer mute function is enabled. (→P.345)

- Approximate distance to object: 30 cm (1.0 ft.) to 15 cm (0.5 ft.)<sup>\*1</sup>

Multi-information display <sup>*2</sup>	Center Display <sup>*2</sup>	Head-up display

<sup>\*1</sup>: Automatic buzzer mute function is disabled. (→P.345)

<sup>\*2</sup>: The distance segments will blink slowly.

- Approximate distance to object: Less than 15 cm (0.5 ft.)<sup>\*1</sup>

Multi-information display <sup>*2</sup>	Center Display <sup>*2</sup>	Head-up display

<sup>\*1</sup>: Automatic buzzer mute function is disabled. (→P.345)

<sup>\*2</sup>: The distance segments will blink rapidly.

■ **Buzzer operation and distance to an object**

A buzzer sounds when the sensors are operating.

- The buzzer beeps faster as the vehicle approaches an object. When the vehicle comes within the following distance of the object, the buzzer sounds continuously:

Approximately 30 cm (1.0 ft.)

- When 2 or more objects are

detected simultaneously, the buzzer sounds for the nearest object. If one or more objects come within approximately 30 cm (1.0 ft.) of the vehicle, the buzzer will repeat a long tone, followed by fast beeps.

- Automatic buzzer mute function: After a buzzer begins sounding, if the distance between the vehicle and the detected object does not become shorter, the buzzer will be muted automatically. (However, if

the distance between the vehicle and object is 30 cm (1.0 ft.) or less, this function will not operate.)

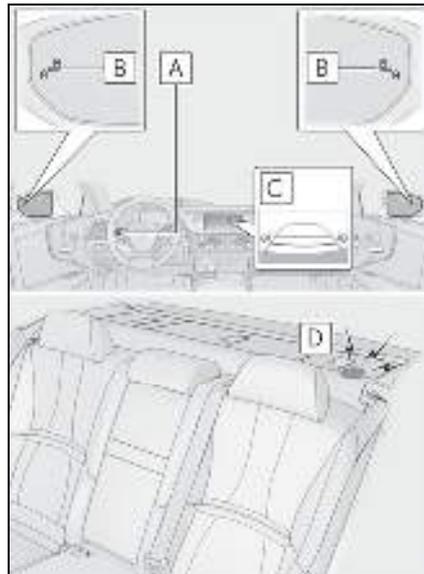
The buzzer sounds volume can be adjusted. (→P.339)

### RCTA (Rear cross traffic alert) function \*

\*: If equipped

The RCTA function uses the BSM rear side radar sensors installed behind the rear bumper. This function is intended to assist the driver in checking areas that are not easily visible when backing up.

### System components



#### **A** Meter control switches

Turning the RCTA function on/off.

When the RCTA function is disabled, the RCTA OFF indicator illuminates.

#### **B** Outside rear view mirror indicators

When a vehicle approaching from the right or left at the rear of the vehicle is detected, both outside rear view mirror indicators will flash.

**C** Center Display

If a vehicle approaching from the right or left at the rear of the vehicle is detected, the RCTA icon (→P.348) for the detected side will be displayed on the Center Display. This illustration shows an example of a vehicle approaching from both sides of the vehicle.

**D** RCTA buzzer

If a vehicle approaching from the right or left at the rear of the vehicle is detected, a buzzer will sound. The buzzer also sounds for approximately 1 second immediately after the RCTA function is turned on.

### Turning the RCTA function on/off

Use the meter control switches to enable/disable the RCTA function. (→P.119)

- 1 Press  or  to select .
- 2 Press  or  to select "PKSA" and then press .
- 3 Press  or  to select "RCTA" and then press .

When the RCTA function is disabled, the RCTA OFF indicator (→P.106) illuminates. (Each time the engine switch is turned off then changed to IGNITION ON mode, the RCTA function will be enabled automatically.)

### WARNING

#### ■ Cautions regarding the use of the function

The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings.

The RCTA function is only a supplementary function which alerts the driver that a vehicle is approaching from the right or left at the rear of the vehicle. As the RCTA function may not function correctly under certain conditions, the driver's own visual confirmation of safety is necessary. Over reliance on this function may lead to an accident resulting death or serious injury.

### NOTICE

#### ■ Before using the RCTA function

Do not place obstacles near the sensors.

#### ■ Outside rear view mirror indicator visibility

In strong sunlight, the outside rear view mirror indicator may be difficult to see.

#### ■ Hearing the RCTA buzzer

The RCTA buzzer may be difficult to hear over loud noises, such as if the audio system volume is high.

#### ■ When "RCTA Not Available" is shown on the multi-information display

Water, snow, mud, etc., may be attached to the rear bumper around the sensors. (→P.335) Removing the water, snow, mud, etc., from the attached to the rear bumper around the sensors to normal.

Additionally, the function may not function normally when used in extremely hot or cold environments.

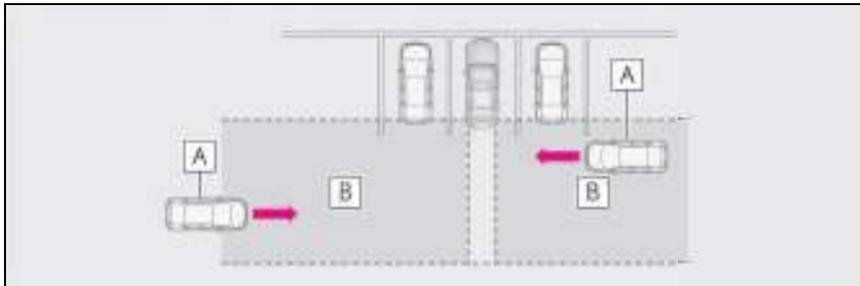
#### ■ Rear side radar sensors

→P.335

### RCTA function

#### ■ Operation of the RCTA function

The RCTA function uses rear side radar sensors to detect vehicles approaching from the right or left at the rear of the vehicle and alerts the driver of the presence of such vehicles by flashing the outside rear view mirror indicators and sounding a buzzer.



**A** Approaching vehicles

**B** Detection areas of approaching vehicles

#### ■ RCTA icon display

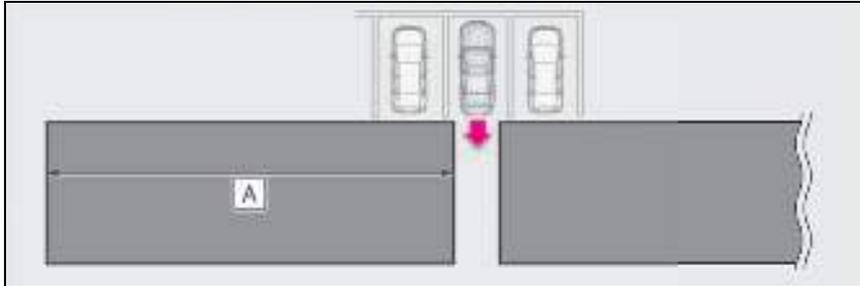
When a vehicle approaching from the right or left at the rear of the vehicle is detected, the following will be displayed on the Center Display.

- Example (Lexus parking assist monitor) (if equipped): Vehicles are approaching from both sides of the vehicle



#### ■ RCTA function detection areas

The areas that vehicles can be detected in are outlined below.



The buzzer can alert the driver of faster vehicles approaching from farther away.

Example:

Approaching vehicle speed	<b>A</b> Approximate alert distance
28 km/h (18 mph) (fast)	20 m (65 ft.)
8 km/h (5 mph) (slow)	5.5 m (18 ft.)

#### ■ The RCTA function is operational when

The RCTA function operates when all of the following conditions are met:

- The engine switch is in IGNITION ON mode.
- The RCTA function is on.
- The shift position is in R.
- The vehicle speed is less than approximately 8 km/h (5 mph).
- The approaching vehicle speed is between approximately 8 km/h (5 mph) and 28 km/h (18 mph).

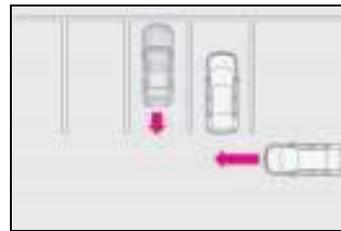
#### ■ Setting the buzzer volume

The buzzer volume can be adjusted on the multi-information display. (→P.339)

#### ■ Conditions under which the RCTA function will not detect a vehicle

The RCTA function is not designed to detect the following types of vehicles and/or objects:

- Vehicles approaching from directly behind
- Vehicles backing up in a parking space next to your vehicle
- Vehicles that the sensors cannot detect due to obstructions

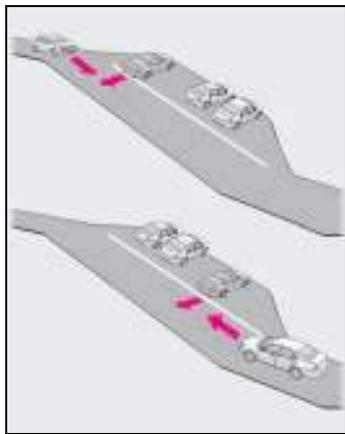


- Guardrails, walls, signs, parked vehicles and similar stationary objects\*
  - Small motorcycles, bicycles, pedestrians, etc.\*
  - Vehicles moving away from your vehicle
  - Vehicles approaching from the parking spaces next to your vehicle\*
- \*: Depending on the conditions, detection of a vehicle and/or object may occur.

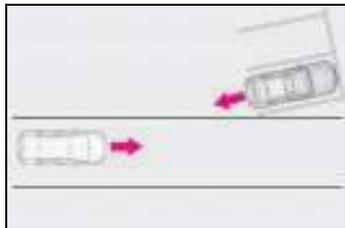
#### ■ Conditions under which the RCTA function may not function correctly

- The RCTA function may not detect vehicles correctly in the following situations:
  - When a sensor is misaligned due to a strong impact to the sensor or its surrounding area
  - When mud, snow, ice, a sticker, etc. is covering a sensor or its surrounding area on the rear bumper
  - When driving on a road surface that is wet with standing water during bad

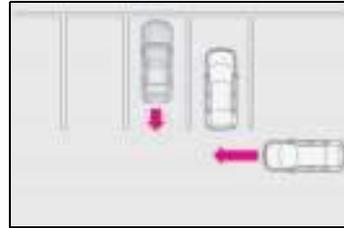
- weather, such as heavy rain, snow, or fog
- When multiple vehicles are approaching with only a small gap between each vehicle
- If a vehicle is approaching the rear of your vehicle rapidly
- When a towing eyelet is installed to the rear of the vehicle.
- When backing up on a slope with a sharp change in grade



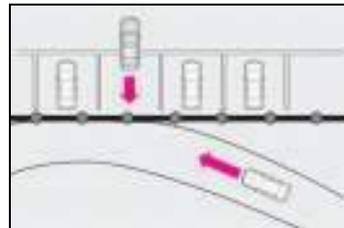
- When backing out of a shallow angle parking spot



- Immediately after the RCTA function is turned on
- Immediately after the engine is started with the RCTA function on
- When the sensors cannot detect a vehicle due to obstructions



- Instances of the RCTA function unnecessarily detecting a vehicle and/or object may increase in the following situations:
  - When a vehicle passes by the side of your vehicle
  - When the parking space faces a street and vehicles are being driven on the street



- When the distance between your vehicle and metal objects, such as a guardrail, wall, sign, or parked vehicle, which may reflect electrical waves toward the rear of the vehicle, is short
- When a towing eyelet is installed to the rear of the vehicle

### RCD (Rear Camera Detection) function\*

\*: If equipped

When the vehicle is backing up, the rear camera detection function can detect pedestrians in the detection area behind the vehicle. If a pedestrian is detected, a buzzer will sound and an icon will be displayed on the Center Display to inform the driver of the pedestrian.

#### Center Display



**A** Pedestrian detection icon  
Displayed automatically when a pedestrian is detected.

**B** RCD OFF icon  
When the RCD function is disabled, the RCD OFF icon illuminates. (Each time the engine switch is turned off then changed to IGNITION ON mode, the RCD function will be enabled automatically.)

#### Turning the RCD function on/off

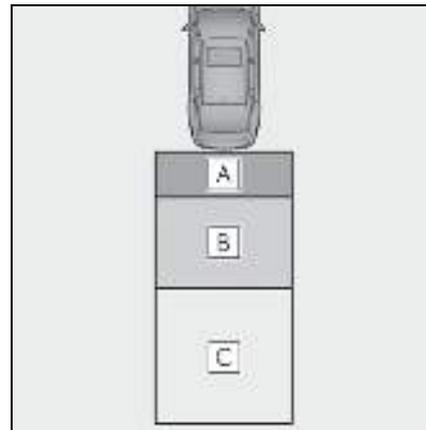
Use the meter control switches to enable/disable the RCD function. (→P.119)

- 1 Press **<** or **>** to select .
- 2 Press **A** or **V** to select "PKSA" and then press **OK**.
- 3 Press **A** or **V** to select "RCD" and then press **OK**.

When the RCD function is disabled, the RCD OFF indicator (→P.106) illuminates.

#### When a pedestrian is detected

If the rear camera detection function detects a pedestrian in the detection area, the buzzer and pedestrian detection will operate as follows:



- A** If a pedestrian is detected in area **A**  
Buzzer: Sounds repeatedly  
Pedestrian detection icon: Blinks 3 times and then stays on
- B** If a pedestrian is detected in area **B**  
Buzzer (When the vehicle is stationary): Sounds 3 times  
Buzzer (When the vehicle is back-

ing up, when a pedestrian approaches the rear of the vehicle):  
 Sounds repeatedly  
 Pedestrian detection icon: Blinks 3 times and then stays on

- C** If the system determines that your vehicle may collide with a pedestrian in area **C**  
 Buzzer: Sounds repeatedly  
 Pedestrian detection icon: Blinks 3 times and then stays on

■ **The rear camera detection function is operational when**

- The engine switch is in IGNITION ON mode.
- RCD function is on.
- The shift position is in R.

■ **Setting the buzzer volume**

The buzzer volume can be adjusted on the multi-information display. (→P.339)

■ **If “Rear Camera Detection Unavailable Remove the Dirt of Rear Camera” is displayed on the multi-information display**

A rear camera lens may be dirty or covered with snow or ice. In such cases, if it is removed from the rear camera lens, the system should return to normal. (It may be necessary to drive the vehicle for some time before the system returns to normal.)

■ **If “Rear Camera Detection Unavailable” is displayed on the multi-information display**

- If this message is displayed after the battery has been disconnected and reconnected, fully turn the steering wheel to the left and then the right on level ground.
- If this message is displayed only when the R shift position is selected, the rear camera lens may be dirty. Clean the rear camera lens.

■ **Situations in which the system may not operate properly**

- Some pedestrians, such as the following, may not be detected by the rear camera detection function, preventing the function from operating properly:
  - Pedestrians who are bending forward or squatting
  - Pedestrians who are lying down
  - Pedestrians who are running
  - Pedestrians who suddenly enter the detection area
  - People riding a bicycle, skateboard, or other light vehicle
  - Pedestrians wearing oversized clothing such as a rain coat, long skirt, etc., making their silhouette obscure
  - Pedestrians whose body is partially hidden by an object, such as a cart or umbrella
  - Pedestrians which are obscured by darkness, such as at night
- In some situations, such as the following, pedestrians may not be detected by the rear camera detection function, preventing the function from operating properly:
  - When backing up in inclement weather (rain, snow, fog, etc.)
  - When the rear camera is obscured (dirt, snow, ice, etc. are attached) or scratched
  - When a very bright light, such as the sun, or the headlights of another vehicle, shines directly into the rear camera
  - When backing up in a place where the surrounding brightness changes suddenly, such as at the entrance or exit of a garage or underground parking lot
  - When backing up in a dim environment such as during dusk or in an underground parking lot
- Even though there are no pedestrians in the detection area, some objects, such as the following, may be detected, possibly causing the rear camera detection function to operate.
  - Three dimensional objects, such as a pole, traffic cone, fence, or parked vehicle
  - Moving objects, such as a car or motorcycle
  - Objects moving toward your vehicle

- when backing up, such as flags or puddles (or airborne matter, such as smoke, steam, rain, or snow)
- Cobblestone or gravel roads, tram rails, road repairs, white lines, pedestrian crossings or fallen leaves on the road
  - Metal covers (gratings), such as those used for drainage ditches
  - Objects reflected in a puddle or on a wet road surface
  - The roadside or bumps on the road
  - Shadows on the road
- In some situations, such as the following, the rear camera detection function may operate even though there are no pedestrians in the detection area.
    - When backing up toward the roadside or a bump on the road
    - If the vehicle is significantly tilted, such as when carrying a heavy load
    - When backing up toward an incline/decline
    - If the suspension has been modified or tires of a size other than specified are installed
    - If the rear of the vehicle is raised or lowered due to the carried load
    - If an electronic component, such as a backlit license plate or rear fog light, is installed near the rear camera
    - If a bumper protector, such as an additional trim strip, is installed to the rear bumper
    - If the orientation of the rear camera has been changed
    - If a towing eyelet is installed to the rear of the vehicle
    - When water is flowing over the rear camera lens
    - When the rear camera is obscured (dirt, snow, ice, etc. are attached) or scratched
    - If there is a flashing light in the detection area, such as the emergency flashers of another vehicle
  - Situations in which the rear camera detection function may be difficult to notice
    - If buzzer may be difficult to hear if the surrounding area is noisy, the volume of the audio system volume is high, the air conditioning system is being used, etc.
    - If the temperature in the cabin is extremely high or low, the audio system screen may not operate correctly.

**PKSB (Parking Support Brake)\***

\*: If equipped

The Parking Support Brake system consists of the following functions that operate when driving at a low speed or backing up, such as when parking. When the system determines that a collision with a detected object or pedestrian is high, a warning operates to urge the driver to take evasive action. If the system determines that the possibility of a collision with a detected object or pedestrian is extremely high, the brakes are automatically applied to help avoid the collision or help reduce the impact of the collision.

**PKSB (Parking Support Brake) system**

■ **Parking Support Brake function (static objects)**

Ultrasonic sensors are used to detect static objects, such as a wall, in the detection area when driving at a low speed or backing up. (→P.360)

■ **Parking Support Brake function (rear-crossing vehicles) (if equipped)**

Rear radar sensors are used to detect approaching vehicles in the detection area behind the vehicle when backing up. (→P.366)

■ **Parking Support Brake function (rear pedestrians) (if equipped)**

A rear camera sensor is used to detect pedestrians in the detection area behind the vehicle when backing up. (→P.371)

 **WARNING**

■ **Limitations of the Parking Support Brake system**

Do not overly rely on the system, as doing so may lead to an accident.

- The driver is solely responsible for safe driving. Always drive carefully, taking care to observe your surroundings. The Parking Support Brake system is designed to provide support to lessen the severity of collisions. However, it may not operate in some situations.
- The Parking Support Brake system is not designed to stop the vehicle completely. Additionally, even if the system has stopped the vehicle, it is necessary to depress the brake pedal immediately as brake control will be canceled after approximately 2 seconds.

 **NOTICE**

■ **If “Parking Support Brake Unavailable” is displayed on the multi-information display and the PKSB OFF indicator is flashing**

If this message is displayed immediately after the engine switch is changed to IGNITION ON mode, operate the vehicle carefully, paying attention to your surroundings. It may be necessary to drive the vehicle for a certain amount of time before the system returns to normal. (If the system is not return to normal after driving for a while, clean the rear camera lens.)

### Enabling/Disabling the Parking Support Brake

The Parking Support Brake can be enabled/disabled on the multi-information display. All of the Parking Support Brake functions (static objects, rear-crossing vehicles, and rear pedestrians) are enabled/disabled simultaneously.

Use the meter control switches to enable/disable the parking support brake. (→P.119)

- 1 Press  or  to select .
- 2 Press  or  to select  and then press .

When the Parking Support Brake is disabled, the PKSB OFF indicator (→P.106) illuminates.

To re-enable the system when it was disabled, select  on the multi-information display, select  and then On. If disabled using this method, the system will not be re-enabled by turning the engine switch off and then to IGNITION ON mode.

### Displays and buzzers for engine output restriction control and brake control

If the engine output restriction control or brake control operates, a buzzer will sound and a message will be displayed on the Center Display and multi-information display, to alert the driver. On vehicles with a head-up display, the head-up display will display the same message as the multi-information display.

Depending on the situation, engine output

restriction control will operate to either limit acceleration or restrict output as much as possible.

- Engine output restriction control is operating (acceleration restriction)

Acceleration greater than a certain amount is restricted by the system.

Center Display (Panoramic view monitor): No warning displayed

Multi-information display: "Object Detected Acceleration Reduced"

PKSB OFF indicator: Not illuminated

Buzzer: Does not sound

- Engine output restriction control is operating (output restricted as much as possible)

The system has determined that stronger-than-normal brake operation is necessary.

Center Display (Panoramic view monitor): "BRAKE!"

Multi-information display: "BRAKE!"

PKSB OFF indicator: Not illuminated

Buzzer: Short beep

- Brake control is operating

The system determined that emergency braking is necessary.

Center Display (Panoramic view monitor): "BRAKE!"

Multi-information display: "BRAKE!"

PKSB OFF indicator: Not illuminated

Buzzer: Short beep

- Vehicle stopped by system operation

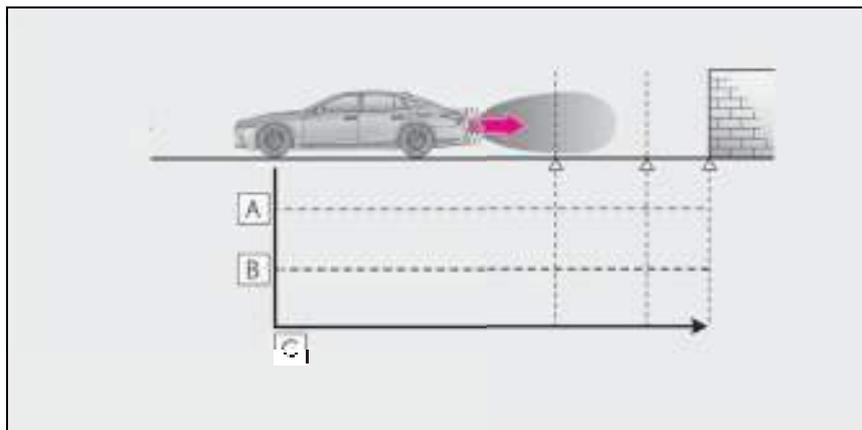
The vehicle has been stopped by brake control operation.

Center Display (Panoramic view monitor): "Press Brake Pedal"	played.) PKSB OFF indicator: Illuminated
Multi-information display: "Switch to Brake" (If the accelerator pedal is not depressed, "Press Brake Pedal" will be dis-	Buzzer: Short beep

### System overview

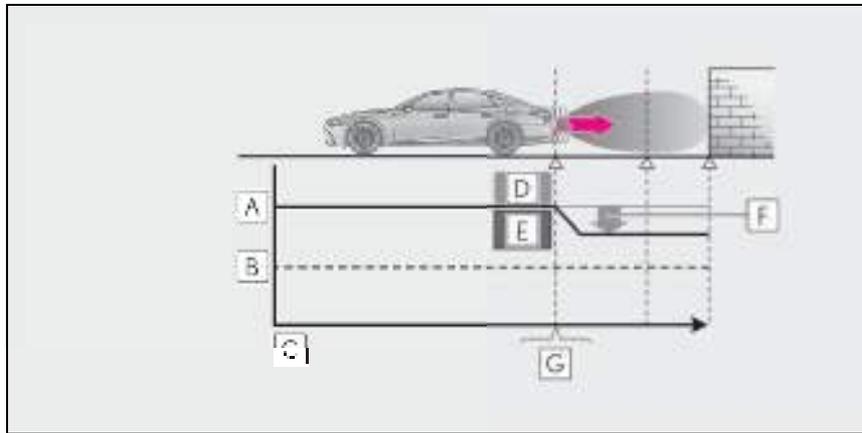
If the Parking Support Brake determines that a collision with a detected object or pedestrian is possible, the engine output will be restricted to restrain any increase in the vehicle speed. (Engine output restriction control: See figure 2.) Additionally, if the accelerator pedal continues to be depressed, the brakes will be applied automatically to reduce the vehicle speed. (Brake control: See figure 3.)

- Figure 1 When the PKSB (Parking Support Brake) is disabled



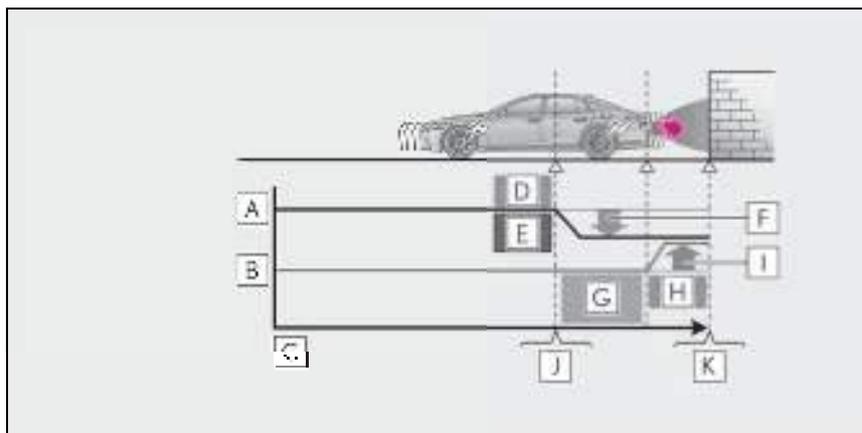
- A** Engine output
- B** Braking force
- C** Time

- Figure 2 When engine output restriction control operates



- A** Engine output
- B** Braking force
- C** Time
- D** Engine output restriction control begins operating
- E** System determines that possibility of collision with detected object is high
- F** Engine output reduced
- G** Example: Multi-information display: "BRAKE!"

● Figure 3 When brake control operates



- A** Engine output
- B** Braking force

- C** Time
- D** Engine output restriction control begins operating
- E** System determines that possibility of collision with detected object is high
- F** Engine output reduced
- G** System determines that possibility of collision with detected object is extremely high
- H** Brake control begins operating
- I** Brake control strength increased
- J** Example: Multi-information display: "BRAKE!"
- K** Example: Multi-information display: "Switch to Brake"

**■ If the Parking Support Brake has operated**

If the vehicle is stopped due to operation of the Parking Support Brake, the Parking Support Brake will be disabled and the PKSB OFF indicator will illuminate. If the Parking Support Brake operates unnecessarily, brake control can be canceled by depressing the brake pedal or waiting for approximately 2 seconds for it to automatically be canceled. Then, the vehicle can be operated by depressing the accelerator pedal.

**■ Re-enabling the Parking Support Brake**

To re-enable the Parking Support Brake when it has been disabled due to operation of the Parking Support Brake, either enable the system again (→P.355), or turn the engine switch off and then back to IGNITION ON mode.

Additionally, if any of the following conditions are met, the system will be re-enabled automatically and the PKSB OFF indicator will turn off:

- The P shift position is selected
- The object is no longer detected in the traveling direction of the vehicle
- The traveling direction of the vehicle changes\*

\*: Except when the Parking Support Brake function (rear pedestrians) operated.

**■ If "Parking Support Brake Unavailable" is displayed on the multi-information display and the PKSB OFF indicator is flashing**

- If this message is displayed only when the R shift position is selected, the rear camera lens may be dirty. Clean the camera lens. If this message is displayed when the shift position is any position other than R, a sensor on the front or rear bumper may be dirty. Clean the sensors and their surrounding area on the bumpers.
- Initialization may not have been performed after a battery terminal was disconnected and reconnected. Initialize the system. (→P.359)  
If this message continues to be displayed even after initialization, have the vehicle inspected by your Lexus dealer.

**■ If "Parking Support Brake Unavailable" and "Parking Assist Unavailable Clean Parking Assist Sensor" are displayed on the multi-information display and the PKSB OFF indicator is flashing**

- A sensor may be covered with ice, snow, dirt, etc. Remove the ice, snow, dirt, etc., from the sensor to return the system to normal. If this message continues to be displayed even after cleaning the sensor,

or is displayed even though the sensor is clean, have the vehicle inspected by your Lexus dealer.

- A sensor may be frozen. Once the ice melts, the system will return to normal.
  - Water may be continuously flowing over the sensor surface, such as in a heavy rain. When the system determines that it is normal, the system will return to normal.
- **If a battery terminal has been disconnected and reconnected**

The system needs to be initialized. To initialize the system, drive the vehicle straight ahead for 5 seconds or more at a speed of approximately 35 km/h (22 mph) or more. Additionally, for vehicles with the Parking Support Brake function, turn the steering wheel fully to the left and right with the vehicle stopped.

### Parking Support Brake function (static objects)\*

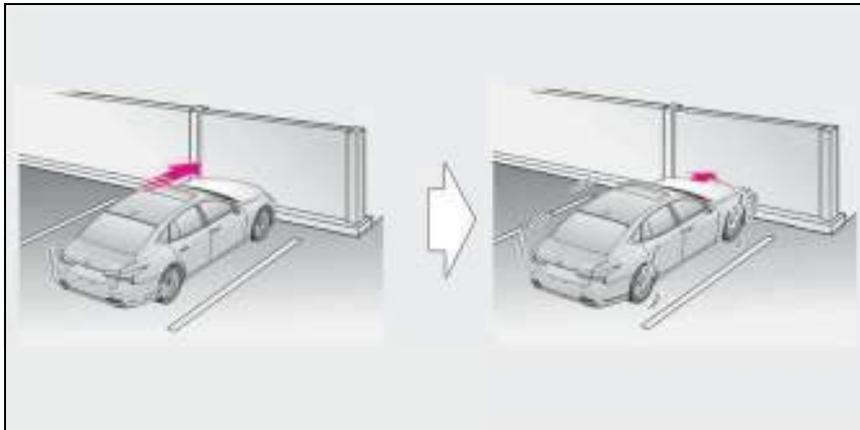
\*: If equipped

If the sensors detect a static object, such as a wall, in the travelling direction of the vehicle and the system determines that a collision may occur due to the vehicle suddenly moving forward due to an accidental accelerator pedal operation, the vehicle moving the unintended direction due to the wrong shift position being selected, or while parking or traveling at low speeds, the system will operate to lessen the impact with the detected static object and reduce the resulting damage.

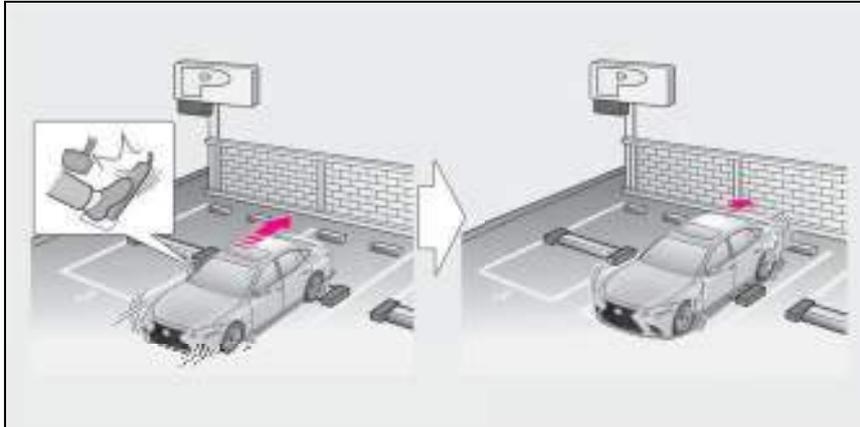
### Examples of function operation

This function will operate in situations such as the following if an object is detected in the traveling direction of the vehicle.

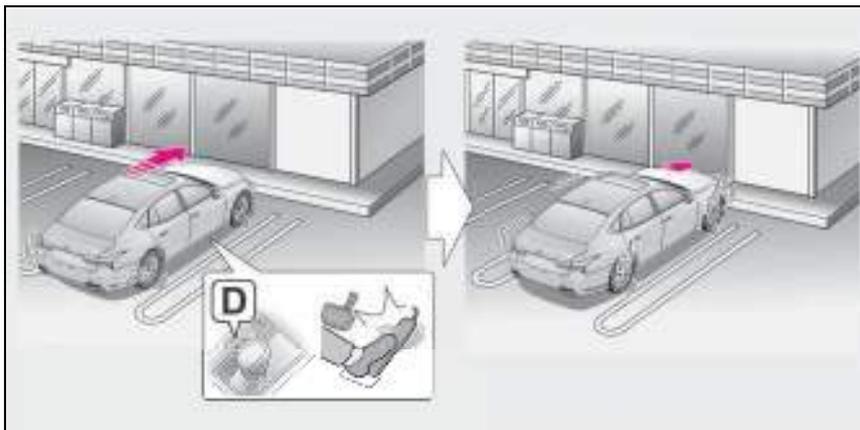
- When traveling at a low speed and the brake pedal is not depressed, or is depressed late



■ When the accelerator pedal is depressed excessively



■ When the vehicle moves in the unintended direction due to the wrong shift position being selected



Types of sensors

→P.340

**⚠ WARNING**

■ To ensure the Parking Support Brake can operate properly

Observe the following precautions regarding the sensors (→P.340). Failure to do so may cause a sensor to not operate properly, and may cause an accident.

- Do not modify, disassemble or paint the sensors.

 **WARNING**

- Do not replace a sensor with a part other than a genuine part.
- Do not subject a sensor or its surrounding area to a strong impact.
- Do not damage the sensors, and always keep them clean.

■ **Handling the suspension**

Do not modify the suspension, as changes to the height or inclination of the vehicle may prevent the sensors from detecting objects correctly or cause the system to not operate or operate unnecessarily.

■ **If the Parking Support Brake function (static objects) operates unnecessarily, such as at a railroad crossing**

In the event that the Parking Support Brake function (static objects) operates unnecessarily, such as at a railroad crossing, brake control will be canceled after approximately 2 seconds, allowing you to proceed forward and leave the area, brake control can also be canceled by depressing the brake pedal. Depressing the accelerator pedal after brake control is canceled will allow you to proceed forward and leave the area.

■ **Notes when washing the vehicle**

Do not apply intensive bursts of water or steam to the sensor area.

Doing so may result in the sensor malfunctioning.

- When using a high pressure washer to wash the vehicle, do not spray the sensors directly, as doing so may cause a sensor to malfunction.
- When using steam to clean the vehicle, do not direct steam too close to the sensors as doing so may cause a sensor to malfunction.

■ **When to disable the Parking Support Brake**

In the following situations, disable the Parking Support Brake as the system may operate even though there is no possibility of a collision.

- When inspecting the vehicle using a chassis roller, chassis dynamo or free roller
- When loading the vehicle onto a boat, truck or other transport vessel
- If the suspension has been modified or tires of a size other than specified are installed
- If the front of the vehicle is raised or lowered due to the carried load
- When equipment that may obstruct a sensor is installed, such as a towing eyelet, bumper protector (an additional trim strip, etc.), bicycle carrier, or snow plow
- When using an automatic car wash

■ **The Parking Support Brake function (static object) will operate when**

The function will operate when the PKSB OFF indicator is not illuminated or flashing (→P.107, 108) and all of the following conditions are met:

- Engine output restriction control
  - The Parking Support Brake is enabled.
  - The vehicle speed is 15 km/h (9 mph) or less.
  - There is a static object in the traveling direction of the vehicle and 2 to 4 m (6 to 13 ft.) away.
  - The Parking Support Brake determines that a stronger-than-normal brake operation is necessary to avoid a collision.
- Brake control
  - Engine output restriction control is operating.
  - The Parking Support Brake determines that an immediate brake operation is nec-

essary to avoid a collision.

■ **The Parking Support Brake function (static objects) will stop operating when**

The function will stop operating if any of the following conditions are met:

- Engine output restriction control
  - The Parking Support Brake is disabled.
  - The system determines that the collision has become avoidable with normal brake operation.
  - The static object is no longer 2 to 4 m (6 to 13 ft.) away from the vehicle or in the traveling direction of the vehicle.
- Brake control
  - The Parking Support Brake is disabled.
  - Approximately 2 seconds have elapsed since the vehicle was stopped by brake control.
  - The brake pedal is depressed after the vehicle is stopped by brake control.
  - The static object is no longer 2 to 4 m (6 to 13 ft.) away from the vehicle or in the traveling direction of the vehicle.

■ **Re-enabling the Parking Support Brake function (static objects)**

→P.358

■ **Detection range of the Parking Support Brake function (static objects)**

The detection range of the Parking Support Brake function (static objects) differs from the detection range of the Lexus parking assist-sensor. (→P.343) Therefore, even if the Lexus parking assist-sensor detects an object and provides a warning, the Parking Support Brake function (static objects) may not start operating.

■ **Objects that the Parking Support Brake function (static objects) may not detect**

The sensors may not be able to detect certain objects, such as the following:

- Pedestrian
- Cotton cloth, snow, and other materials that are poor reflectors of ultrasonic waves
- Objects which are not perpendicular to the ground, are not perpendicular to the traveling direction of the vehicle, are un-

ven or are waving

- Low objects
- Thin objects such as wires, fences, ropes and signposts
- Objects that are extremely close to the bumper
- Sharply-angled objects
- Tall objects with upper sections projecting outwards in the direction of your vehicle

■ **Situations in which the Parking Support Brake function (static objects) may not operate**

When driving with the shift position in N

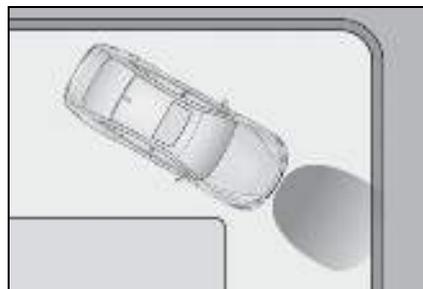
■ **Lexus parking assist-sensor buzzer**

Regardless of whether the Lexus parking assist-sensor buzzer is enabled or not (→P.341), if the Parking Support Brake function (static objects) is enabled (→P.355), the front or rear sensors detect an object and brake control is performed, the Lexus parking assist-sensor buzzer will sound to notify the driver of the approximate distance to the object.

■ **Situations in which the Parking Support Brake function (static objects) may operate even if there is no possibility of a collision**

In some situations, such as the following, the Parking Support Brake function (static objects) may operate even though there is no possibility of a collision.

- Vehicle surroundings
  - When driving on a narrow road



- When driving on a gravel road or in an area with tall grass



- When driving toward a banner, flag, low-hanging branch or boom barrier (such as those used at railroad crossings, toll gates and parking lots)
- When driving on a narrow path surrounded by a structure, such as in a tunnel or on an iron bridge
- When parallel parking
- When there is a rut or hole in the surface of the road
- When driving on a metal cover (grating), such as those used for drainage ditches
- When driving on a steep slope
- If a sensor is hit by a large amount of water, such as when driving on a flooded road
- Weather
  - If a sensor is covered with ice, snow, dirt, etc. (when cleared, the system will return to normal)
  - If heavy rain or water strikes a sensor
  - When driving in inclement weather such as fog, snow or a sandstorm
  - When strong winds are blowing
- Other ultrasonic wave sources
  - When vehicle horns, vehicle detectors, motorcycle engines, air brakes of large vehicles, the clearance sonar of other vehicles or other devices which produce ultrasonic waves are near the vehicle
  - If a sticker or an electronic component, such as a backlit license plate (especially fluorescent type), fog lights, fender pole or wireless antenna is installed near a sensor
- Changes in the vehicle posture
  - If the vehicle is significantly tilted
  - If the front of the vehicle is raised or lowered due to the carried load
  - If the orientation of a sensor has been

changed due to a collision or other impact

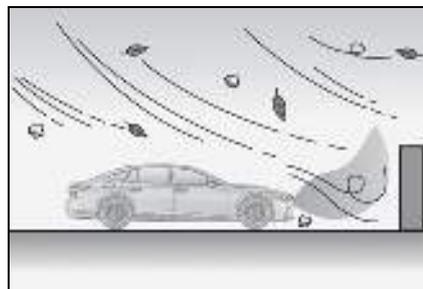
■ **Situations in which the Parking Support Brake function (static objects) may not operate properly**

In some situations, such as the following, this function may not operate properly.

- Weather
  - When a sensor or the area around a sensor is extremely hot or cold



- When strong winds are blowing



- If a sensor is covered with ice, snow, dirt, etc. (when cleared, the system will return to normal)
- If heavy rain or water strikes a sensor
- When driving in inclement weather such as fog, snow or a sandstorm
- When the sensor is frozen (Once the sensor thaws, the system will return to normal)
- Vehicle surroundings
  - When an object that cannot be detected is between the vehicle and a detected object
  - If an object such as a vehicle, motorcycle, bicycle or pedestrian cuts in front of the vehicle or runs out from the side of the

- vehicle
- The vehicle is approaching a tall or curved curb.
  - On an extremely bumpy road, on an incline, on gravel, or on grass.
  - If objects draw too close to the sensor.
- Other ultrasonic waves sources
- When vehicle horns, vehicle detectors, motorcycle engines, air brakes of large vehicles, the clearance sonar of other vehicles or other devices which produce ultrasonic waves are near the vehicle
  - If a sticker or an electronic component, such as a backlit license plate (especially fluorescent type), fog lights, fender pole or wireless antenna is installed near a sensor
- Changes in the vehicle posture
- If the vehicle is significantly tilted
  - If the front of the vehicle is raised or lowered due to the carried load
  - If the orientation of a sensor has been changed due to a collision or other impact
  - When equipment that may obstruct a sensor is installed, such as a towing eye-let, bumper protector (an additional trim strip, etc.), bicycle carrier, or snow plow
  - If the suspension has been modified or tires of a size other than specified are installed
  - If a sensor has been painted or covered with a sticker, etc.

### Parking Support Brake function (rear-crossing vehicles)\*

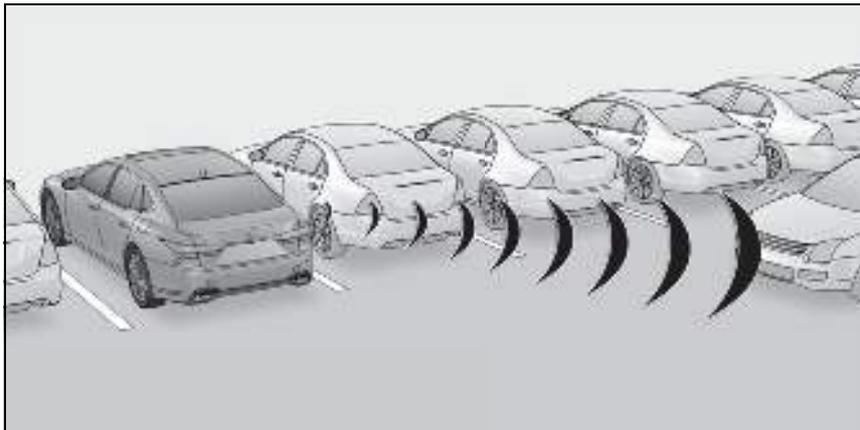
\*: If equipped

If a rear radar sensor detects a vehicle approaching from the right or left at the rear of the vehicle and the system determines that the possibility of a collision is high, this function will perform brake control to reduce the likelihood of an impact with the approaching vehicle.

#### Examples of function operation

This function will operate in situations such as the following if a vehicle is detected in the traveling direction of the vehicle.

- When reversing, a vehicle is approaching and the brake pedal is not depressed, or is depressed late



#### Types of sensors

→P.334

#### ⚠ WARNING

- To ensure the Parking Support Brake (rear-crossing vehicles) can operate properly

Observe the following precautions regarding the rear side radar sensors (→P.334). Failure to do so may cause a sensor to not operate properly, and may cause an accident.

- Do not modify, disassemble or paint the sensors.

**WARNING**

- Do not replace a rear side radar sensor with a part other than a genuine part.
- Do not damage the rear side radar sensors, and always keep the radar sensors and their surrounding area on the bumper clean.
- If the area around a rear side radar sensor is subjected to an impact, the system may not operate properly due to a sensor malfunction. Have the vehicle inspected by your Lexus dealer.

■ **The Parking Support Brake function (rear-crossing vehicles) will operate when**

The function will operate when the PKSB OFF indicator is not illuminated or flashing (→P.107, 108) and all of the following conditions are met:

- Engine output restriction control
  - The Parking Support Brake is enabled.
  - The vehicle speed is 15 km/h (9 mph) or less.
  - Vehicles which are approaching from the right or left at the rear of the vehicle at a traveling speed of less than approximately 8 km/h (5 mph)
  - The shift position is in R.
  - The Parking Support Brake determines that a stronger than normal brake operation is necessary to avoid a collision with an approaching vehicle.
- Brake control
  - Engine output restriction control is operating.
  - The Parking Support Brake determines that an emergency brake operation is necessary to avoid a collision with an approaching vehicle.

■ **The Parking Support Brake function (rear-crossing vehicles) will stop operating when**

The function will stop operating if any of the following conditions are met:

- Engine output restriction control
  - The Parking Support Brake is disabled.
  - The collision becomes avoidable with normal brake operation.
  - A vehicle is no longer approaching from the right or left at the rear of the vehicle.
- Brake control
  - The Parking Support Brake is disabled.
  - Approximately 2 seconds have elapsed since the vehicle was stopped by brake control.
  - The brake pedal is depressed after the vehicle is stopped by brake control.
  - A vehicle is no longer approaching from the right or left at the rear of the vehicle.

■ **Re-enabling the Parking Support Brake function (rear-crossing vehicles)**

→P.358

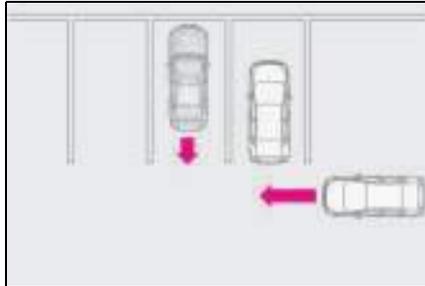
■ **Detection area of the Parking Support Brake function (rear-crossing vehicles)**

The detection area of the Parking Support Brake function (rear-crossing vehicles) differs from the detection area of the RCTA function (→P.348). Therefore, even if the RCTA function detects a vehicle and provides an alert, the Parking Support Brake function (rear-crossing vehicles) may not start operating.

■ **Conditions under which the Parking Support Brake function (rear-crossing vehicles) will not detect a vehicle**

The Parking Support Brake function (rear-crossing vehicles) is not designed to detect the following types of vehicles and/or objects:

- Vehicles approaching from directly behind
- Vehicles backing up in a parking space next to your vehicle
- Vehicles that the sensors cannot detect due to obstructions



- Vehicles which suddenly accelerate or decelerate near your vehicle
- Guardrails, walls, signs, parked vehicles and similar stationary objects
- Small motorcycles, bicycles, pedestrians, etc.
- Vehicles moving away from your vehicle
- Vehicles approaching from the parking spaces next to your vehicle
- Objects which are extremely close to a radar sensor
- Vehicles which are approaching from the right or left at the rear of the vehicle at a traveling speed of less than approximately 8 km/h (5 mph)
- Vehicles which are approaching from the right or left at the rear of the vehicle at a traveling speed of more than approximately 24 km/h (15 mph)

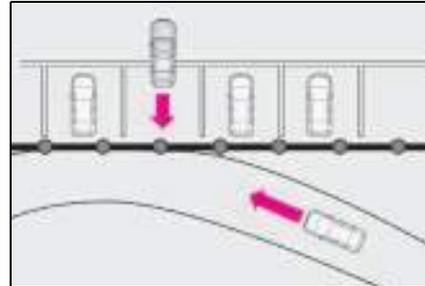
■ **PKSB buzzer**

If the Parking Support Brake is enabled and brake control is performed, a buzzer will sound to notify the driver.

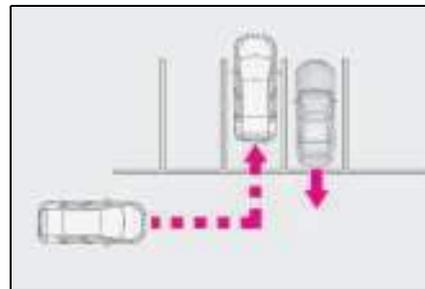
■ **Situations in which the system may operate even though there is no possibility of a collision**

In some situations such as the following, the Parking Support Brake function (rear-crossing vehicles) may operate even though there is no possibility of a collision.

- When the parking space faces a street and vehicles are being driven on the street



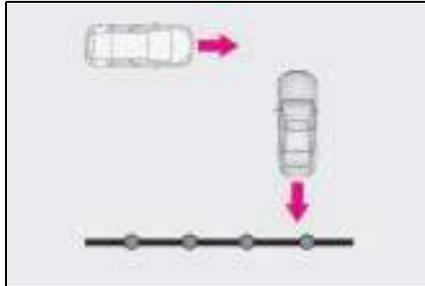
- When a detected vehicle turns while approaching the vehicle



- When a vehicle passes by the side of your vehicle



- When the distance between your vehicle and metal objects, such as a guardrail, wall, sign, or parked vehicle, which may reflect electrical waves toward the rear of the vehicle, is short

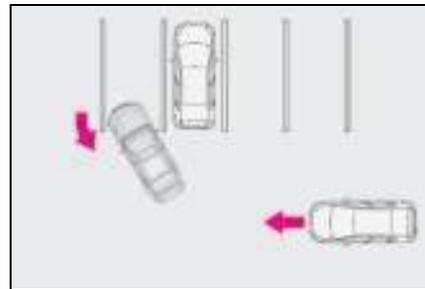


- When there are spinning objects near your vehicle such as the fan of an air conditioning unit
- When water is splashed or sprayed toward the rear bumper, such as from a sprinkler
- **Situations in which the Parking Support Brake function (rear-crossing vehicles) may not operate properly**

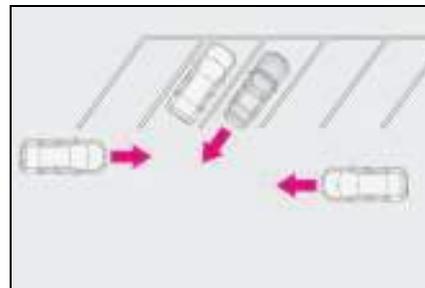
In some situations, such as the following, the radar sensors may not detect an object and this function may not operate properly

- Stationary objects
- When a sensor or the area around a sensor is extremely hot or cold
- If the rear bumper is covered with ice, snow, dirt, etc.
- When it is raining heavily or water strikes the vehicle
- If the vehicle is significantly tilted
- When equipment that may obstruct a sensor is installed, such as a towing eyelet, bumper protector (an additional trim strip, etc.), bicycle carrier, or snow plow
- If the suspension has been modified or tires of a size other than specified are installed
- If the front of the vehicle is raised or lowered due to the carried load
- If an electronic component, such as a backlit license plate (especially fluorescent type), fog lights, fender pole or wireless antenna is installed near a radar sensor
- If the orientation of a radar sensor has been changed

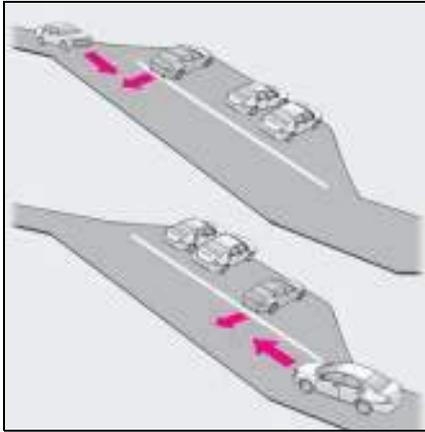
- When multiple vehicles are approaching with only a small gap between each vehicle
- If a vehicle is approaching the rear of your vehicle rapidly
- Situations in which the radar sensor may not detect a vehicle
  - When a vehicle approaches from the right or left at the rear of the vehicle while you are turning while backing up
  - When turning while backing up



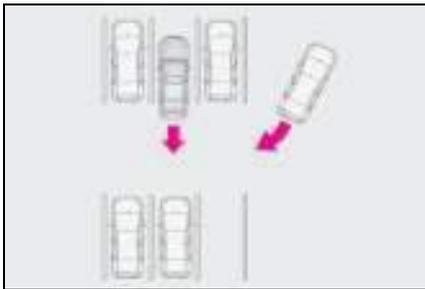
- When backing out of a shallow angle parking spot



- When backing up on a slope with a sharp change in grade



- When a vehicle turns into the detection area



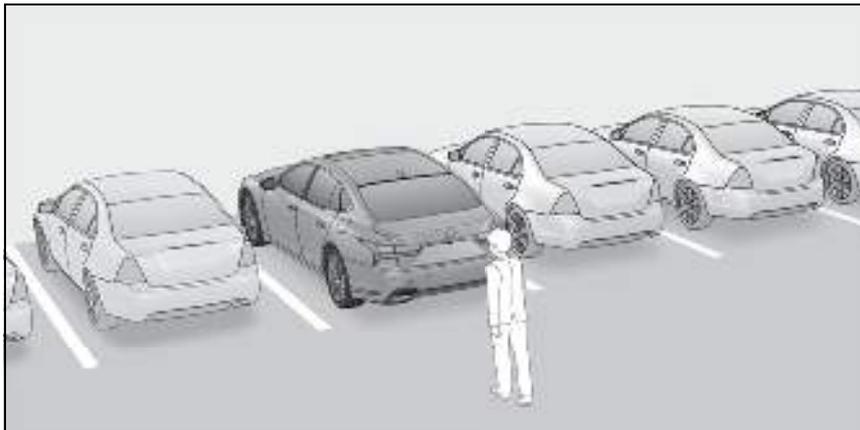
### Parking Support Brake function (rear pedestrians)\*

\*: If equipped

If the rear camera sensor detects a pedestrian behind the vehicle while backing up and the system determines that the possibility of colliding with the detected pedestrian is high, a buzzer will sound. If the system determines that the possibility of colliding with the detected pedestrian is extremely high, the brakes will be applied automatically to help reduce the impact of the collision.

### Examples of system operation

When a pedestrian is detected behind the vehicle while backing up, the brake pedal is not depressed or is depressed late.



### Center Display

Displays a message to urge the driver to take evasive action when a pedestrian is detected in the detection area behind the vehicle. (A message will also be displayed on the multi-information display and head-up display (if equipped).)



**A** Pedestrian detection icon

**B** Brake reminder

**⚠ WARNING****■ If the Parking Support Brake function (rear pedestrians) operates unnecessarily**

Depress the brake pedal immediately after the Parking Support Brake function (rear pedestrians) operates. (Operation of the function is canceled by depressing the brake pedal.)

**■ Correct use of the Parking Support Brake function (rear pedestrians)**

Do not overly rely on the Parking Support Brake function (rear pedestrians). Depending on the road conditions, vehicle conditions and weather, this function may not operate correctly. As the detection performance of the rear camera is limited, always drive safely, taking care to observe your surroundings. Additionally, if the PKSB OFF indicator is flashing or a warning message is displayed on the center display indicating that the Parking Support Brake function (rear pedestrians) is unavailable, the function cannot be used. Even if these warnings are not output, the driver is always responsible for paying attention to the vehicle's surroundings and driving safely.

**■ Parking Support Brake function (rear pedestrians) will operate when**

The function will operate when the PKSB OFF indicator is not illuminated or flashing (→P.107, 108) and all of the following conditions are met:

- Engine output restriction control
  - The Parking Support Brake is enabled.
  - The vehicle speed is 15 km/h (9 mph) or less.
  - The shift position is in R.
  - The rear camera sensor detects a pedestrian behind the vehicle while backing up and the system determines that the possibility of colliding with the detected pedestrian is high.
- Brake control

- Engine output restriction control is operating.
- The Parking Support Brake determines that an emergency brake operation is necessary to avoid a collision with a pedestrian.

**■ The Parking Support Brake function (rear pedestrians) will stop operating when**

The function will stop operating if any of the following conditions are met:

- Engine output restriction control
  - The Parking Support Brake is disabled.
  - The collision becomes avoidable with normal brake operation.
  - The pedestrian is no longer detected behind your vehicle.
- Brake control
  - The Parking Support Brake is disabled.
  - Approximately 2 seconds have elapsed since the vehicle was stopped by brake control.
  - The brake pedal is depressed after the vehicle is stopped by brake control.
  - The pedestrian is no longer detected behind your vehicle.

**■ Re-enabling the Parking Support Brake function (rear pedestrians)**

→P.358

**■ Detection area of the Parking Support Brake function (rear pedestrians)**

The detection area of the Parking Support Brake function (rear pedestrians) differs from the detection area of the RCD function (→P.351). Therefore, even if the RCD function detects a pedestrian and provides an alert, the Parking Support Brake function (rear pedestrians) may not start operating.

**■ Situations in which the system may not operate properly**

- Some pedestrians, such as the following, may not be detected by the Parking Support Brake function (rear pedestrians), preventing the function from operating properly:
  - Pedestrians who are bending forward or squatting
  - Pedestrians who are lying down

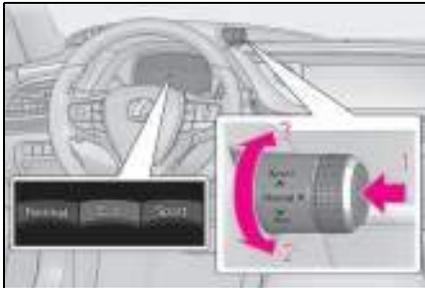
- Pedestrians who are running
- Pedestrians who suddenly enter the detection area
- People riding a bicycle, skateboard, or other light vehicle
- Pedestrians wearing oversized clothing such as a rain coat, long skirt, etc., making their silhouette obscure
- Pedestrians whose body is partially hidden by an object, such as a cart or umbrella
- Pedestrians which are obscured by darkness, such as at night
- In some situations, such as the following, pedestrians may not be detected by the Parking Support Brake function (rear pedestrians), preventing the function from operating properly:
  - When backing up in inclement weather (rain, snow, fog, etc.)
  - When the rear camera is obscured (dirt, snow, ice, etc. are attached) or scratched
  - When a very bright light, such as the sun, or the headlights of another vehicle, shines directly into the rear camera
  - When backing up in a place where the surrounding brightness changes suddenly, such as at the entrance or exit of a garage or underground parking lot
  - When backing up in a dim environment such as during dusk or in an underground parking lot
- Even though there are no pedestrians in the detection area, some objects, such as the following, may be detected, possibly causing the Parking Support Brake function (rear pedestrians) to operate.
  - Three dimensional objects, such as a pole, traffic cone, fence, or parked vehicle
  - Moving objects, such as a car or motorcycle
  - Objects moving toward your vehicle when backing up, such as flags or puddles (or airborne matter, such as smoke, steam, rain, or snow)
  - Cobblestone or gravel roads, tram rails, road repairs, white lines, pedestrian crossings, puddles or fallen leaves on the road
  - Metal covers (gratings), such as those used for drainage ditches
- Objects reflected in a puddle or on a wet road surface
- The roadside or bumps on the road
- Shadows on the road
- In some situations, such as the following, the Parking Support Brake function (rear pedestrians) may operate even though there are no pedestrians in the detection area.
  - When backing up toward the roadside or a bump on the road
  - If the vehicle is significantly tilted, such as when carrying a heavy load
  - When backing up toward an incline/decline
  - If the suspension has been modified or tires of a size other than specified are installed
  - If the rear of the vehicle is raised or lowered due to the carried load
  - If an electronic component, such as a backlit license plate or rear fog light, is installed near the rear camera
  - If a bumper protector, such as an additional trim strip, is installed to the rear bumper
  - If the orientation of the rear camera has been changed
  - If a towing eyelet is installed to the rear of the vehicle
  - When water is flowing over the rear camera lens
  - When the rear camera is obscured (dirt, snow, ice, etc. are attached) or scratched
  - If there is a flashing light in the detection area, such as the emergency flashers of another vehicle

**Driving mode select switch**

The driving modes can be selected to suit driving condition.

**Selecting a drive mode**

- ▶ Vehicles without AVS (Adaptive Variable Suspension System)

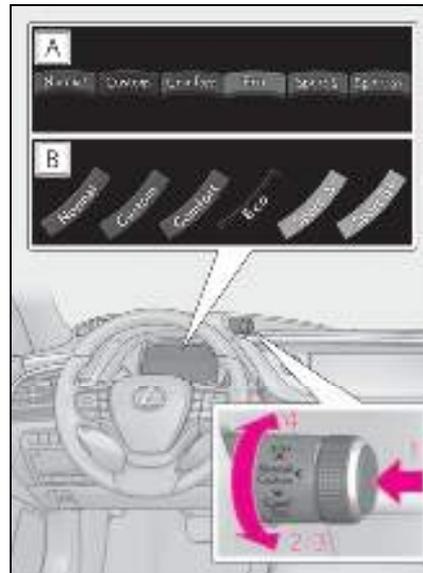


- 1 Normal mode**  
Provides an optimal balance of fuel economy, quietness, and dynamic performance. Suitable for city driving.  
Press the switch to change the driving mode to normal mode when not in normal mode.
- 2 Eco drive mode**  
Helps the driver accelerate in an eco-friendly manner and improve fuel economy through moderate throttle characteristics and by controlling the operation of the air conditioning system (heating/cooling).  
When not in Eco drive mode, if the driving mode select switch is turned backward, the Eco drive mode indicator will come on.
- 3 Sport mode**  
Controls the transmission and engine to provide quick, powerful acceleration. This mode also changes the steering feel, making it suitable for when agile driving

response is desired, such as when driving on roads with many curves.

When not in sport mode, if the driving mode select switch is turned forward, the sport mode indicator will come on.

- ▶ Vehicles with AVS (Adaptive Variable Suspension System)



**A** Except F SPORT models

**B** F SPORT models

- 1 Normal mode/Custom mode**  
Normal mode and custom mode are selected by pressing the driving mode select switch. Each time the switch is pressed, the driving mode changes between normal mode and custom mode.  
When normal mode is selected, the normal mode indicator comes on.  
When custom mode is selected, the custom mode indicator comes on.  
Press the switch to change the driving mode to normal mode when not in normal mode.
  - Normal mode

Provides an optimal balance of fuel economy, quietness, and dynamic performance. Suitable for city driving.

When the shift position is in D, an appropriate gear for sporty driving may automatically be selected according to driver performance and driving conditions.

- Custom mode

Allows you to drive with the powertrain, chassis and air conditioning system functions set to your preferred settings. Custom mode settings can only be changed on the drive mode customization display of the Center Display. (→P.394)

## 2 Comfort mode

By controlling the suspension, riding comfort is further enhanced. Suitable for city driving.

When not in comfort mode and the driving mode select switch is turned backward, the comfort mode indicator comes on.

## 3 Eco drive mode

Helps the driver accelerate in an eco-friendly manner and improve fuel economy through moderate throttle characteristics and by controlling the operation of the air conditioning system (heating/cooling).

When in comfort mode, if the driving mode select switch is turned backward, the Eco drive mode indicator comes on.

## 4 Sport mode

- Sport S mode

Controls the transmission and engine to provide quick, powerful acceleration. This mode is suitable for when agile driving response is desired, such as when driving on roads with many curves.

When not in Sport S mode, if the driving mode select switch is turned forward, the Sport S mode indicator comes on.

- Sport S+ mode

Helps to ensure steering performance and driving stability by simultaneously controlling the steering and suspension in addition to the transmission and engine. Suitable for sportier driving.

When in Sport S mode, if the driving mode select switch is turned forward, the Sport S+ mode indicator comes on.

### ■ If the driving mode select switch is operated while the opening screen is being displayed

If the driving mode select switch is operated while the opening screen is being displayed, the driving mode will be changed and the meter display will change accordingly after the opening screen operation has completed.

### ■ Operation of the air conditioning system in Eco drive mode

Eco drive mode controls the heating/cooling operations and fan speed of the air conditioning system to enhance fuel efficiency. To improve air conditioning performance, perform the following operations:

- Turn off eco air conditioning mode (if equipped) (→P.406)
- Adjust the fan speed (→P.402)
- Turn off Eco drive mode

### ■ Automatic deactivation of sport mode and custom mode

If the engine switch is turned off after driving in sport mode or custom mode, the drive mode will be changed to normal mode.

### ■ Driving mode pop-up display

When the driving mode is changed, the selected driving mode will be temporarily displayed on the side display. (→P.395)

**Electronically modulated air suspension\***

\*: If equipped

The height of the vehicle when driving can be selected using the vehicle height adjustment switch. The selected height level will be maintained regardless of the number of passengers or weight of cargo.

Additionally, settings of the following functions can be changed:

- Enabling/Disabling controls of access mode
- Temporarily disabling vehicle height control

■ Situations in which the vehicle height control may not operate properly

- In the following situations, the vehicle height may change slowly or may not change to the correct height:
  - When the vehicle comes into contact with snow, ice, stone, etc.
  - When the ambient temperature is low
  - When the accumulator tank pressure is low
- In the following situations, the vehicle height may not change:
  - If the hood or trunk is not fully closed
  - If the brake pedal depressed and the vehicle is stopped
  - When the vehicle is on a significantly uneven or undulating road
  - When the vehicle is on a slanted road or a slope

■ Operating sound of the air suspension compressor and valves

In the following situations the air suspension compressor and valves may operate and a sound may be heard, but this does not indicate a malfunction.

- When passengers enter or exit the vehicle or cargo is loaded or unloaded, causing the vehicle height to change
- When the height of the vehicle is changed using the vehicle height adjustment switch

- When the doors are opened/closed
- When the doors are locked/unlocked

■ When the accumulator tank pressure is low

When the accumulator tank pressure is low, the air suspension compressor and valves may operate repeatedly even though the vehicle height is not being changed. This does not indicate a malfunction.

■ When "Check Air Suspension System" is displayed on the multi-information display

The system may not operate properly. Have the vehicle inspected by your Lexus dealer.

■ Customization

Some functions can be customized. (→P.568)

**⚠ WARNING**

■ Situations in which the operation of the electronically modulated air suspension should be temporarily disabled

In the following situations, make sure to temporarily disable all functions of the vehicle height control of the electronically modulated air suspension and then stop the engine. Otherwise, the vehicle height may change and part of your body may be caught under the vehicle, possibly causing injury.

- When the vehicle is parked on a curb
- If any of the wheels is not touching the ground
- If the vehicle needs to be jacked up
- If the vehicle is to be tied down
- If the vehicle is to be towed

**⚠ WARNING****■ Vehicle height control precautions**

In the following situations, make sure to check the safety of the area around the vehicle, as the vehicle height may change and part of someone's body may be caught in the vehicle, possibly causing injury or the vehicle may be damaged.

- When opening or closing a door
- When locking or unlocking the doors
- When changing the vehicle height using the vehicle height adjustment switch

**⚠ NOTICE****■ Parking precaution**

- If the vehicle is parked for a long time, the vehicle height may change due to changes in the ambient temperature. When parking the vehicle, make sure that the area above and below the vehicle is clear, so that the vehicle will not contact anything if its height changes.
- Be careful when parking the vehicle in an area with a low ceiling or near low hanging objects, as the vehicle height will increase when passengers exit the vehicle and exit control of access mode operates.
- When the doors are closed or locked, the vehicle height may decrease. When parking in a parking lot with a device which raises to contact the bottom of the vehicle, make sure to disable the vehicle height control.

**Selecting the vehicle height**

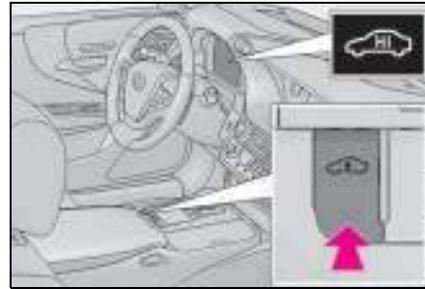
To adjust the vehicle height to one appropriate for road and driving conditions, press the vehicle height adjust-

ment switch.

Turns high mode on/off.

When high mode is enabled, the high mode indicator on the meter will illuminate. The vehicle height will increase by approximately 20 mm (0.8 in.) from its normal position.

When the vehicle height is increased by a control of access mode press the vehicle height adjustment switch twice to enable/disable high mode.

**■ The vehicle height adjustment switch can be used to change the mode when**

The engine switch is in IGNITION ON mode.

**■ System protection function**

If the vehicle height is repeatedly increased and decreased using the vehicle height adjustment switch, etc., the system may not operate temporarily.

**Vehicle height control when entering/exiting the vehicle ("Access Mode")**

In order to improve the ease of entering and exiting the vehicle, the vehicle height will increase automatically.

- ▶ Enter control

If any of the following operations are

performed, the vehicle height will increase automatically:

- When the doors are unlocked using the smart entry & start system
- When the doors are unlocked using the wireless remote control and then a door is opened.

The vehicle height will increase by approximately 20 mm (0.8 in.) from its normal position.

Depending on the current vehicle height, the vehicle height may not increase.

If the vehicle height increased, when any of the following conditions are met, the vehicle will return to its previous height:

- A certain amount of time has elapsed since the engine was started and the doors were closed
- The vehicle speed reaches approximately 5 km/h (3 mph)
- The doors are locked using the smart entry & start system or wireless remote control

► Exit control

When “Select Parking Height” is set to “High”, the vehicle height will automatically increase when the P shift position is selected and a door is opened.

- 1 Press  or  to select .
- 2 Press  or  to select “Vehicle Settings” and then press .
- 3 Press  or  to select  and then press .

- 4 Press  or  to select “Select Parking Height” and then press .

The vehicle height will increase by approximately 10 mm (0.4 in.) from its normal position.

Depending on the current vehicle height, the vehicle height may not increase.

If the vehicle height increased, when any of the following conditions are met, the vehicle will return to its previous height:

- The vehicle speed reaches approximately 5 km/h (3 mph)
- The doors are locked using the smart entry & start system or wireless remote control

■ Enabling/Disabling access mode

- 1 Press the  or  meter control switch to select .
- 2 Press the  or  meter control switch to select “Vehicle Settings” and then press .
- 3 Press the  or  meter control switch to select  and then press .
- 4 Press the  or  meter control switch to select “Access Mode” and then press .

The setting will change between enabled/disabled each time the  meter control switch is pressed.

■ **When the vehicle height has been increased by a control of access mode**

Press the vehicle height adjustment switch with the engine switch in any mode to return the vehicle to its previous vehicle height.

■ **Access mode operation**

- Access mode will not operate if the vehicle is not parked on a level road surface.
- When the P shift position is selected, if the doors are not locked and any door is opened from the outside, exit control will operate.
- If the doors are locked and unlocked repeatedly, the system may not operate temporarily.

mph).

### Temporarily disabling vehicle height control

Vehicle height control can be temporarily disabled using the meter control switches. (→P.119)

When to temporarily disable vehicle height control:→P.376

- 1 Press  or  to select .
- 2 Press  or  to select "Vehicle Settings" and then press .
- 3 Press  or  to select  and then press .
- 4 Press  or  to select "Height Control" and then press .

This setting is memorized even if the engine switch is turned off.

Even if the vehicle height control functions are disabled, they will be enabled automatically when the vehicle speed reaches approximately 30 km/h (19

### Driving assist systems

To keep driving safety and performance, the following systems operate automatically in response to various driving situations. Be aware, however, that these systems are supplementary and should not be relied upon too heavily when operating the vehicle.

### Summary of the driving assist systems

- **ECB (Electronically Controlled Brake System) (vehicles with Lexus Safety System + A)**

The electronically controlled system generates braking force corresponding to the brake operation

- **ABS (Anti-lock Brake System)**

Helps to prevent wheel lock when the brakes are applied suddenly, or if the brakes are applied while driving on a slippery road surface

- **Brake assist**

Generates an increased level of braking force after the brake pedal is depressed when the system detects a panic stop situation

- **VSC (Vehicle Stability Control)**

Helps the driver to control skidding when swerving suddenly or turning on slippery road surfaces.

- **Secondary Collision Brake (if equipped)**

When the airbag sensor detects a collision, the brakes and stop lights are automatically controlled to reduce the vehicle speed and that helps reduce the possibility of further damage due to a secondary collision.

- **TRC (Traction Control)**

Helps to maintain drive power and prevent the drive wheels from spinning when starting the vehicle or accelerating on slippery roads

- **Hill-start assist control**

Helps to reduce the backward movement of the vehicle when starting on an uphill

- **VGRS (Variable Gear Ratio Steering) (if equipped)**

Adjusts the front wheel turning angle in accordance with the vehicle speed and steering wheel movement

- **DRS (Dynamic Rear Steering) (if equipped)**

Contributes to the turning characteristics and responsiveness of the vehicle by adjusting the rear wheel angle of the vehicle in accordance with steering wheel movement.

- **EPS (Electric Power Steering)**

Employs an electric motor to reduce the amount of effort needed to turn the steering wheel.

■ **Active stabilizer suspension system (if equipped)**

Reduces sway when cornering according to steering wheel movement in order to maintain a stable vehicle posture.

■ **AVS (Adaptive Variable Suspension System) (if equipped)**

By independently controlling the damping force of the shock absorbers for each of the 4 wheels according to the road and driving conditions, this system helps riding comfort with superior vehicle stability, and helps good vehicle posture.

Also, the damping force changes depending on the selected driving mode. (→P.374)

■ **LDH (Lexus Dynamic Handling system) (if equipped)**

Provides integrated control of the VGRS, DRS and EPS. Contributes to turning characteristics at low speeds, responsiveness at medium speeds and safety at high speeds by controlling the steering angle of the front and rear wheels in accordance with the steering wheel operation and vehicle speed.

■ **VDIM (Vehicle Dynamics Integrated Management)**

Provides integrated control of the ABS, brake assist, TRC, VSC, hill-start assist control, EPS, VGRS (if equipped), DRS (if equipped), active stabilizer suspension system (if equipped) and AVS (if equipped) systems

Helps to maintain vehicle stability when swerving on slippery road surfaces by controlling the brakes, engine output, steering assist, and steering ratio

■ **Emergency brake signal (if equipped)**

When the brakes are applied suddenly, the stop lights automatically flash to alert the vehicle behind.

■ **When the TRC/VSC systems are operating (vehicles without Lexus Safety System + A)**

The slip indicator light will flash while the TRC/VSC systems are operating.



■ **When the TRC/VSC/ABS systems are operating (vehicles with Lexus Safety System + A)**

The slip indicator light will flash while the TRC/VSC/ABS systems are operating.



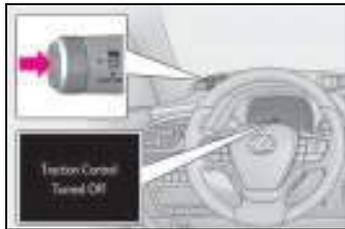
■ **Disabling the TRC system**

If the vehicle gets stuck in mud, dirt or snow, the TRC system may reduce power from the engine to the wheels. Pressing the  switch to turn the system off may make it easier for you to rock the vehicle in order to free it.

To turn the TRC system off, quickly press and release the  switch.

The "Traction Control Turned Off" will be shown on the multi-information display.

Press the  switch again to turn the system back on.



■ **Disabling both TRC and VSC systems**

To turn the TRC and VSC systems off, press and hold the  switch for more than 3 seconds while the vehicle is stopped.

The VSC OFF indicator light will come on and the "Traction Control Turned Off" will be shown on the multi-information display.\*

Press the  switch again to turn the system back on.

\*: On vehicles with PCS (Pre-Collision System), PCS will also be disabled (only Pre-Collision warning is available). The PCS warning light will come on and a message will be displayed on the multi-information display. (→P.279)

■ **When the message is displayed on the multi-information display showing that TRC has been disabled even if the  switch has not been pressed**

TRC cannot be operated. Contact your Lexus dealer.

■ **Operating conditions of hill-start assist control**

When the following four conditions are met, the hill-start assist control will operate:

- The shift position is in a position other than P or N (when stating off for-

ward/backward on an upward incline)

- The vehicle is stopped
- The accelerator pedal is not depressed
- The parking brake is not engaged

■ **Automatic system cancelation of hill-start assist control**

The hill-start assist control will turn off in any of the following situations:

- Shift the shift position to P or N
- The accelerator pedal is depressed
- The parking brake is engaged
- 2 seconds at maximum elapsed after the brake pedal is released

■ **VGRS is disabled when**

VGRS may stop operating in the following situations.

In this event, the steering wheel may move from its straight forward position, but it will return when the system restarts.

- When the steering wheel is operated for an extended period of time while the vehicle is stopped or is moving very slowly (on vehicles with LDH, DRS is disabled together with VGRS)
- When the steering wheel has been held fully to the left or right

The center position of the steering wheel may change when VGRS is disabled. However, the position will return to normal after VGRS is reactivated.

■ **When the battery is disconnected (vehicles with VGRS)**

The steering wheel may move from its straight forward position, but this will be corrected automatically when driving.

■ **Sounds and vibrations caused by the ABS, brake assist, VSC, TRC, hill-start assist control and VGRS systems**

- A sound may be heard from the engine compartment when the brake pedal is depressed repeatedly, when the engine is started or just after the vehicle begins to move. This sound does not indicate that a malfunction has occurred in any of these systems.

- Any of the following conditions may occur when the above systems are operating. None of these indicates that a malfunction has occurred.
- Vibrations may be felt through the vehicle body and steering.
- A motor sound may be heard also after the vehicle comes to a stop.
- Vehicles without Lexus Safety System + A: The brake pedal may pulsate slightly after the ABS is activated.
- Vehicles without Lexus Safety System + A: The brake pedal may move down slightly after the ABS is activated.

#### ■ ECB operating sound

ECB operating sound may be heard in the following cases, but it does not indicate that a malfunction has occurred.

- Operating sound heard from the engine compartment when the brake pedal is operated.
- Motor sound of the brake system heard from the front part of the vehicle when the driver's door is opened.
- Operating sound heard from the engine compartment when one or two minutes passed after the stop of the engine.

#### ■ EPS, VGRS and DRS operation sound

When the steering wheel is operated, a motor sound (whirring sound) may be heard. This does not indicate a malfunction.

#### ■ Automatic reactivation of TRC and VSC systems

After turning the TRC and VSC systems off, the systems will be automatically re-enabled in the following situations:

- When the engine switch is turned off
- If only the TRC system is turned off, the TRC will turn on when vehicle speed increases  
If both the TRC and VSC systems are turned off, automatic re-enabling will not occur when vehicle speed increases.

#### ■ Reduced effectiveness of the EPS system

The effectiveness of the EPS system is reduced to prevent the system from over-

heating when there is frequent steering input over an extended period of time. The steering wheel may feel heavy as a result. Should this occur, refrain from excessive steering input or stop the vehicle and turn the engine off. The EPS system should return to normal within 10 minutes.

#### ■ Secondary Collision Brake operating conditions

The vehicle speed is approximately 10 km/h (6 mph) or more and the airbag sensor detects a collision. (The Secondary Collision Brake will not operate when the vehicle speed is below approximately 10 km/h [6 mph].)

#### ■ Secondary Collision Brake automatic cancellation

The Secondary Collision Brake is automatically canceled in the following situations:

- The vehicle speed drops below approximately 10 km/h (6 mph)
- A certain amount of time elapses during operation
- The accelerator pedal is depressed a large amount

#### ■ Operating conditions of emergency brake signal

When the following three conditions are met, the emergency brake signal will operate:

- The emergency flashers are off
- Actual vehicle speed is over 55 km/h (35 mph)
- The brake pedal is depressed in a manner that cause the system to judge from the vehicle deceleration that this is a sudden braking operation

#### ■ Automatic system cancelation of emergency brake signal

The emergency brake signal will turn off in any of the following situations:

- The emergency flashers are turned on
- The brake pedal is released
- The system judges from the vehicle deceleration that is not a sudden braking

operation

■ **When “Check VGRS System” or “CHECK DRS” is displayed on the multi-information display**

The VGRS or DRS may not operate properly. Have the vehicle inspected by your Lexus dealer.

 **WARNING**

■ **The ABS does not operate effectively when**

- The limits of tire gripping performance have been exceeded (such as excessively worn tires on a snow covered road).
- The vehicle hydroplanes while driving at high speed on wet or slick roads.

■ **Stopping distance when the ABS is operating may exceed that of normal conditions**

The ABS is not designed to shorten the vehicle’s stopping distance. Always maintain a safe distance from the vehicle in front of you, especially in the following situations:

- When driving on dirt, gravel or snow-covered roads
- When driving with tire chains
- When driving over bumps in the road
- When driving over roads with potholes or uneven surfaces

■ **TRC/VSC may not operate effectively when**

Directional control and power may not be achievable while driving on slippery road surfaces, even if the TRC/VSC system is operating. Drive the vehicle carefully in conditions where stability and power may be lost.

■ **Hill-start assist control does not operate effectively when**

- Do not overly rely on hill-start assist control. Hill-start assist control may not operate effectively on steep inclines and roads covered with ice.
- Unlike the parking brake, hill-start assist control is not intended to hold the vehicle stationary for an extended period of time. Do not attempt to use hill-start assist control to hold the vehicle on an incline, as doing so may lead to an accident.

■ **When the TRC/VSC is activated (vehicles without Lexus Safety System + A)**

The slip indicator light flashes. Always drive carefully. Reckless driving may cause an accident. Exercise particular care when the indicator light flashes.

■ **When the TRC/ABS/VSC is activated (vehicles without Lexus Safety System + A)**

The slip indicator light flashes. Always drive carefully. Reckless driving may cause an accident. Exercise particular care when the indicator light flashes.

■ **When the TRC/VSC systems are turned off**

Be especially careful and drive at a speed appropriate to the road conditions. As these are the systems to help ensure vehicle stability and driving force, do not turn the TRC/VSC systems off unless necessary.

■ **Secondary Collision Brake**

Do not overly rely on the Secondary Collision Brake. This system is designed to help reduce the possibility of further damage due to a secondary collision, however, that effect changes according to various conditions. Overly relying on the system may result in death or serious injury.

 **WARNING****■ Replacing tires**

Make sure that all tires are of the specified size, brand, tread pattern and total load capacity. In addition, make sure that the tires are inflated to the recommended tire inflation pressure level.

The ABS, TRC and VSC systems will not function correctly if different tires are installed on the vehicle.

Contact your Lexus dealer for further information when replacing tires or wheels.

**■ Handling of tires and the suspension**

Using tires with any kind of problem or modifying the suspension will affect the driving assist systems, and may cause a system to malfunction.

### Winter driving tips

Carry out the necessary preparations and inspections before driving the vehicle in winter. Always drive the vehicle in a manner appropriate to the prevailing weather conditions.

### Preparation for winter

- Use fluids that are appropriate to the prevailing outside temperatures.
  - Engine oil
  - Engine coolant
  - Washer fluid
- Have a service technician inspect the condition of the battery.
- Have the vehicle fitted with four snow tires or purchase a set of tire chains for the rear tires.\*

Ensure that all tires are the specified size and brand, and that chains match the size of the tires.

\*: Tire chains cannot be mounted on vehicles with front and rear tires of differing sizes.

### WARNING

#### ■ Driving with snow tires

Observe the following precautions to reduce the risk of accidents. Failure to do so may result in a loss of vehicle control and cause death or serious injury.

- Use tires of the specified size.

- Maintain the recommended level of air pressure.

- Do not drive at speeds in excess of the speed limit or the speed limit specified for the snow tires being used.

- Use snow tires on all, not just some wheels.

#### ■ When installing tire chains

Before installing tire chains, make sure to disable all functions of the vehicle height control of the electronically modulated air suspension. Otherwise, the vehicle height may change while installing the tire chains and part of your body may be caught under the vehicle, possibly causing injury. (→P.379)

#### ■ Driving with tire chains

Observe the following precautions to reduce the risk of accidents. Failure to do so may result in the vehicle being unable to be driven safely, and may cause death or serious injury.

- Do not drive in excess of the speed limit specified for the tire chains being used, or 50 km/h (30 mph), whichever is lower.

- Avoid driving on bumpy road surfaces or over potholes.

- Avoid sudden acceleration, abrupt steering, sudden braking and shifting operations that cause sudden engine braking.

- Slow down sufficiently before entering a curve to ensure that vehicle control is maintained.

- Do not use LTA (Lane Tracing Assist) system. (if equipped)

- Do not use LDA (Lane Departure Alert) system. (if equipped)

 NOTICE**■ Repairing or replacing snow tires**

Request repairs or replacement of snow tires from Lexus dealers or legitimate tire retailers.

This is because the removal and attachment of snow tires affects the operation of the tire pressure warning valves and transmitters.

**Before driving the vehicle**

Perform the following according to the driving conditions:

- Do not try to forcibly open a window or move a wiper that is frozen. Pour warm water over the frozen area to melt the ice. Wipe away the water immediately to prevent it from freezing.
- To ensure proper operation of the climate control system fan, remove any snow that has accumulated on the air inlet vents in front of the windshield.
- Check for and remove any excess ice or snow that may have accumulated on the exterior lights, vehicle's roof, chassis, around the tires or on the brakes.
- Remove any snow or mud from the bottom of your shoes before getting in the vehicle.

**When driving the vehicle**

Accelerate the vehicle slowly, keep a safe distance between you and the vehicle ahead, and drive at a reduced

speed suitable to road conditions.

**When parking the vehicle**

Park the vehicle and shift the shift position to P without setting the parking brake. The parking brake may freeze up, preventing it from being released. If the vehicle is parked without setting the parking brake, make sure to block the wheels.

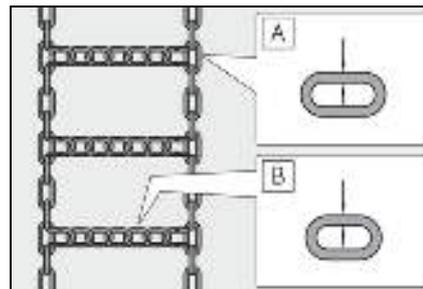
Failure to do so may be dangerous because it may cause the vehicle to move unexpectedly, possibly leading to an accident.

**Selecting tire chains**

- ▶ Vehicles with front and rear tires of the same size

Use the correct tire chain size when mounting the tire chains.

Chain size is regulated for each tire size.



**A** Side chain (3 mm [0.12 in.] in diameter)

**B** Cross chain (4 mm [0.16 in.] in diameter)

- ▶ Vehicles with front and rear tires of differing sizes lever. (→P.241)

Tire chains cannot be mounted.

Snow tires should be used instead.

### Regulations on the use of tire chains

Regulations regarding the use of tire chains vary depending on location and type of road. Always check local regulations before installing chains.

#### ■ Tire chain installation

Observe the following precautions when installing and removing chains:

- Install and remove tire chains in a safe location.
- Install tire chains on the rear tires. Do not install tire chains on the front tires.
- Install tire chains on the rear tires as tightly as possible. Retighten chains after driving 0.5—1.0 km (1/4—1/2 mile).
- Install tire chains following the instructions provided with the tire chains.



#### NOTICE

##### ■ Fitting tire chains

The tire pressure warning valves and transmitters may not function correctly when tire chains are fitted.

### Windshield wipers

To enable the windshield wipers to be lifted when heavy snow or icy conditions are expected, change the rest position of the windshield wipers from the retracted position below the hood to the service position using the wiper

**Eco-friendly driving tips**

For improved fuel economy and reduced CO<sub>2</sub> emissions, pay attention to the following points:

**Using Eco drive mode**

When using Eco drive mode, the torque corresponding to the accelerator pedal depression amount can be generated more smoothly than it is in normal conditions. In addition, the operation of the air conditioning system (heating/cooling) will be minimized, improving the fuel economy. (→P.374)

**Use of Eco Driving Indicator**

The Eco-friendly driving is possible by keeping the bar display of the Eco Driving Indicator shown in the multi-information display within the Zone of Eco driving. (→P.122)

**Accelerator pedal/brake pedal operation**

Drive your vehicle smoothly. Avoid abrupt acceleration and deceleration. Gradual acceleration and deceleration will help reduce excessive fuel consumption.

**When braking**

Observe conditions in front of and around the vehicle, and estimate your

stopping position. Release the accelerator pedal early and continue coasting. Use the brake pedal to adjust your stopping position. Make sure to operate the brake pedal gently.

**Delays**

Repeated acceleration and deceleration, as well as long waits at traffic lights, will lead to bad fuel economy. Check traffic reports before leaving and avoid delays as much as possible.

**Highway driving**

Control and maintain the vehicle at a constant speed. Before stopping at a toll booth or similar, allow plenty of time to release the accelerator pedal and gently apply the brakes.

**Air conditioning**

Use the air conditioning only when necessary. Doing so can help reduce excessive fuel consumption.

In summer: When the ambient temperature is high, use the recirculated air mode. Doing so will help to reduce the burden on the air conditioning system and reduce fuel consumption as well.

In winter: Turn the A/C switch on only when both heating and dehumidifying are needed, and if only heating is needed, turn the A/C switch off. Turning the A/C switch on when unnecessary leads to excessive fuel consumption.

### Performing idling stops

- Avoid unnecessary idling. Stop the engine when parking the vehicle to reduce excessive fuel consumption, even it is only for a short period of time.
  - Except in severe environment, such as when the outside temperature is extremely low, warming up the engine before driving is unnecessary. Rather than idling, it is more efficient to drive the vehicle gently to warm up each part while avoiding increasing the engine revolutions unnecessarily and accelerating or decelerating suddenly.
  - Using the Stop & Start system (if equipped) will help improve fuel economy. (→P.323)
  - LS500: Idling before stopping the engine (→P.204) is performed in order to maintain vehicle functions and is not considered unnecessary idling.
- inflation pressure can cause poor fuel economy. Also, as snow tires can cause large amounts of friction, their use on dry roads can lead to poor fuel economy. Use tires that are appropriate for the season and road conditions.
- Use oil and fluid of the recommended quality, which affect fuel consumption and the life of the vehicle. Also, check oil and fluid periodically. (→P.456)

### Luggage

Carrying heavy luggage will lead to poor fuel economy. Avoid carrying unnecessary luggage. Installing a large roof rack will also cause poor fuel economy.

### Regular maintenance

- Make sure to check the tire inflation pressure frequently. Improper tire

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### Remote Touch

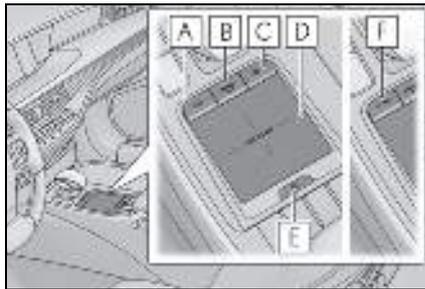
The Remote Touch can be used to operate the Center Display.

For details on the Remote touch, refer to “Navigation and Multimedia System Owner’s Manual” or “Multimedia Owner’s Manual”.

The illustrations below are for left-hand drive vehicles.

### Remote Touch operation

#### ■ Switches



**A** Vehicles with navigation function: “MAP” button

Press this button to display the vehicle’s current position.

**B** “MENU” button

Press this button to display the menu screen.

**C** Back button

Press this button to display the previous screen.

**D** Touchpad

Slide your finger on the touchpad and move the pointer to select a function, letter and screen button.

Press the touchpad to enter the selected function, letter or screen button. Certain finger movements on the touchpad can perform functions, such as changing map scale and scrolling list screens.

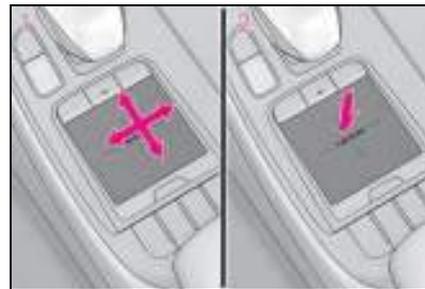
**E** Sub function button

When  is displayed on the screen, a function screen assigned to the screen can be displayed.

**F** Vehicles without navigation function: “HOME” button

Press this button to display the compass mode screen.

#### ■ Using the touchpad



- 1** Select: Touch the touchpad to select the desired button on the screen.
- 2** Enter: Buttons on the screen can be selected by either depressing or double tapping the touchpad. Once a button has been selected, the screen will change.

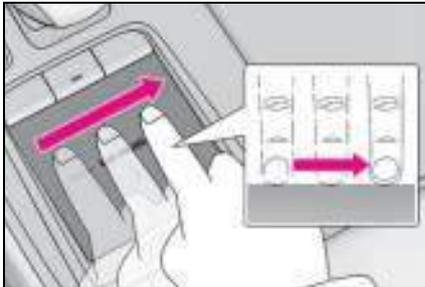
#### ■ Touch operation

Operations are performed by touching the touchpad with your finger.

##### ● Trace

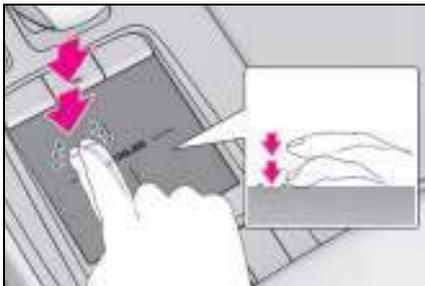
Trace the pad surface while maintaining contact with the touchpad. Moving the

cursor and the pointer.



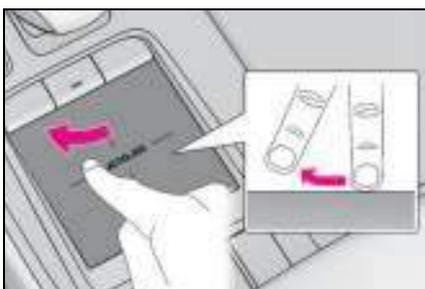
● Double tap

Tap the touchpad twice, quickly. Select the button on the screen.



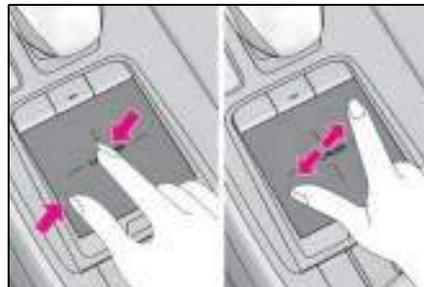
● Flick

Quick and short movement along the touchpad with your finger. Move the list screen.



● Pinch in/Pinch out

Slide fingers toward each other or apart on the touchpad. Change the scale of the map.



 NOTICE

■ To prevent damage to the Remote Touch

Observe the following precautions. Failure to do so may cause damage to the Remote Touch.

- Do not allow food, liquid, stickers or lit cigarettes to contact the Remote Touch.
- Do not subject the Remote Touch to excessive pressure or strong impact.
- Do not push the touchpad with a strong force or use a sharp pointed object to operate the pad.

## Center Display

### Center Display overview

#### ■ Menu screen

Press the "MENU" button on the Remote Touch to display the menu screen.

The displays shown in the illustrations are used for example only and may differ from the actual vehicle.



Switch	Function
	Select to display the "Destination" screen. *1,2
	Select to display the radio control screen. *1

Switch	Function
	Select to display the media control screen. *1
	Select to display the hands-free control screen. *1
	Select to display the "Apps" screen. *1,2
	Select to display the information screen. *1 (→P.130)
	Select to display the setup screen. *1
	Select to display the air conditioning control screen. (→P.404)

\*1: Refer to the "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual"

\*2: This function is not available on some models.

#### ■ Split-screen display

Different information can be displayed on the left and right sides of the screen. For example, air conditioning system screen can be displayed and operated while the fuel consumption information screen is being displayed. The large screen on the left of the display is called the main display, and the small screen to the right is called the side display.



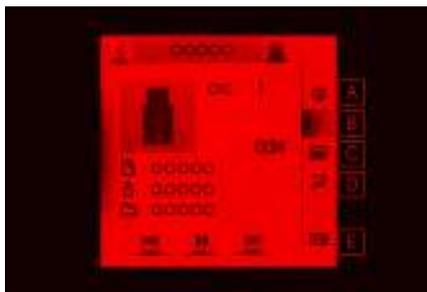
### ■ Main display

For details about the functions and operation of the main display, refer to the respective section and "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".

### ■ Side display

The following functions can be displayed and operated on the side display.

Select  or  to display the desired screen.



**A** Navigation system \*

**B** Audio \*

**C** Vehicle information (→P.132)

**D** Air conditioning system (→P.407)

**E** Show/hide the side display \*

\*: Refer to the "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".

### ■ Screen display during low temperatures

When the ambient temperature is extremely low, screen response may be delayed even if the Remote Touch is operated.

### Rear Multi Operation Panel\*

\*: If equipped

The Rear Multi Operation Panel built-into the rear armrest can be used to operate the rear audio system, air conditioning system, seat, relaxation seat, shades or lights.

### Rear Multi Operation Panel overview

#### ■ Home screen



- A** Touch to display the audio control screen.  
Refer to "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".
- B** Touch to display the rear air conditioning control screen. (→P.413, 417)
- C** Touch to display the rear seat adjustment screen. (→P.170, 179, 181)

**D** Touch to display the relaxation seat (if equipped) control screen. (→P.173)

**E** Touch to display the rear sunshade (if equipped)/rear interior light control screen. (→P.420, 436)

**F** Touch to display the Rear Multi Operation Panel settings screen. (→P.396)

**G** Touch to display/hide the shortcut screen.

**H** Shortcut screen

The following can be adjusted or operated:

- Rear air conditioning system temperature setting (→P.413)
- Rear seat heaters/rear seat ventilators (→P.417)
- Audio system

Refer to "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".

- Rear door sunshades/rear quarter sunshades/rear sunshade (→P.437)

**I**  button

Press to display the home screen. When the screen is on, press and hold to turn the screen off.

#### ■ Rear Multi Operation Panel settings screen

Screen operation settings and the brightness of the screen can be changed.



**A** Touch to turn the screen off.

Press the  button to display the home screen.

**B** Touch to adjust the brightness of the screen.

**C** Touch to display the automatic screen transition settings screen.

**D** Touch to lock the Rear Multi Operation Panel.

■ **Auto screen change settings screen**



**A** Touch to turn the automatic screen transition function on/off.

**B** Touch to set whether the screen will transition to the home screen or turn off when the automatic screen transition function operates.

**C** Touch to set the amount of time (10/30/60/120 seconds) the Rear

Multi Operation Panel must be idle before the automatic screen transition function operates.

When the screen is off, press the  button to turn the screen on and display the previously displayed screen. Press again to display the home screen.

■ **Unlocking the Rear Multi Operation Panel**

Touch and hold **A** until the unlock status indicators (**B**) are completely illuminated to unlock the Rear Multi Operation Panel.



■ **Operating the Rear Multi Operation Panel**

- When operating the Rear Multi Operation Panel, only use the tip of a finger. The Rear Multi Operation Panel cannot be operated with a fingernail, pen, etc.
- Use only one finger when operating the Rear Multi Operation Panel. The Rear Multi Operation Panel cannot be operated with multiple fingers.
- When the engine switch is changed to ACCESSORY or IGNITION ON mode, if a hand object, liquid or foreign matter is touching the Rear Multi Operation Panel, it may not operate correctly. In this case, remove anything touching the Rear Multi Operation Panel and wait for approximately 30 seconds before operating it again.

If the Rear Multi Operation Panel still cannot be operated normally, press and hold the  button to turn the Rear Multi Operation Panel off, and then press the  button again to turn it back on and operate it.

- In the following situations, the Rear Multi Operation Panel may not operate properly:
  - If wearing gloves during operation, non response may occur.
  - If a wet hand is used to operate the Rear Multi Operation Panel.
  - If a screen cover or coating is applied to on the Rear Multi Operation Panel.
  - If the Rear Multi Operation Panel is dirty or has liquid attached to it, incorrect operation or non-response may occur.
  - If the Rear Multi Operation Panel receives electro magnetic waves, incorrect operation or non-response may occur.
  - If a mobile phone or other wireless communication device brought near the Rear Multi Operation Panel.
- If the a metal object, such as the following, is touching or covering the Rear Multi Operation Panel:
  - Coins
  - Keys
  - Metallic wallets or bags
  - Magnetic isolation cards
  - Metallic foil, such as the inner packaging of a cigarette box
  - Disposable heat packs
  - Discs, such as a CD or DVD, Cables, such as a USB cable
  - Mobile devices, such as smartphones, mobile phones, tablets, etc.
- Make sure to keep the Rear Multi Operation Panel clean. If the Rear Multi Operation Panel is dirty, it may not operate correctly. (When cleaning the Rear Multi Operation Panel, turn the screen off to avoid unexpected operation.)

 NOTICE

■ To prevent damage to the Rear Multi Operation Panel

Observe the following precautions. Failure to do so may cause damage to the Rear Multi Operation Panel.

- Keep the Rear Multi Operation Panel free of liquids, such as drinks or rain, as they may cause a short circuit.
- Do not sit on or set heavy objects on the Rear Multi Operation Panel.
- Do not push the Rear Multi Operation Panel with a strong force or use a sharp pointed object to operate the panel.

## Lexus Climate Concierge

The seat heaters (if equipped), seat ventilators (if equipped) and heated steering wheel (if equipped) are each automatically controlled according to the set temperature of the air conditioning system, the outside and cabin temperature, etc. Lexus Climate Concierge allows a comfortable condition to be maintained without adjusting each system.

Press the "MENU" button on the Remote Touch to display the main menu and move the cursor to  to display the climate control shortcut buttons. Then, select  to display the Lexus Climate Concierge control screen.

### Turning on Lexus Climate Concierge

Select .

The indicator on the Lexus Climate Concierge control screen illuminates, and the automatic air conditioning system, seat heaters and ventilators, and heated steering wheel operate in automatic mode.

If any of the system is operated manually, the indicator turns off. However, all other functions continue to operate in automatic mode.



### ■ Changing Lexus Climate Concierge control screen between front/rear (vehicles with 4-ZONE climate control)

Select "Rear" to display the rear air conditioning system screen.

Select "Front" to display the front air conditioning system screen.

### ■ When using the Lexus Climate Concierge

Lexus Climate Concierge can be operated on the sub function menu or option control screen. (→P.404)

### Operation of each system

#### ■ Automatic air conditioning system (→P.401, 412)

The temperature can be adjusted independently for each seat.

#### ■ Seat heaters and ventilators (if equipped) (→P.415)

Heating or ventilation is automatically selected according to the set temperature of the air conditioning system, the outside temperature, etc.

#### ■ Heated steering wheel (if equipped) (→P.415)

Heated steering wheel operates auto-

matically according to the set temperature of the air conditioning system, the outside temperature, etc.

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■ **Passenger detection functions**

- When a passenger is detected in the front passenger seat, the seat heater and ventilator will operate automatically.
- When a passenger is detected in a rear seat, the seat heater and ventilator will operate automatically. (vehicles with 4-ZONE climate control)

■ **Seat heater/ventilator operation**

When automatic mode is selected using the seat heater/ventilator switch, passenger detection is not performed.

■ **Rear seat heater operation (vehicles with power rear seat)**

The rear seat heaters are not controlled by the Lexus Climate Concierge.

### Front automatic air conditioning system

Air outlets and fan speed are automatically adjusted according to the temperature setting.

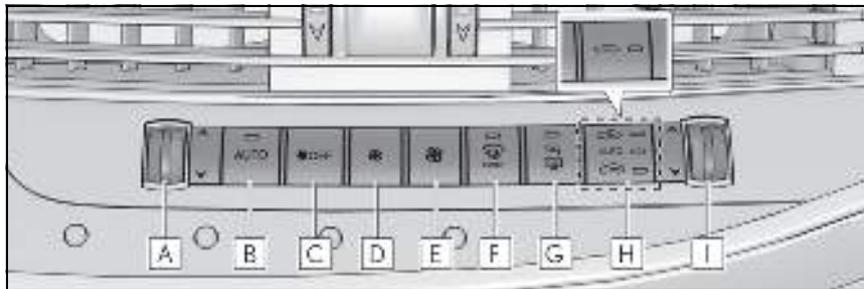
Press the “MENU” button on the Remote Touch to display the main menu and move the cursor to  to display the climate control shortcut buttons. Then, select  to display the air conditioning control screen.

The air conditioning system can be displayed and operated on the side display. The illustrations below are for left-hand drive vehicles.

The button positions and shapes will differ for right-hand drive vehicles.

Also, the display and button positions will differ depending on the type of the system.

### Air conditioning controls



- A** Left-hand side temperature control switch
- B** Automatic mode switch
- C** Off switch
- D** Fan speed decreases switch
- E** Fan speed increases switch
- F** Windshield defogger switch
- G** Rear window defogger and outside rear view mirror defoggers switch
- H** Outside/recirculated air mode switch
- I** Right-hand side temperature control switch

■ **Adjusting the temperature**

Operate the temperature control switch upwards to increase the temperature and downwards to decrease the temperature.

■ **Setting the fan speed**

Operate the  switch to increase the fan speed and the  switch to decrease the fan speed.

Press the off switch to turn the fan off.

■ **Changing the air flow mode**

→P.404

■ **Switching between outside air and recirculated air modes**

▶ Type A

Press the outside/recirculated air mode switch.

The mode changes as follows each time the switch is pressed.

automatic mode →  (outside air mode) →  (recirculated air mode) → automatic mode

When the system is switched to automatic mode, the air conditioning system operates automatically.

▶ Type B

Press the outside/recirculated air mode switch.

The mode switches between outside air mode and recirculated air mode modes each time the switch is operated.

■ **Defogging the windshield**

Defoggers are used to defog the windshield and front side windows.

Press the windshield defogger switch.

Set the outside/recirculated air mode switch to outside air mode if the recirculated air mode is used. (It may switch automatically.)

To defog the windshield and the side windows quickly, turn the air flow and temperature up.

To return to the previous mode, press the windshield defogger switch again when the windshield is defogged.

■ **Defogging the rear window and outside rear view mirrors**

Defoggers are used to defog the rear window, and to remove raindrops, dew and frost from the outside rear view mirrors.

Press the rear window and outside rear view mirror defoggers switch.

The defoggers will automatically turn off after a while. The operation time changes according to the ambient temperature and vehicle speed.

■ **Blower customization (if equipped)**

→P.408

■ **Windshield wiper de-icer (if equipped)**

→P.408

■ **When the outside temperature exceeds 24°C (75°F) and the air conditioning system is on**

- In order to reduce the air conditioning power consumption, the air conditioning system may switch to recirculated air mode automatically. This may also reduce fuel consumption.
- Recirculated air mode is selected as a default mode when the engine switch is

turned to IGNITION ON mode .

- It is possible to switch to outside air mode at any time by pressing the outside/recirculated air mode switch.

#### ■ Fogging up of the windows

The windows will easily fog up when the humidity in the vehicle is high. Turning "A/C" on will dehumidify the air from the outlets and defog the windshield effectively.

- If you turn "A/C" off, the windows may fog up more easily.
- The windows may fog up if the recirculated air mode is used.

#### ■ When driving on dusty roads

Close all windows. If dust thrown up by the vehicle is still drawn into the vehicle after closing the windows, it is recommended that the air intake mode be set to outside air mode and the fan speed to any setting except off.

#### ■ Outside/recirculated air mode

- Setting to the recirculated air mode temporarily is recommended in preventing dirty air from entering the vehicle interior and helping to cool the vehicle when the outside air temperature is high.
- Outside/recirculated air mode may automatically switch depending on the temperature setting or the inside temperature.

#### ■ Registering air conditioning settings to electronic keys

- Unlocking the vehicle using an electronic key and turning the engine switch to IGNITION ON mode will recall that key's registered air conditioning settings.
- When the engine switch is turned off, the current air conditioning settings will automatically be registered to the electronic key that was used to unlock the vehicle.
- The system may not operate correctly if more than one electronic key is in the vicinity or if the smart entry & start system is used to unlock a passenger door.
- The doors that can recall the air conditioning setting\* when unlocked using the

smart entry & start system can be changed. For details, contact your Lexus dealer.

- \*: The doors that can recall the driving position memory are changed at the same time.

#### ■ Operation of the air conditioning system in Eco drive mode

In Eco drive mode, the air conditioning system is controlled as follows to prioritize fuel efficiency:

- Engine speed and compressor operation controlled to restrict heating/cooling capacity
- Fan speed restricted when automatic mode is selected

To improve air conditioning performance, perform the following operations:

- Turn off eco air conditioning mode (if equipped) (→P.404)
- Adjust the fan speed
- Turn off Eco drive mode (→P.374)

#### ■ When the outside temperature falls to nearly 0°C (32°F)

The dehumidification function may not operate even when "A/C" is selected.

#### ■ Ventilation and air conditioning odors

- To let fresh air in, set the air conditioning system to the outside air mode.
- During use, various odors from inside and outside the vehicle may enter into and accumulate in the air conditioning system. This may then cause odor to be emitted from the vents.
- To reduce potential odors from occurring:
  - It is recommended that the air conditioning system be set to outside air mode prior to turning the vehicle off.
  - The start timing of the blower may be delayed for a short period of time immediately after the air conditioning system is started in automatic mode or pollen removal mode.
- Except for GCC countries\*, Egypt,

Yemen, Jordan, Lebanon and Iraq: When parking, the system automatically switches to outside air mode to encourage better air circulation throughout the vehicle, helping to reduce odors that occur when starting the vehicle.

\* : Saudi Arabia, Sultanate of Oman, Bahrain, United Arab Emirates, Qatar and Kuwait

■ **Using the voice command system**

Air conditioning system can be operated using voice commands. For details, refer to "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".

■ **Air conditioning filter**

→P.502

■ **Customization**

Some functions can be customized. (→P.568)

**⚠ WARNING**

■ **To prevent the windshield from fogging up**

Do not use the windshield defogger switch during cool air operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield can cause the outer surface of the windshield to fog up, blocking your vision.

■ **When the outside rear view mirror defoggers are operating**

Do not touch the outside rear view mirror surfaces, as they can become very hot and burn you.

**⚠ NOTICE**

■ **To prevent battery discharge**

Do not leave the air conditioning system on longer than necessary when the engine is off.

**Air conditioning control screen**

■ **Main control screen**

Using the touchpad of the Remote Touch, select the button on the screen.

[B] to [E] and [H] can be adjusted by performing the following operations.

Flick operation: Move the pointer to the desired item and flick the touchpad up or down.

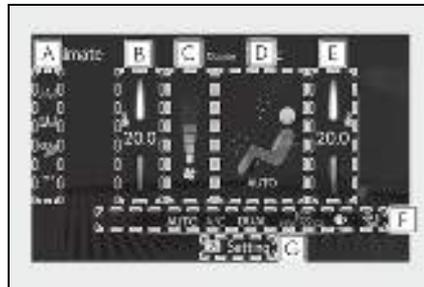
The item can be adjusted by one level.

Trace operation: After selecting the desired item, trace the pad surface.

The item can be adjusted by the amount that you trace.

Trace operation cannot be used while driving.

▶ Vehicles with DUAL-ZONE climate control



[A] **Sub menu**

Selecting the sub menu item to switch the main screen.

: Display the air conditioning control screen

: Display the heated steering wheel/front seat heater/front seat ventilator control screen (if equipped)

: Display the rear seat heater/rear seat ventilator control screen (if equipped)

: Display the Lexus Climate Concierge control screen

: Display the option control screen

**B** Adjust the left side seat temperature setting

**C** Adjust the fan speed setting

**D** Select the air flow mode



: Air flows to the upper body



: Air flows to the upper body and feet



: Air flows to the feet



: Air flows to the feet and the windshield defogger operates

**E** Adjust the right side seat temperature setting

**F** Function on/off indicators

When the function is on, the indicator illuminates on the control screen.

**G** Sub function menu

When the sub function button on the Remote Touch is pressed, the following functions can be switched on and off.

: Set Lexus Climate Concierge (→P.399)

"AUTO": Set automatic mode on/off (→P.409)

"Off": Turn the fan off

"A/C": Set cooling and dehumidification function

If the "A/C" display is turned off, the system will blow ambient temperature air or

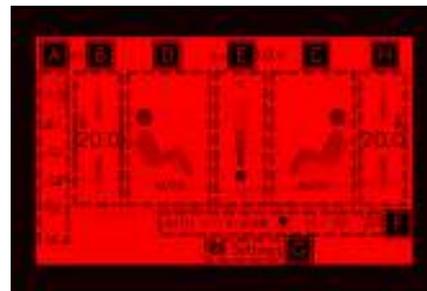
heated air.

"DUAL": Adjust the temperature for driver and passenger seats separately ("DUAL" mode) (→P.410)

: Changing the fan speed setting during the automatic mode operation (Blower customization) (if equipped)

: Set eco air conditioning mode (if equipped)

▶ Vehicles with 4-ZONE climate control



**A** Sub menu

Selecting the sub menu item to switch the main screen.

: Display the front air conditioning control screen

: Display the heated steering wheel/front seat heater/front seat ventilator control screen

: Display the rear air conditioning control screen

: Display the rear seat heater/rear seat ventilator control screen

: Display the Lexus Climate Concierge control screen

: Display the option control screen

**B** Adjust the left side seat temperature setting

**C** Select the right side seat air flow mode



: Air flows to the upper body



: Air flows to the upper body and feet



: Air flows to the feet



: Air flows to the feet and the windshield defogger operates

**D** Select the left side seat air flow mode

**E** Adjust the fan speed setting

**F** Function on/off indicators

When the function is on, the indicator illuminates on the control screen.

**G** Sub function menu

When the sub function button on the Remote Touch is pressed, the following functions can be switched on and off.



: Set Lexus Climate Concierge (→P.399)

"AUTO": Set automatic mode on/off (→P.409)

"Off": Turn the fan off

"A/C": Set cooling and dehumidification function

If the "A/C" display is turned off, the system will blow ambient temperature air or heated air.

"4-ZONE": Adjust the temperature for the driver, front passenger and left and right rear passenger seats separately ("4-ZONE" mode) (→P.410)



: Changing the fan speed setting during the automatic mode operation (Blower customization) (if equipped)



: Set eco air conditioning mode (if equipped)

**H** Adjust the right side seat temperature setting

#### ■ Option control screen

Select  on the sub menu to display the option control screen.

The functions can be switched on and off.

When the function is on, the indicator illuminates on the screen.

► Vehicles with DUAL-ZONE climate control



**A** Set Lexus Climate Concierge (→P.399)

**B** Adjusting the temperature for driver and passenger seats separately ("DUAL" mode) (→P.410)

**C** Set eco air conditioning mode  
Air conditioning and heater output is limited to prioritize fuel economy.

**D** Cooling and dehumidification function

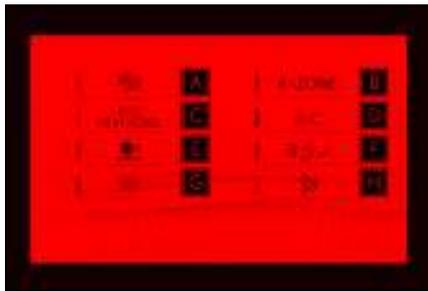
If the "A/C" indicator is turned off, the system will blow ambient temperature air or

heated air.

- E** nanoe™\* system on/off
- F** Select front seat concentrated air-flow mode (→P.409)
- G** Prevent ice from building up on the windshield and wiper blades (Windshield wiper de-icer) (if equipped)
- H** Removing pollen from the air (Pollen removal mode)

\* : nanoe™ and the nanoe™ mark are trademarks of Panasonic Corporation.

- ▶ Vehicles with 4-ZONE climate control



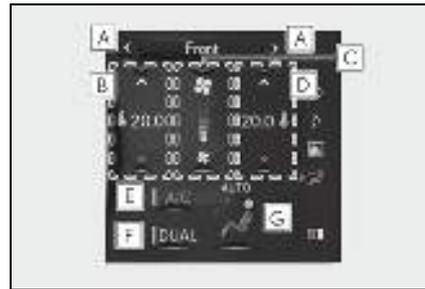
- A** Set Lexus Climate Concierge (→P.399)
- B** Adjust the temperature for driver, passenger and rear seats separately ("4-ZONE" mode)(→P.410)
- C** Set eco air conditioning mode  
Air conditioning and heater output is limited to prioritize fuel economy.
- D** Cooling and dehumidification function  
If the "A/C" indicator is turned off, the system will blow ambient temperature air or heated air.
- E** nanoe™\* system on/off

- F** Select front seat concentrated air-flow mode (→P.409)
- G** Prevent ice from building up on the windshield and wiper blades (Windshield wiper de-icer) (if equipped)
- H** Removing pollen from the air (Pollen removal mode)

\* : nanoe™ and the nanoe™ mark are trademarks of Panasonic Corporation.

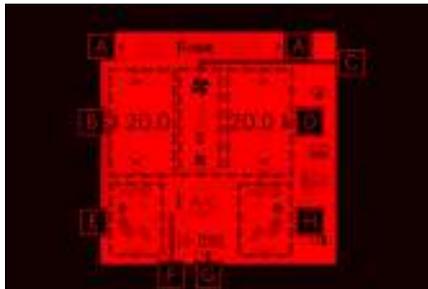
#### ■ Side display

- ▶ Vehicles with DUAL-ZONE climate control



- A** Display the front seat heaters/front seat ventilators control screen (→P.416)
- B** Adjust the left side seat temperature setting
- C** Adjust the fan speed setting
- D** Adjust the right side seat temperature setting
- E** Set cooling and dehumidification function on/off
- F** Adjusting the temperature for driver and passenger seats separately ("DUAL" mode)(→P.410)
- G** Select the air flow mode

- ▶ Vehicles with 4-ZONE climate control



- A** Display the front seat heaters/front seat ventilators control screen (→P.416)
  - B** Adjust the left side seat temperature setting
  - C** Adjust the fan speed setting
  - D** Adjust the right side seat temperature setting
  - E** Select the left side seat air flow mode
  - F** Set cooling and dehumidification function on/off
- If the "A/C" indicator is turned off, the system will blow ambient temperature air or heated air.
- G** Adjust the temperature for driver, passenger and rear seats separately ("4-ZONE" mode) (→P.410)
  - H** Select the right side seat air flow mode

■ **Blower customization (if equipped)**

Fan speed setting during the automatic mode operation can be customized.

Each time  is selected, the fan speed setting mode changes as follows.

"NORMAL" → "ECO" → "FAST" → "NORMAL"

■ **Windshield wiper de-icer (if equipped)**

This feature is used to prevent ice from building up on the windshield and wiper blades.

The windshield de-icer will automatically turn off after a while.

■ **Eco air conditioning mode**

When Eco drive mode is selected using the driving mode select switch, eco air conditioning mode turns on.

When a drive mode other than Eco drive mode is selected, eco air conditioning mode may turn off.

■ **Pollen removal mode**

Outside air mode switches to  (recirculated air) mode. Pollen is removed from the air and the air flows to the upper part of the body.

Usually the system will automatically turn off after a while.

In order to prevent the windshield from fogging up when the outside air is cold, the dehumidification function may operate or the outside/recirculated air mode may not switch to  (recirculated air) mode.

Pollen is filtered even if the pollen removal mode is turned off.

■ **nanoe™ system**

The air conditioning system adopts nanoe™ technology. This helps to fill the cabin with refreshing air by emitting slightly acidic nanoe™ ions coated with water particles through the front center vent on driver's side.

- When the fan is turned on and nanoe™ on the option control screen is selected, the nanoe™ system is activated.

- When the fan is operated in the following conditions, system performance will be maximized. If the following conditions are not met, performance will be limited.

- The ,  or  air outlets are

- being used.
- The front center vent on driver's side is open.
  - When nanoe™ is generated, a small amount of ozone is emitted and may be faintly smelled in some situations. However, this is approximately the same as the amount that already exists in nature, such as in forests, and it has no effect on the human body.
  - A slight noise may be heard during operation. This is not a malfunction.
- \* According to temperature and humidity conditions, fan speed and direction of the air flow, the nanoe™ system may not operate at full capacity.

**WARNING**

■ **To prevent burns (vehicles with windshield wiper de-icer)**

Do not touch the glass at lower part of the windshield or to the side of the front pillars when the windshield wiper de-icer is on.

■ **nanoe™ generator**

Do not disassemble or repair the generator because it contains high voltage parts. Contact your Lexus dealer if the generator needs repair.

**NOTICE**

■ **To prevent damage to the nanoe™**

Do not insert anything into the driver's side vent, attach anything to it, or use sprays around the driver's side vent. These things may cause the generator not to work properly.

### Using automatic mode

- 1 Press the automatic mode switch or select "AUTO" on the sub function menu. (→P.404)

- 2 Press the outside/recirculated air mode switch to switch to automatic air intake mode. (if equipped)

The air conditioning system automatically switches between outside air and recirculated air modes.

- 3 Adjust the temperature setting.
- 4 To stop the operation, press the off switch or select "Off" on the sub function menu. (→P.404)

If the fan speed setting or air flow modes are operated, the automatic mode indicator goes off. However, automatic mode for functions other than that operated is maintained.

### ■ Using automatic mode

Fan speed is adjusted automatically according to the temperature setting and the ambient conditions.

Therefore, the fan may stop for a while until warm or cool air is ready to flow immediately after the automatic mode switch is pressed or "AUTO" is selected.

Cool air may blow around the upper body even when the heater is on due to sunlight.

### ■ Automatic mode for air intake control (if equipped)

In automatic mode, the system detects exhaust gas and other pollutants and automatically switches between outside air and recirculated air modes.

When the dehumidification function is off, and the fan is operating, turning automatic mode on will activate the dehumidification function.

### Front seat concentrated airflow mode (S-FLOW mode)

This function automatically controls the air conditioning airflow so that priority is given to the front seats. When the

front passenger seat is not occupied, airflow may switch to only the driver's seat. Unnecessary air conditioning is suppressed, contributing to increased fuel efficiency.

Front seat concentrated airflow mode operates in the following situations.

- No passengers are detected in the rear seats
- The windshield defogger is not operating
- Pollen removal mode is not operating

While operating,  illuminates.

■ **Manually turning front seat concentrated airflow mode on/off**

In front seat concentrated airflow mode, directing airflow to the front seats only and to all seats can be switched via switch operation. When the mode has been switched manually, automatic airflow control stops operating.

Select  on the option control screen (→P.406) and switch the airflow.

- Indicator illuminated: Airflow to the front seat only
- Indicator off: Airflow to all the seats.

■ **Operation of automatic airflow mode**

- In order to maintain a comfortable interior, airflow may be directed to seats without passengers immediately after the

engine is started and at other times depending on the outside temperature.

- After the engine is started, if passengers move around inside or enter/exit the vehicle, the system cannot accurately detect the presence of passengers and automatic airflow control will not operate.

■ **Operation of manual airflow control**

Even if the function is manually switched to directing airflow to only the front seats, when a rear seat is occupied, it may automatically direct airflow to all seats.

■ **To return to automatic airflow control**

- 1 With the indicator off, turn the engine switch off.
- 2 After 60 minutes or more elapse, change the engine switch to IGNITION ON mode.

**Adjusting the temperature for the driver and passenger seats separately**

- ▶ Vehicles with DUAL-ZONE climate control

To turn on the "DUAL" mode, perform any of the following procedures:

- Select "DUAL" on the sub function menu. (→P.404)
- Select "DUAL" on the option control screen.
- Adjust the passenger's side temperature setting.

The indicator on the main control screen comes on when the "DUAL" mode is on.

- ▶ Vehicles with 4-ZONE climate control

To turn on the "4-ZONE" mode, perform any of the following procedures:

- Select "4-ZONE" on the sub func-

tion menu. (→P.404)

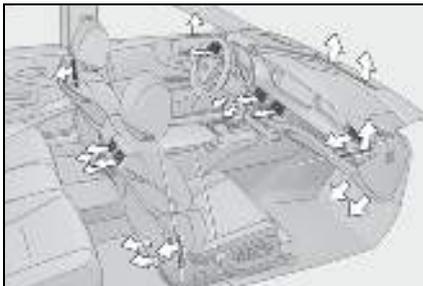
- Select "4-ZONE" on the option control screen.
- Adjust a passenger seat temperature setting.

The indicator on the main control screen comes on when the "4-ZONE" mode is on.

### Air outlet layout and operations

#### ■ Location of air outlets

The air outlets and air volume changes according to the selected air flow mode.



#### ■ Adjusting the position of and opening and closing the air outlets

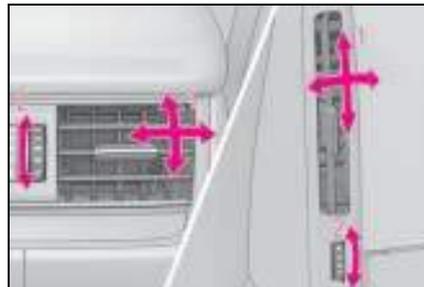
##### ▶ Front center/front side



- 1 Direct air flow to the left or right, up or down
- 2 Turn the knob to open or close the

vent

##### ▶ Rear center/rear side



- 1 Direct air flow to the left or right, up or down
- 2 Turn the knob to open or close the vent

#### ⚠ WARNING

##### ■ To prevent the windshield defogger from operating improperly

Do not place anything on the instrument panel which may cover the air outlets. Otherwise, air flow may be obstructed, preventing the windshield defoggers from defogging.



### Rear automatic air conditioning system\*

\*: If equipped

The air outlets and fan speed are automatically adjusted according to the temperature setting.

The rear air conditioning system can be operated using the Center Display and Rear Multi Operation Panel.

### Rear air conditioning control screen

#### ■ Center Display

Press the "MENU" button on the Remote Touch to display the main menu and move the cursor to  to display the climate control shortcut buttons. Then, select  to display the rear air conditioning control screen.

**A** to **E** can be adjusted by performing the following operations.

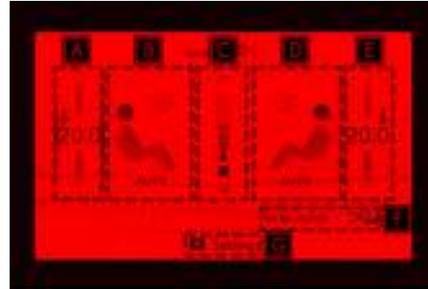
**Flick operation:** Move the pointer to the desired item and flick the touchpad up or down.

The item can be adjusted by one level.

**Trace operation:** After selecting the desired item, trace the pad surface.

The item can be adjusted by the amount that you trace.

Trace operation cannot be used while driving.



- A** Adjust the left side rear seat temperature setting
- B** Select the left side rear seat air flow mode



: Air flows to the upper body



: Air flows to the upper body and feet



: Air flows to the feet

- C** Adjust the rear seats fan speed setting

- D** Select the right side rear seat air flow mode

- E** Adjust the right side rear seat temperature setting

- F** Function on/off indicators

When the function is on, the indicator illuminates on the control screen.

- G** Sub function menu

When the sub function button on the Remote Touch is pressed, the following functions can be switched on and off.

"Rear off": Turn the rear seats fan off

"Rear AUTO": Set the rear seats automatic mode on/off (→P.413)



: Disables operation of the rear air conditioning system using the Rear Multi

Operation Panel

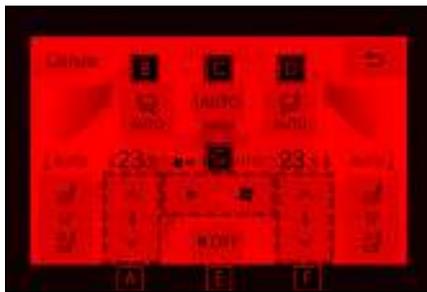
### ■ Rear Multi Operation Panel

Touch "Climate" on the home screen to display the rear air conditioning control screen.(→P.396)

Some functions of the rear air conditioning system can also be operated from the shortcut screen.

The Rear Multi Operation Panel cannot be used to operate the rear air conditioning system if the function is disabled.

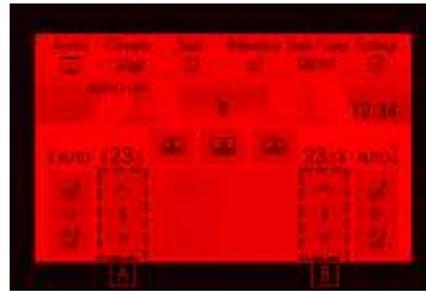
▶ Rear air conditioning control screen



- A** Adjust the left side rear seat temperature setting
- B** Select the left side rear seat air flow mode
-  : Air flows to the upper body
-  : Air flows to the upper body and feet
-  : Air flows to the feet
- C** Set the rear seats automatic mode on/off (→P.413)
- D** Select the right side rear seat air flow mode
- E** Turn the rear seats fan off
- F** Adjust the right side rear seat temperature setting

- G** Adjust the rear seats fan speed setting

▶ Shortcut screen



- A** Adjust the left side rear seat temperature setting
- B** Adjust the right side rear seat temperature setting

### Using automatic mode

▶ Center Display

- 1 Select "Rear AUTO" on the sub function menu. (→P.412)
- 2 To stop the operation, select "Rear off" on the sub function menu. (→P.412)

If the fan speed setting or air flow modes are operated, the automatic mode indicator goes off. However, automatic mode for functions other than that operated is maintained.

▶ Rear Multi Operation Panel

- 1 Select "AUTO" on the rear air conditioning control screen. (→P.413)
- 2 To stop the operation, select "OFF" on the rear air conditioning control screen. (→P.412)

If the fan speed setting or air flow

modes are operated, the automatic mode indicator goes off. However, automatic mode for functions other than that operated is maintained.

■ **Using automatic mode**

Fan speed is adjusted automatically according to the temperature setting and the ambient conditions.

Therefore, the fan may stop for a while until warm or cool air is ready to flow immediately after "Rear AUTO" is selected or "AUTO" is touched.

Cool air may blow around the upper body even when the heater is on due to sunlight.

**Adjusting the temperature setting of the rear seats**

The temperature setting of the rear seats can be adjusted using the following methods:

- When the "4-ZONE" indicator is off: Adjust the driver's seat temperature.

Adjust the temperature setting of each rear seat using the Center Display or Rear Multi Operation Panel.

- Adjust the temperature setting of each rear seat using the Center Display (rear air conditioning control screen) or Rear Multi Operation Panel.

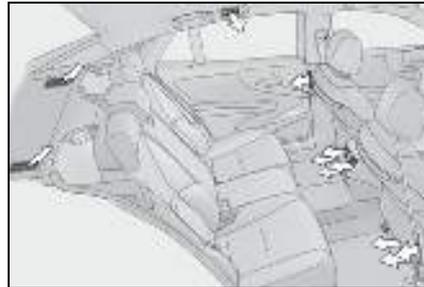
The temperature setting of each rear seat can be changed independently.

**Air outlet layout and operations**

■ **Location of air outlets**

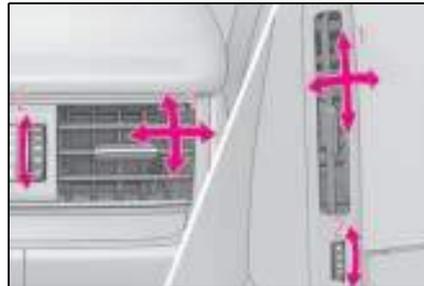
The air outlets and air volume changes

according to the selected air flow mode.



■ **Adjusting the position of and opening and closing the air outlets**

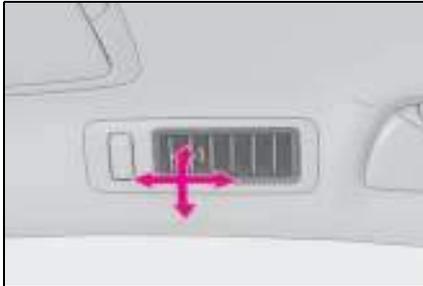
- ▶ Rear center outlets and rear side outlets



- 1 Direct air flow to the left or right, up or down
- 2 Turn the knob to open or close the vent

- ▶ Roof side outlets (if equipped)

Direct air flow to the left or right, up or down

**NOTICE**

■ **To prevent battery discharge**

Do not leave the air conditioning system on longer than necessary when the engine is off.

### Heated steering wheel<sup>\*</sup> / seat heaters<sup>\*</sup> / seat ventilators<sup>\*</sup>

<sup>\*</sup>: If equipped

● Heated steering wheel

Warms up the grip of the steering wheel

● Front seat heaters/Rear seat heaters

Warm up the seat upholstery

● Front seat ventilators/Rear seat ventilators

Maintain good ventilation by pulling air through the seat upholstery

**The Center Display and Rear Multi Operation Panel/rear control panel can be used to operate the heated steering wheel, seat heaters and seat ventilators.**

**WARNING**

■ **To prevent minor burn injuries**

Care should be taken if anyone in the following categories comes in contact with the steering wheel or seats when the heater is on:

- Babies, small children, the elderly, the sick and the physically challenged
- Persons with sensitive skin
- Persons who are fatigued
- Persons who have taken alcohol or drugs that induce sleep (sleeping drugs, cold remedies, etc.)

 **NOTICE**

■ **To prevent damage to the seat heaters and seat ventilators**  
Do not put heavy objects that have an uneven surface on the seat and do not stick sharp objects (needles, nails, etc.) into the seat.

■ **To prevent battery discharge**  
Do not use the functions when the engine is off.

**Control screen**

■ **Center Display**

Press the "MENU" button on the Remote Touch to display the main menu and move the cursor to  to display the shortcut buttons. Then, select  to display the heated steering wheel/front seat heater/front seat ventilator control screen.

To display the rear seat heater/rear seat ventilator control screen, select  (if equipped)

▶ **Main screen**

Using the touchpad of the Remote Touch, select the button on the screen.

**A** to **C** can be adjusted by performing the following operations.

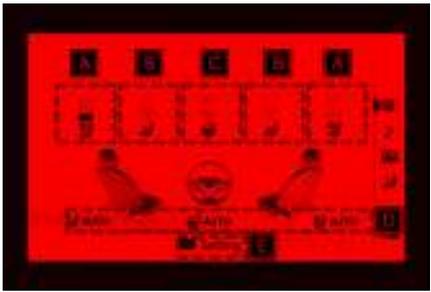
Flick operation: Move the pointer to the desired item and flick the touchpad up or down.

The item can be adjusted by one level.

Trace operation: After selecting the desired item, trace the touchpad surface.

The item can be adjusted by the amount that you trace.

Trace operation cannot be used while driving.



**A** Adjust the seat ventilator fan speed level

The seat ventilator can be adjusted in 3 levels. (Low, Mid or Hi)

**B** Adjust the seat heater temperature level

The seat heater can be adjusted in 3 levels. (Low, Mid or Hi)

**C** Adjust the heated steering wheel temperature level\*

The heated steering wheel can be adjusted in 2 levels. (Low or Hi)

**D** Automatic mode on/off indicators  
When the automatic mode is on, the indicator illuminates on the screen.

**E** Sub function menu  
When the sub function button on the Remote Touch is pressed, the following functions can be set to automatic mode.

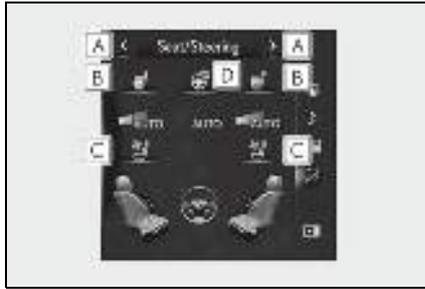
 **AUTO**: Left-hand side seat heater/seat ventilator

 **AUTO**: Heated steering wheel\*

 **AUTO**: Right-hand side seat heater/seat ventilator

\* : Available on the front seat control screen only

► Side screen



**A** Display the air conditioning control screen: →P.407

**B** Adjust the front seat heater temperature level

Each time the switch is selected, the temperature level and level indicator (orange) change as follows:

AUTO→Hi→Mid→Lo→OFF

**C** Adjust the front seat ventilator fan speed level

Each time the switch is selected, the fan speed level and level indicator (blue) change as follows:

AUTO→Hi→Mid→Lo→OFF

**D** Adjust the heated steering wheel temperature level

Each time the switch is selected, the temperature level and level indicator change as follows:

AUTO→Hi→Lo→OFF

■ **Rear Multi Operation Panel (if equipped)**

Touch “Climate” on the home screen to display the air conditioning control screen.(→P.396)

The rear seat heaters and rear seat ventila-

tors can also be operated from the shortcut screen.

The Rear Multi Operation Panel cannot be used to operate the rear air conditioning system if the function is disabled. (→P.412)

► Rear air conditioning control screen



**A** Adjust the rear seat heater temperature level

Each time the switch is selected, the temperature level and level indicator (orange) change as follows:

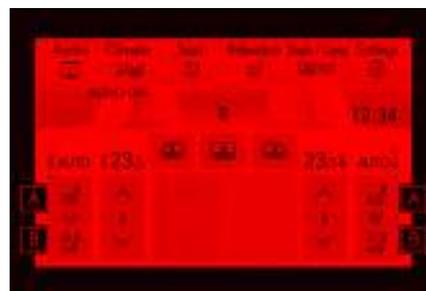
AUTO→Hi→Mid→Lo→OFF

**B** Adjust the rear seat ventilator fan speed level

Each time the switch is selected, the fan speed level and level indicator (blue) change as follows:

AUTO→Hi→Mid→Lo→OFF

► Shortcut screen



**A** Adjust the rear seat heater temperature level

Each time the switch is selected, the temperature level and level indicator (orange) change as follows:

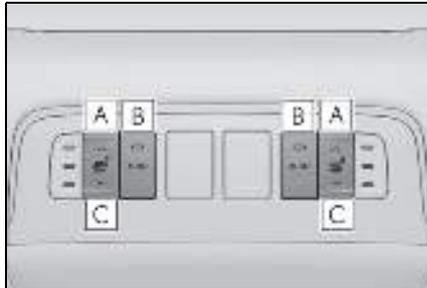
AUTO→Hi→Mid→Lo→OFF

- B** Adjust the rear seat ventilator fan speed level

Each time the switch is selected, the fan speed level and level indicator (blue) change as follows:

AUTO→Hi→Mid→Lo→OFF

■ **Rear control panel (if equipped)**



- A** Increases the rear seat heater temperature level

The seat ventilator can be adjusted in 3 levels. (Low, Mid or Hi)

- B** Enables/Disables the automatic mode of the rear seat heaters

- C** Decreases the rear seat heater temperature level

If this switch is selected when the rear seat heater temperature level is set to Lo, the rear seat heater will turn off.

■ **The heated steering wheel, seat heaters and seat ventilators can be used when**

The engine switch is in IGNITION ON mode.

■ **Air conditioning system-linked control mode**

When the seat ventilator fan speed level is

Hi, the seat ventilator fan speed becomes higher according to the fan speed of the air conditioning system.

■ **When the air conditioning system is operating in S-FLOW mode**

If a passenger is not detected in the front passenger seat, the seat ventilator and seat heater of the front passenger's seat will be turned off if on. (→P.409)

■ **Customization**

Some functions can be customized. (→P.568)

**! WARNING**

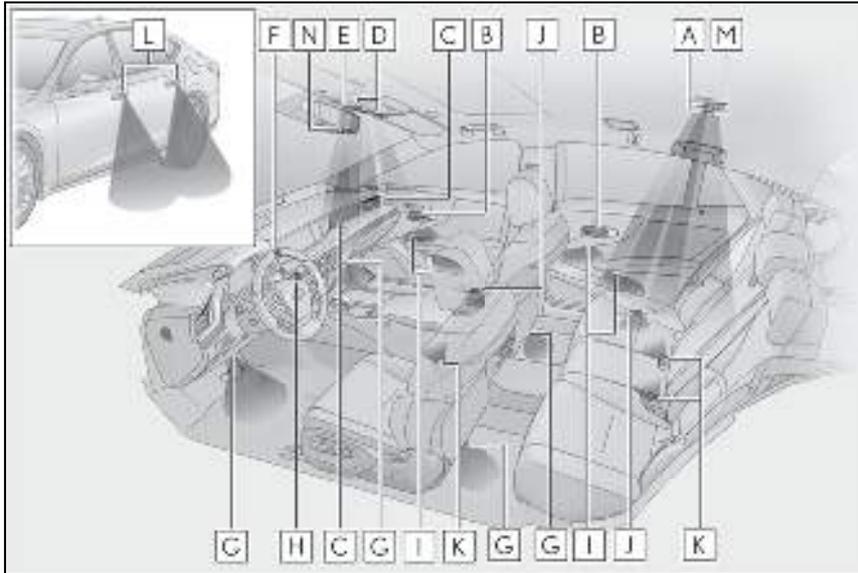
■ **To prevent overheating and minor burn injuries**

Observe the following precautions when using the seat heaters.

- Do not cover the seat with a blanket or cushion when using the seat heater.
- Do not use seat heater more than necessary.

## Interior lights list

### Location of the interior lights



- A** Rear personal lights (→P.421)
- B** Inside door handle lights
- C** Instrument panel ornament lights (if equipped)
- D** Front personal lights (→P.421)
- E** Front interior lights (→P.420)
- F** Clock light
- G** Footwell lights
- H** Engine switch light
- I** Door trim ornament lights
- J** Door courtesy lights
- K** Seat belt buckle lights
- L** Outer foot lights (front/ front and rear)
- M** Rear interior light (→P.420)
- N** Shift lever lights

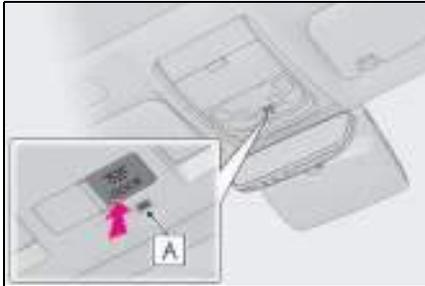
**Operating the interior lights**

■ **Turning the door position on**

Press the door-linked interior light switch

The lights are turned on and off according to whether the doors are opened/closed.

When the door position is on, the indicator  illuminates.

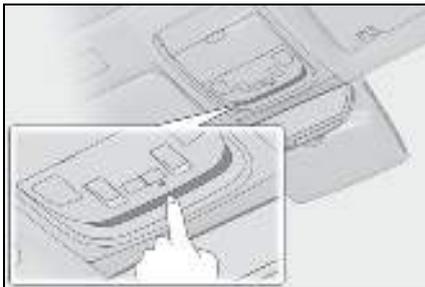


■ **Turning the lights on/off**

▶ **Front**

Turns the lights on/off (touch the light)

When a door is opened while the door position is on, the lights turn on.



▶ **Rear (vehicles without a panoramic moon roof)**

On/off

The rear interior light turns on/off together the front interior lights.

When a door is opened while the door position is on, the lights turn on.



▶ **Rear (vehicles with a panoramic moon roof)**

On/off

The rear interior light turns on/off together the front interior lights.

When a door is opened while the door position is on, the lights turn on.



■ **Using the Rear Multi Operation Panel (if equipped)**

- 1 Display the home screen and then touch "Shade/Lamp" or "Lamp". (→P.396)

- 2 To turn on/off the rear interior lights, touch the respective button.



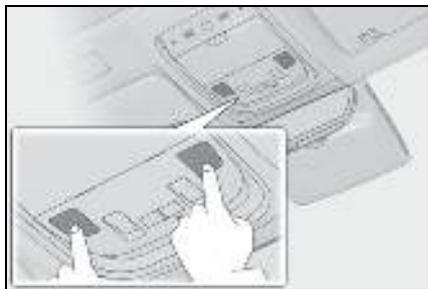
**Operating the personal lights**

■ **Turning the lights on/off**

- ▶ Front

Turns the lights on/off (touch the light)

When a door is opened while the door position is on, the lights turn on.



- ▶ Rear (vehicles without a panoramic moon roof)

On/dimmed/off

When a door is opened while the door position is on, the lights turn on.



- ▶ Rear (vehicles with a panoramic moon roof)

On/dimmed/off

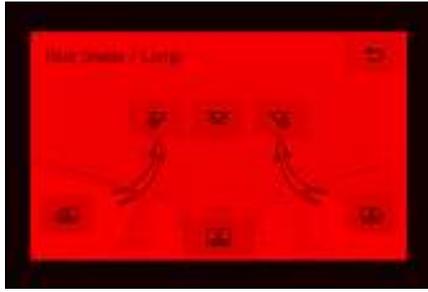
When a door is opened while the door position is on, the lights turn on.



■ **Using the Rear Multi Operation Panel (if equipped)**

- 1 Display the home screen and then touch "Shade/Lamp" or "Lamp". (→P.396)

- 2 To turn on/dimmed/off the rear personal lights, touch the respective button.



■ **Illuminated entry system**

The lights automatically turn on/off according to the engine switch mode, the presence of the electronic key, whether the doors are locked/unlocked, and whether the doors are opened/closed.

■ **To prevent the battery from being discharged**

If the interior lights remain on when the engine switch is turned off, the lights will go off automatically after 20 minutes.

■ **When front interior light or front personal lights do not respond as normal**

- When water, dirt, etc., have adhered to the lens surface
- When operated with a wet hand
- When wearing gloves, etc.

■ **The interior lights may turn on automatically when**

If any of the SRS airbags deploy (inflate) or in the event of a strong rear impact, the interior lights will turn on automatically.

The interior lights will turn off automatically after approximately 20 minutes.

The interior lights can be turned off manually. However, in order to help prevent further collisions, it is recommended that they be left on until safety can be ensured.

(The interior lights may not turn on automatically depending on the force of the impact and conditions of the collision.)

■ **Customization**

Some functions can be customized. (→P.568)

 **NOTICE**

■ **To prevent battery discharge**

Do not leave the lights on longer than necessary when the engine is not running.

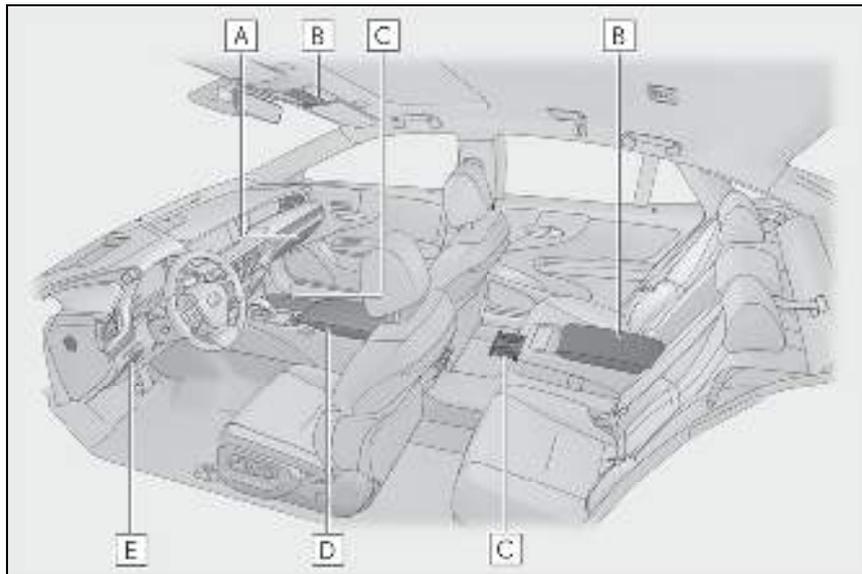
■ **Removing light lenses**

Never remove the lens for the front interior light and front personal lights. Otherwise, the lights will be damaged. If a lens needs to be removed, contact your Lexus dealer.

## List of storage features

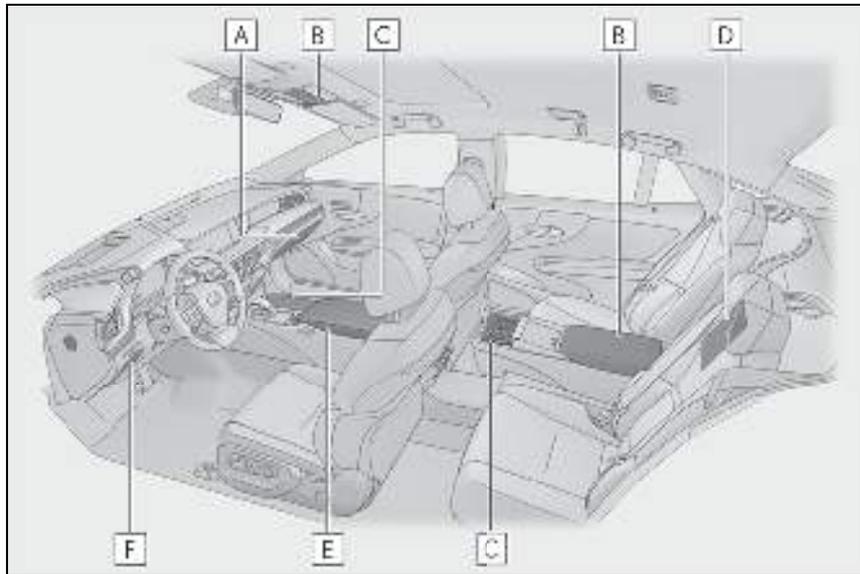
### Location of the storage features

- Vehicles without power rear seat



- A** Glove box (→P.425)
- B** Auxiliary boxes (→P.427)
- C** Cup holders (→P.425)
- D** Console box (→P.426)
- E** Coin holder (→P.425)

► Vehicles with power rear seat



- A** Glove box (→P.425)
- B** Auxiliary boxes (→P.427)
- C** Cup holders (→P.427)
- D** Cool box/auxiliary box (if equipped) (→P.427)
- E** Console box (→P.426)
- F** Coin holder (→P.425)

**⚠ WARNING**

**■ Items that should not be left in the storage spaces**

Do not leave glasses, lighters or spray cans in the storage spaces, as this may cause the following when cabin temperature becomes high:

- Glasses may be deformed by heat or cracked if they come into contact with other stored items.

- Lighters or spray cans may explode. If they come into contact with other stored items, the lighter may catch fire or the spray can may release gas, causing a fire hazard.

### Glove box



- 1 Open (push button)
- 2 Unlock with the mechanical key
- 3 Lock with the mechanical key

#### ■ Glove box light

The glove box light turns on when the tail lights are on.

#### ■ Trunk opener main switch

The trunk opener main switch is located in the glove box. (→P.149)

#### ■ Removing the partition

The partition inside the glove box can be removed by pulling it.



#### ⚠ WARNING

##### ■ Caution while driving

Keep the glove box closed. In the event of sudden braking or sudden swerving, an accident may occur due to an occupant being struck by the open glove box or the items stored inside.

### Coin holder

Push the button.



#### ⚠ WARNING

##### ■ Caution while driving

Keep the coin holder closed. Injuries may result in the event of an accident or sudden braking.

### Cup holders

#### ► Front

Press in and release the button.



#### ► Rear (vehicles without power rear seat)

Pull the armrest down then push in the cup holder trim to extend the cup holders.



► Rear (vehicles with power rear seat)  
Press in and release the button.



■ When stowing the rear cup holders (vehicles without power rear seat)  
Stow the cup holder with the armrest down. The cup holder cannot be stowed if the armrest is not down.

**! WARNING**

■ **Items unsuitable for the cup holder**  
Do not place anything other than cups or beverage cans in the cup holders. Inappropriate items must not be stored in the cup holders even if the lid is closed. Other items may be thrown out of the holders in the event of an accident or sudden braking and cause injury. If possible, cover hot drinks to prevent burns.

■ **When not in use**  
Keep the cup holders closed. Injuries may result in the event of an accident or sudden braking.

**! NOTICE**

■ **To prevent damage to the rear cup holder (vehicles without power rear seat)**

Stow the cup holder before stowing the armrest.

■ **To avoid damaging the power outlet**

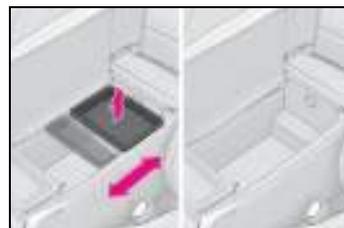
Close the lid of the power outlet in the front cup holder when the power outlet is not in use. Foreign objects or liquids that enter the power outlet may cause a short circuit.

**Console box**



Press a button to open the console box.  
The console box can be opened from either side.

■ **Tray in the console box**



The tray can be slid and removed.

■ **Console box light**

The console box light turns on when the tail lights are on.

**⚠ WARNING**  
**■ Caution while driving**  
 Keep the console box closed. Injuries may result in the event of an accident or sudden braking.

**⚠ NOTICE**  
**■ Tray**  
 Do not insert items exceeding the height of the tray. Doing so may prevent opening and closing of the lid.

**Cool box/auxiliary box (if equipped)**

- 1 Pull the armrest down then pull the lever.



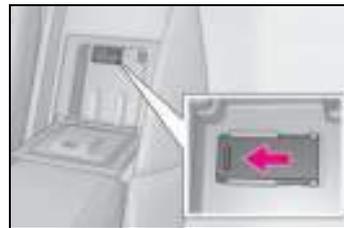
- 2 Open the cool air intake lid.



**■ Cool box**  
 As the cool box uses cooled air from the air conditioning system, the cool box may not

be cooled unless cooled air is blown to the upper body of the rear passengers.

- **Items unsuitable for the cool box**
  - Drinks in unsealed containers
  - Fragile items, perishables or anything with strong odor
- **Using a cool box as an auxiliary box**



Close the cool air intake lid to turn off the cool box system.

**⚠ WARNING**  
**■ Caution while driving**  
 Always keep the cool box/auxiliary box closed to reduce the chance of injury in case of an accident or sudden stop.

**Auxiliary boxes**

- ▶ **Overhead**  
 Press in the button.

This box is useful for temporarily storing sunglasses and similar small items.



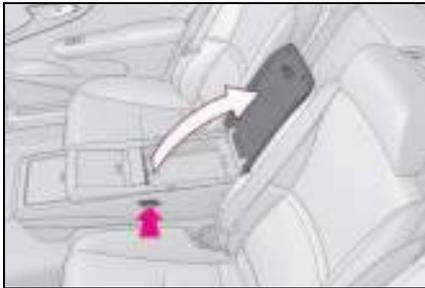
- ▶ Rear seat (vehicles without power rear seat)

Pull the armrest down then push the knob and lift the lid to open it.



- ▶ Rear seat (vehicles with power rear seat)

Pull the armrest down then press the button to open the lid.



**! WARNING**

■ **Caution while driving**

Do not leave the auxiliary box open while driving. Items may fall out and cause death or serious injury in case of an accident or sudden stop.

■ **Items unsuitable for storing (overhead)**

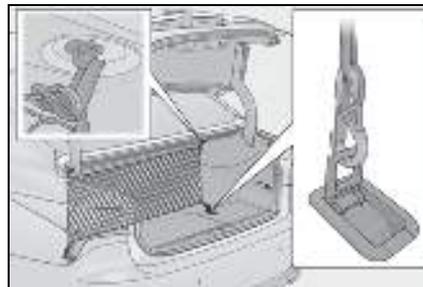
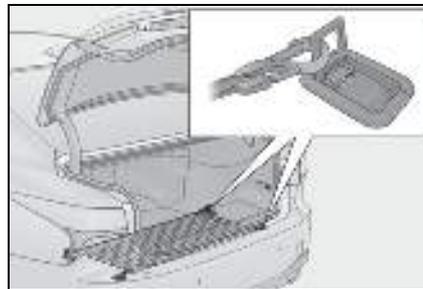
Do not store items heavier than 0.2 kg (0.4 lb.). Doing so may cause the auxiliary box to open and the items inside may fall out, resulting in an accident.

**Trunk features**

**Cargo net**

The cargo net is provided for securing loose items on the floor or items inside the trunk.

Raise the cargo hooks on the floor. Hook the net on the cargo hooks.

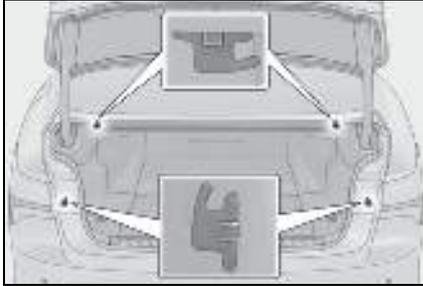


**! WARNING**

■ **When the cargo net is not in use**

To avoid injury, always return the cargo hooks on the floor to their stowed positions.

### Shopping bag hooks



#### ⚠ NOTICE

■ **To prevent damage to the grocery bag hooks**

Do not hang any object heavier than 5 kg (11 lb.) on the grocery bag hooks.

### Luggage mats

#### ► Rear (if equipped)

Pull the strap upwards to lift the luggage mat and remove it.



#### ► Side

Pull the strap upwards to lift the luggage mat and remove it.

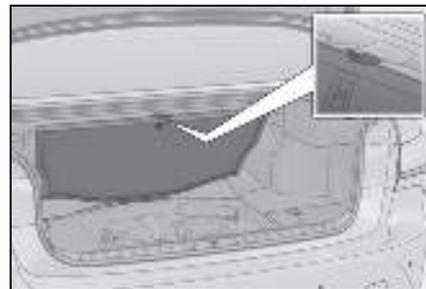


#### ► Front

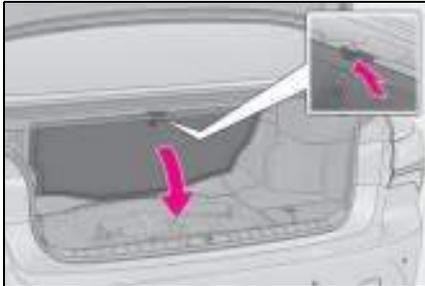
**1** Pull the strap upwards and lift up the luggage mat.



**2** Lift the luggage mat until it engages with the hook.



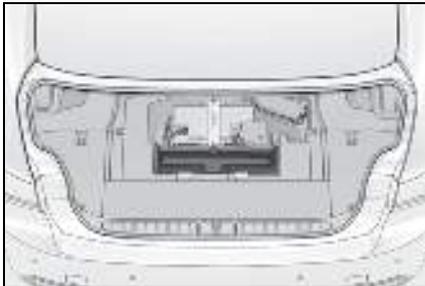
To return the luggage mat to its original position, push the hook and lower the luggage mat.



**NOTICE**  
 ■ To prevent damage to the hook for the front luggage mat  
 Do not hang a grocery bag or any other object from the hook.

**Auxiliary boxes**

► Front



► Rear (if equipped)

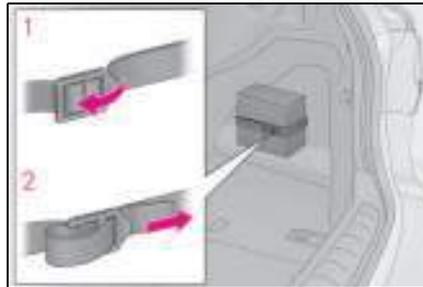


Auxiliary boxes are under the luggage mats.

Rear (if equipped): A warning reflector

can be stowed.

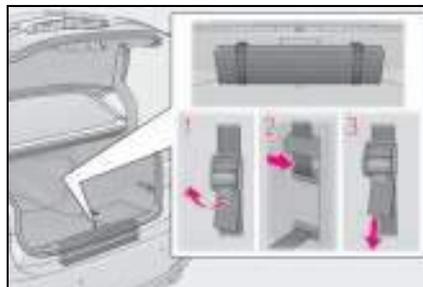
**First-aid kit storage belt**



- 1 Loosen the belt
- 2 Tighten the belt

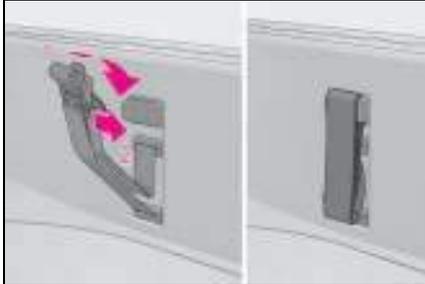
**Warning reflector storage belt**

■ Using a belt to hold an object



- 1 Loosen the belt
- 2 Pass the belt through the clip
- 3 Tighten the belt

Depending on the size and shape of an object, such as the case of a warning reflector, the object may not be able to be secured with the belts or stowed in an auxiliary box.

**■ Stowing the belt**

- 1** Fold the belt
- 2** Secure the belt with the clip

To prevent damage to the warning reflector storage belt when it is not in use, stow the belt.

**Other interior features**

**USB charging ports**

The USB charging ports are used to supply 2.1 A of electricity at 5 V to external devices. The USB charging ports are for charging only. They are not designed for data transfer or other purposes. Depending on the external device, it may not charge properly. Refer to the manual included with the device before using a USB charging port.

■ **Using the USB charging ports**

Open the auxiliary boxes lid.

- ▶ Vehicles without power rear seat



- ▶ Vehicles with power rear seat



■ **The USB charging ports can be used when**

The engine switch is in ACCESSORY or IGNITION ON mode.

■ **Situations in which the USB charging ports may not operate correctly**

- If a device which consumes more than 2.1 A at 5 V is connected
- If a device designed to communicate with a personal computer, such as a USB memory device, is connected
- If the connected external device is turned off (depending on device)
- If the temperature inside the vehicle is high, such as after the vehicle has been parked in the sun

■ **About connected external devices**

Depending on the connected external device, charging may occasionally be suspended and then start again. This is not a malfunction.

 **NOTICE**

■ **To prevent damage to the USB charging ports**

- Do not insert foreign objects into the ports.
- Do not spill water or other liquids into the ports.
- When the USB charging ports are not in use, close the lids. If a foreign object or liquid enters a port may cause a short circuit.
- Do not apply excessive force to or impact the USB charging ports.
- Do not disassemble or modify the USB charging ports.

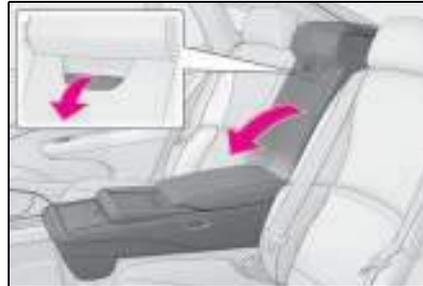
 NOTICE

■ **To prevent damage to external devices**

- Do not leave external devices in the vehicle. The temperature inside the vehicle may become high, resulting in damage to an external device.
- Do not push down on or apply unnecessary force to an external device or the cable of an external device while it is connected.

■ **To prevent battery discharge**

Do not use the USB charging ports for a long period of time with the engine stopped.



 NOTICE

■ **To prevent damage to the armrest**

Do not place too much strain on the armrest.

### Armrest

- ▶ Vehicle without power rear seat  
Pull the armrest down for use.



- ▶ Vehicle with power rear seat  
Pull the lock release lever and fold the rear seatback down.

### Assist grips

An assist grip installed on the ceiling can be used to support your body while sitting on the seat.



 WARNING

■ **Assist grip**

Do not use the assist grip when getting in or out of the vehicle or rising from your seat. Doing so could damage the assist grip, or could cause you to injure yourself by falling over.

 NOTICE

■ **To prevent damage to the assist grip**  
Do not hang any heavy object or put a heavy load on the assist grip.

**Coat hooks**

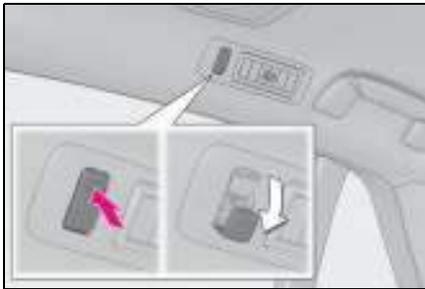
▶ Type A

To use the coat hook, push it on.



▶ Type B

To use the coat hook, push it on.

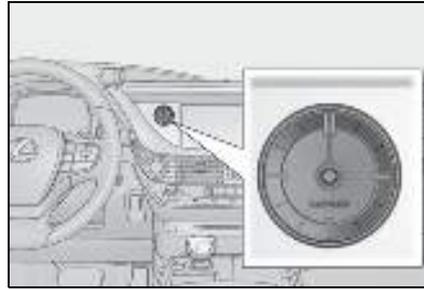


 WARNING

■ **Items that must not be hung on the hook**  
Do not hang a coat hanger or other hard or sharp object on the hook. If the SRS curtain shield airbags deploy, these items may become projectiles that cause death or serious injury.

**Clock**

The GPS clock's time is automatically adjusted by utilizing GPS time information. For details, refer to "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".



**Power outlets**

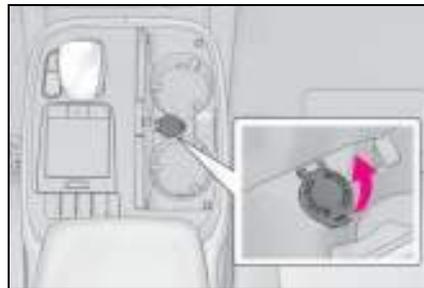
The power outlet can be used for the following components:

- 12 V: Accessories that run on less than 10 A.
- 120 VAC: Accessories that use less than 100 W.

■ 12 V

▶ Front

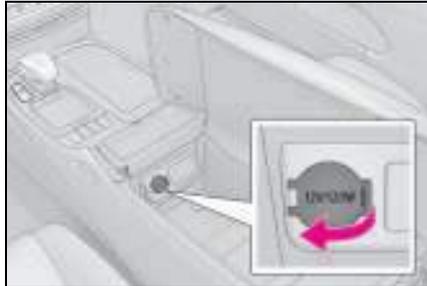
Open the cup holder, and open the lid.



▶ Console box

Open the console box and open the

lid.



► Rear (if equipped)

Open the lid.



■ 120 VAC (if equipped)

Open the lid.



■ The power outlet can be used when

● 12 V

The engine switch is in ACCESSORY or IGNITION ON mode.

● 120 VAC

The engine switch is in IGNITION ON

mode.

 NOTICE

■ To avoid damaging the power outlet

Close the power outlet lid when the power outlet is not in use. Foreign objects or liquids that enter the power outlet may cause a short circuit.

■ To prevent the fuse from being blown

● 12 V

Do not use an accessory that uses more than 12 V 10 A.

● 120 VAC

Do not use a 120 VAC appliance that requires more than 100 W. If a 120 VAC appliance that consumes more than 100 W is used, the protection circuit will cut the power supply.

■ To prevent incorrect operation of the vehicle

When turning the engine switch off, make sure to disconnect accessories designed for charging, such as portable chargers, power banks, etc. from the power outlets.

If such an accessory is left connected, the following may occur:

● The doors cannot be locked using the smart entry & start system or wireless remote control.

● The opening screen will be displayed on the multi-information display.

● The interior lights, instrument panel lights, etc. will illuminate.

■ To prevent the battery from being discharged

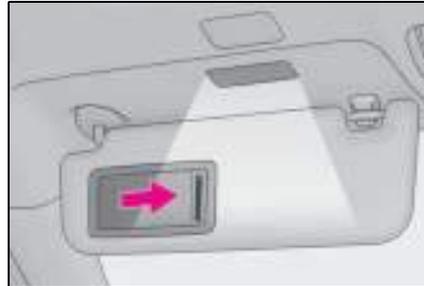
Do not use the power outlet longer than necessary when the engine is not running.

 NOTICE

■ **Appliances that may not operate properly (120 VAC)**

The following 120 VAC appliances may not operate properly even if their power consumption is under 100 W.

- Appliances with high initial peak wattage
- Measuring devices that process precise data
- Other appliances that require an extremely stable power supply

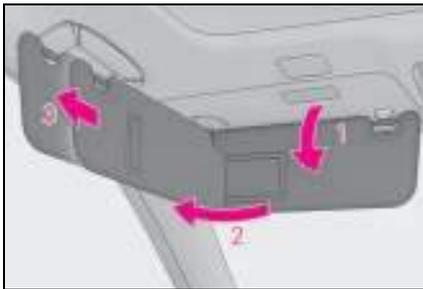


► Rear

Press the button to open.

The vanity light turns on.

**Sun visors**



- 1 To set the visor in the forward position, flip it down.
- 2 To set the visor in the side position, flip down, unhook, and swing it to the side.
- 3 To use the side extender, place the visor in the side position, then slide it backward.



■ **To prevent battery discharge**

If the vanity lights remain on when the engine switch is turned off, the lights will go off automatically after 20 minutes.

 NOTICE

■ **When not in use**

Keep the rear vanity mirror closed.

■ **To prevent the battery from being discharged**

Do not leave the vanity lights on for extended periods while the engine is stopped.

**Vanity mirrors**

► Front

Slide the cover to open.

The vanity light turns on.

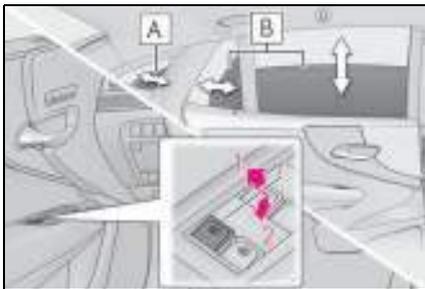
**Rear door/rear quarter sunshades (if equipped)**

The rear door/rear quarter sunshades

can be extended and retracted using the driver's power window switch and Rear Multi Operation Panel.

■ **From driver's seat**

Operate the driver's power window switch.



**A** Rear quarter sunshade (if equipped)

**B** Rear door sunshade

**1** Extend

**2** Retract\*

\*: If the driver's power window switch is operated when a rear door sunshade/rear quarter sunshade is retracted or being retracted, the rear window will open.

■ **From rear seat**

The rear seat power window switches cannot be used to extend the rear door sunshades/rear quarter sunshades.

▶ Rear shade/lamp control screen

**1** Display the home screen and then touch "Shade/Lamp". (→P.396)

**2** To fully extend/retract a rear door/rear quarter sunshade, touch the respective button.



▶ Shortcut screen

To fully extend/retract a rear door/rear quarter sunshade, touch the respective button.



■ **Operating conditions**

- The engine switch is in IGNITION ON mode.
- The rear side windows are fully closed.

■ **Operation of rear door sunshades/rear quarter sunshades when extended**

If a rear door power window switch is operated when the rear door sunshade/rear quarter sunshade is extended, the rear door sunshade/rear quarter sunshade will retract while the rear window is opening.

■ **Operating the rear door/rear quarter sunshades after turning the engine switch off**

The rear door/rear quarter sunshades can

be operated for a while even after the engine switch is turned to ACCESSORY mode or off. However, they cannot be operated using the driver's power window switch after either front door is opened.

■ **Jam protection function**

If an object becomes caught between a rear door sunshade and the window frame, the rear door sunshade will stop and then extend/retract slightly.

■ **When reconnecting the battery**

The rear door/rear quarter sunshades will always be retracted the first time the button is pressed.

**⚠ WARNING**

■ **When the rear door/rear quarter sunshades are being extended or retracted**

Do not place fingers or other objects in the shade mechanism or in the opening as injury may result.

■ **Jam protection function**

Never use any part of your body to intentionally activate the jam protection function.

**⚠ NOTICE**

■ **To ensure normal operation of the sunshades**

Observe the following precautions:

- Do not place excessive load on the motor or other components.
- Do not place objects where they may hinder opening and closing operations.
- Do not attach items to the rear door/rear quarter sunshades.
- Keep the opening clean and clear of obstructions.

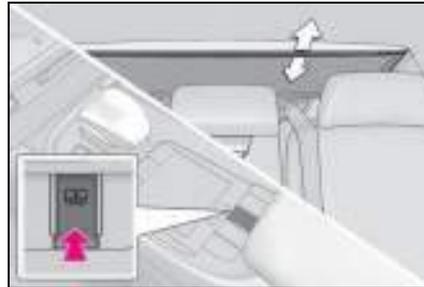
- Do not operate the rear door/rear quarter sunshades continuously for long periods of time.

**Rear sunshade (if equipped)**

The rear sunshade can be extended and retracted using the rear sunshade switch and Rear Multi Operation Panel.

■ **From front seat**

Extend/retract



■ **From rear seat**

- ▶ Vehicles without power rear seat

Extend/retract



- ▶ Vehicles with power rear seat (Rear shade/lamp control screen)

- 1 Display the home screen and then touch "Shade/Lamp". (→P.396)

- 2 To fully extend/retract a rear door sunshade, touch the respective button.



- ▶ Vehicles with power rear seat (shortcut screen)

To fully extend/retract a rear door sunshade, touch the respective button.



■ **The rear sunshade can be used when**

The engine switch is in IGNITION ON mode.

■ **Operating the rear sunshade after turning the engine switch off**

The rear sunshade can be operated for a while even after the engine switch is switched to ACCESSORY mode or turned off.

■ **Reverse operation feature**

To ensure adequate rear visibility, the rear sunshade automatically lowers when the shift position is shifted to R.

However, the rear sunshade is raised again if any of the following occurs:

- The switch is pressed again.
- The shift position is shifted to P.
- The shift position is shifted out of P and R, and the vehicle reaches a speed of 15 km/h (9 mph).

If the engine is turned off when the rear sunshade has been lowered due to the reverse operation feature, it will not be raised even when the engine is turned on again and the vehicle reaches a speed of 15 km/h (9 mph). To raise the sunshade again, press the switch.

**WARNING**

■ **When the rear sunshade is being extended or retracted**

Do not place fingers or other objects in the shade mechanism or in the opening as injury may result.

**NOTICE**

■ **To ensure normal operation of the sunshade**

Observe the following precautions:

- Do not place excessive load on the motor or other components.
- Do not place objects where they may hinder opening and closing operations.
- Do not attach items to the rear sunshade.
- Keep the opening clean and clear of obstructions.
- Do not operate the rear sunshade continuously for long periods of time.

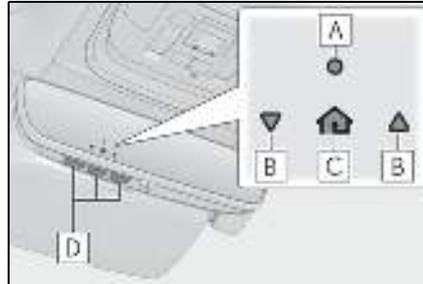
### Garage door opener\*

\*: If equipped

The garage door opener can be programmed using the HomeLink® to operate garage doors, gates, entry doors, door locks, home lighting systems, security systems, and other devices.

### System components

The HomeLink® wireless control system in your vehicle has 3 buttons which can be programmed to operate 3 different devices. Refer to the programming methods on the following pages to determine the method which is appropriate for the device.



- A] HomeLink® indicator light
- B] Garage door operation indicators
- C] HomeLink® icon

Illuminates while HomeLink® is operating.

- D] Buttons

### Codes stored in the HomeLink® memory

- The registered codes are not erased even if the battery cable is disconnected.
- If learning failed when registering a different code to a HomeLink® button that already has a code registered to it, the already registered code will not be erased.

### Certification for the garage door opener

- ▶ For vehicles sold in the U.S.A., Hawaii, Guam and Puerto Rico

This device complies with FCC rules part 15 and Innovation, Science, and Economic Development Canada RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference; and (2) This device must accept any interference that may be received including interference that may cause undesired operation. WARNING: The transmitter has been tested and complies with FCC and ICSED rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment complies with FCC and ICSED radiation exposure limits set forth for an uncontrolled environment. End Users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20 cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

## ► For vehicles sold in Canada

This device complies with FCC rules part 15 and Innovation, Science, and Economic Development Canada RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference that may be received including interference that may cause undesired operation. **WARNING:** The transmitter has been tested and complies with FCC and ISED rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. End Users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20 cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet appareil est conforme aux règlements de la FCC, section 15, et au CNR-210 d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est assujéti aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférences nuisibles et (2) cet appareil doit accepter toute interférence reçue, y compris celle qui pourrait entraîner un dysfonctionnement. **MISE EN GARDE :** L'émetteur a subi des tests et est conforme aux règlements de la FCC et d'ISDE. Les changements ou modifications non approuvés explicitement par la partie responsable de la conformité pourraient rendre caduque l'autorisation de l'utilisateur de se servir du dispositif.

Cet appareil est conforme aux limites d'exposition aux radiations de la FCC et d'ISDE établies pour un environnement non contrôlé. Les utilisateurs finaux doivent respecter les instructions d'utilisation spécifiques pour satisfaire aux exigences de conformité aux expositions de RF. L'émetteur doit se trouver à 20 cm au minimum de l'utilisateur et ne doit pas être situé au même endroit que tout autre émetteur ou antenne ni fonctionner avec un autre émetteur ou antenne.

## ■ When support is necessary

Visit on the web at [www.homelink.com/lexus](http://www.homelink.com/lexus) or call 1-800-355-3515.

⚠ **WARNING**

## ■ When programming a garage door or other remote control device

The garage door or other device may operate, so ensure people and objects are out of danger to prevent potential harm.

## ■ Conforming to federal safety standards

Do not use the HomeLink<sup>®</sup> compatible transceiver with any garage door opener or device that lacks safety stop and reverse features as required by federal safety standards.

This includes any garage door that cannot detect an interfering object. A door or device without these features increases the risk of death or serious injury.

■ When operating or programming HomeLink<sup>®</sup>

Never allow a child to operate or play with the HomeLink<sup>®</sup> buttons.

Programming the HomeLink<sup>®</sup>■ Before programming HomeLink<sup>®</sup>

- During programming, it is possible that garage doors, gates, or other devices may operate. For this reason, make sure that people and objects are clear of the garage door or other devices to prevent injury or other potential harm.
- It is recommended that a new battery be placed in the remote control transmitter for more accurate programming.
- Garage door opener motors manufactured after 1995 may be equipped with rolling code protec-

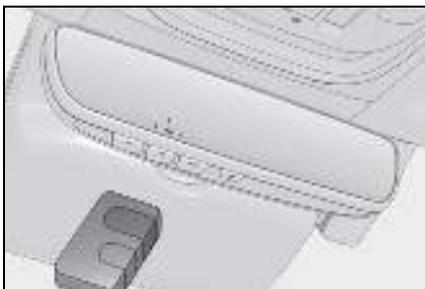
tion. If this is the case, you may need a stepladder or other sturdy, safe device to reach the “Learn” or “Smart” button on the garage door opener motor.

■ **Programming HomeLink®**

Steps **1** through **3** must be performed within 60 seconds, otherwise the indicator light will stop flashing and programming will not be able to be completed.

- 1** Press and release the HomeLink® button you want to program and check that the HomeLink® indicator light flashes (orange).
- 2** Point the remote control transmitter for the device at the rear view mirror, 25 to 75 mm (1 to 3 in.) from the HomeLink® buttons.

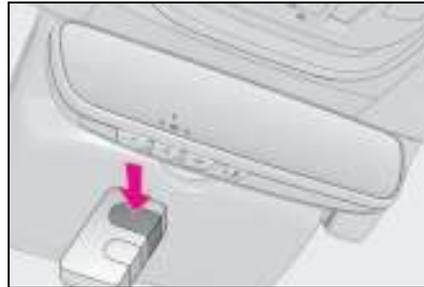
Keep the HomeLink® indicator light in view while programming.



- 3** Program a device.
  - ▶ Programming a device other than an entry gate (for U.S.A. owners)

Press and hold the handheld transmitter button until the HomeLink® indicator light changes from slowly flashing

orange to rapidly flashing green (rolling code) or continuously lit green (fixed code), then release the button.



- ▶ Programming an entry gate (for U.S.A. owners)/Programming a device in the Canadian market

Press and release the remote control transmitter button at 2 second intervals, repeatedly, until the HomeLink® indicator light changes from slowly flashing (orange) to rapidly flashing (green) (rolling code) or continuously lit (green) (fixed code).

- 4** Test the HomeLink® operation by pressing the newly programmed button and observing the indicator light:
  - Indicator light illuminates: Programming of a fixed code device has completed. The garage door or other device should operate when a HomeLink® button is pressed and released.
  - Indicator light flashes rapidly: The garage door opener motor or other device is equipped with a rolling code. To complete programming, firmly press and hold the

HomeLink<sup>®</sup> button for 2 seconds then release it.

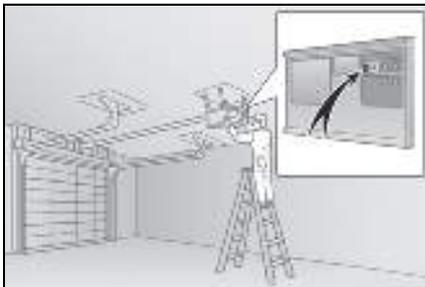
- If the garage door or other device does not operate, proceed to “Programming a rolling code system”.
- 5 Repeat the steps above to program another device for any of the remaining HomeLink<sup>®</sup> buttons.

#### ■ Programming a rolling code system

2 or more people may be necessary to complete rolling code programming.

- 1 Locate the “Learn” or “Smart” button on the garage door opener motor in the garage.

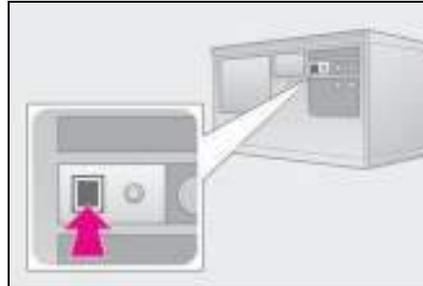
This button can usually be found where the hanging antenna wire is attached to the unit. The name and color of the button may vary by manufacturer. Refer to the owner’s manual supplied with the garage door opener motor for details.



- 2 Press and release the “Learn” or “Smart” button.

Perform 3 within 30 seconds after per-

forming 2.



- 3 Press and hold the desired HomeLink<sup>®</sup> button (inside the vehicle) for 2 seconds and release it. Repeat this sequence (press/hold/release) up to 3 times to complete programming. If the garage door opener motor operates when the HomeLink<sup>®</sup> button is pressed, the garage door opener motor recognizes the HomeLink<sup>®</sup> signal.



#### ■ Enabling 2-way communication with a garage door (only available for compatible devices)

When enabled, 2-way communication allows you to check the status of the opening and closing of a garage door through indicators in your vehicle.

2-way communication is only available

if the garage door opener motor used is a compatible device. (To check device compatibility, refer to [www.homelink.com](http://www.homelink.com).)

- 1 Within 5 seconds after programming the garage door opener has been completed, if the garage door opener motor is trained to HomeLink®, both garage door operation indicators will flash rapidly (green) and the light on the garage door opener motor will blink twice, indicating that 2-way communication is enabled.

If the indicators do not flash, perform **2** and **3** within the first 10 presses of the HomeLink® button after programming has been completed.

- 2 Press a programmed HomeLink® button to operate a garage door.
- 3 Within 1 minute of pressing the HomeLink® button, after the garage door operation has stopped, press the “Learn” or “Smart” button on the garage door opener motor. Within 5 seconds of the establishment of 2-way communication with the garage door opener, both garage door operation indicators in the vehicle will flash rapidly (green) and the light on the garage door opener motor will blink twice, indicating that 2-way communication is enabled.

■ **Reprogramming a single HomeLink® button**

When the following procedure is per-

formed, buttons which already have devices registered to them can be overwritten:

- 1 With one hand, press and hold the desired HomeLink® button.
- 2 When the HomeLink® indicator starts flashing (orange), continue to hold the HomeLink® button and perform “Programming HomeLink®” **1** (it takes 20 seconds for the HomeLink® indicator to start flashing).

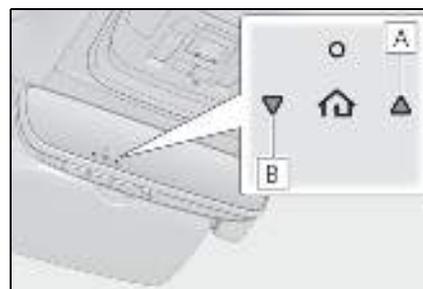
■ **Before programming**

- Install a new battery in the transmitter.
- The battery side of the transmitter must be pointed away from the HomeLink®.

**Operating HomeLink®**

Press the appropriate HomeLink® button. The HomeLink® indicator light should turn on.

The status of the opening and closing of a garage door is shown by the indicators.



- A** Opening
- B** Closing

This function is only available if the garage door opener motor used is a compatible device. (To check device compatibility, refer to [www.homelink.com](http://www.homelink.com).)

Color	Status
Orange (flashing)	Currently opening/closing
Green	Opening/closing has completed
Red (flashing)	Feedback signals cannot be received

The indicators can operate within approximately 250 m (820 ft.) of the garage door. However, if there are obstructions between the garage door and the vehicle, such as houses and trees, feedback signals from the garage door may not be received.

To recall the previous door operation status, press and release either

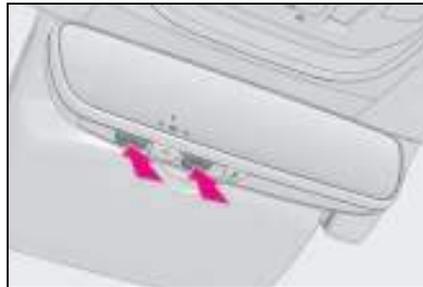
HomeLink® buttons  and  or  and  simultaneously. The last recorded status will be displayed for 3 seconds.

**Erasing the entire HomeLink® memory (all three codes)**

Press and hold the 2 outside buttons for 10 seconds until the HomeLink® indicator light changes from continuously lit (orange) to rapidly flashing (green).

If you sell your vehicle, be sure to erase the

programs stored in the HomeLink® memory.





## Maintenance and care

# 6

### 6-1. Maintenance and care

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## Cleaning and protecting the vehicle exterior

Perform cleaning in a manner appropriate to each component and its material.

### Cleaning instructions

- Working from top to bottom, liberally apply water to the vehicle body, wheel wells and underside of the vehicle to remove any dirt and dust.
- Wash the vehicle body using a sponge or soft cloth, such as a chamois.
- For hard-to-remove marks, use car wash soap and rinse thoroughly with water.
- Wipe away any water.
- Wax the vehicle when the waterproof coating deteriorates.

If water does not bead on a clean surface, apply wax when the vehicle body is cool.

#### ■ Self-restoring coat

The vehicle body has a self-restoring coating that is resistant to small surface scratches caused in a car wash etc.

- The coating lasts for 5 to 8 years from when the vehicle is delivered from the plant.
- The restoration time differs depending on the depth of the scratch and outside temperature. The restoration time may become shorter when the coating is warmed by applying warm water.
- Deep scratches caused by keys, coins, etc. cannot be restored.

- Do not use wax that contains abrasives.

#### ■ Automatic car washes

- Before washing the vehicle:
  - Fold the mirrors
  - Turn off the power trunk lid

Start washing from the front of the vehicle. Extend the mirrors before driving.

- Brushes used in automatic car washes may scratch the vehicle surface and harm your vehicle's paint.

#### ■ High pressure car washes

As water may enter the cabin, do not bring the nozzle tip near the gaps around the doors or perimeter of the windows, or spray these areas continuously.

#### ■ When using a car wash

If the door handle becomes wet while the electronic key is within the effective range, the door may lock and unlock repeatedly. In that case, follow the following correction procedures to wash the vehicle:

- Place the key in a position 2 m (6 ft.) or more separate from the vehicle while the vehicle is being washed. (Take care to ensure that the key is not stolen.)
- Set the electronic key to battery-saving mode to disable the smart entry & start system. (→P.151)

#### ■ Aluminum wheels

- Remove any dirt immediately by using a neutral detergent.
- Wash detergent off with water immediately after use.
- To protect the paint from damage, make sure to observe the following precautions.
  - Do not use acidic, alkaline or abrasive detergent
  - Do not use hard brushes
  - Do not use detergent on the wheels when they are hot, such as after driving or parking in hot weather

#### ■ Brake caliper coating (F SPORT models)

- When using detergent, use neutral detergent. Do not use hard brushes or abra-

sive cleaners, as they will damage the coating.

- Do not use detergent on the brake calipers when they are hot.
- Wash detergent off immediately after use.

#### ■ Bumpers and side moldings

Do not scrub with abrasive cleaners.

#### ■ Front side windows water-repellent coating (if equipped)

- The following precautions can extend the effectiveness of the water-repellent coating.
  - Remove any dirt, etc. from the front side windows regularly.
  - Do not allow dirt and dust to accumulate on the windows for a long period. Clean the windows with a soft, damp cloth as soon as possible.
  - Do not use wax or glass cleaners that contain abrasives when cleaning the windows.
  - Do not use any metallic objects to remove condensation build up.
- When the water-repellent performance has become insufficient, the coating can be repaired. Contact your Lexus dealer.

#### ■ Plated portions

If dirt cannot be removed, clean the parts as follows:

- Use a soft cloth dampened with an approximately 5% solution of neutral detergent and water to clean the dirt off.
- Wipe the surface with a dry, soft cloth to remove any remaining moisture.
- To remove oily deposits, use alcohol wet wipes or a similar product.



#### WARNING

##### ■ When washing the vehicle

Do not apply water to the inside of the engine compartment. Doing so may cause the electrical components, etc. to catch fire.

#### ■ When cleaning the windshield

Set the wiper switch to off. If the wiper switch is in "AUTO", the wipers may operate unexpectedly in the following situations, and may result in hands being caught or other serious injuries and cause damage to the wiper blades.



**A** Off

**B** AUTO

- When the upper part of the windshield where the raindrop sensor is located is touched by hand
- When a wet rag or similar is held close to the raindrop sensor
- If something bumps against the windshield
- If you directly touch the raindrop sensor body or if something bumps into the raindrop sensor

#### ■ Precautions regarding the exhaust pipes and rear bumper diffusers

Exhaust gases cause the exhaust pipes and rear bumper diffusers to become quite hot.

When washing the vehicle, be careful not to touch the pipes and diffusers until they have cooled sufficiently, as touching hot exhaust pipes and rear bumper diffusers can cause burns.

 **WARNING**

■ **Precaution regarding the front bumper (vehicles with Lexus Safety System + A)**

If the paint of the front bumper is chipped or scratched, the Lexus Safety System + A may not function correctly. If this occurs, consult your Lexus dealer.

■ **Precaution regarding the rear bumper**

If the paint of the rear bumper is chipped or scratched, the following systems may not function correctly. If this occurs, consult your Lexus dealer.

- Lexus Safety System + A (if equipped)
- BSM (if equipped)
- RCTA (if equipped)
- PKSB (if equipped)

 **NOTICE**

■ **To prevent paint deterioration and corrosion on the body and components (aluminum wheels, etc.)**

- Wash the vehicle immediately in the following cases:
  - After driving near the sea coast
  - After driving on salted roads
  - If coal tar or tree sap is present on the paint surface
  - If dead insects, insect droppings or bird droppings are present on the paint surface
  - After driving in an area contaminated with soot, oily smoke, mine dust, iron powder or chemical substances
  - If the vehicle becomes heavily soiled with dust or mud
  - If liquids such as benzene and gasoline are spilled on the paint surface

- If the paint is chipped or scratched, have it repaired immediately.

- To prevent the wheels from corroding, remove any dirt and store in a place with low humidity when storing the wheels.

■ **Cleaning the exterior lights**

- Wash carefully. Do not use organic substances or scrub with a hard brush. This may damage the surfaces of the lights.

- Do not apply wax to the surfaces of the lights. Wax may cause damage to the lenses.

■ **When using an automatic car wash**

Set the wiper switch to the off position. If the wiper switch is in "AUTO", the wipers may operate and the wiper blades may be damaged.

■ **When using a high pressure car wash**

- When washing the vehicle, do not spray the camera or its surrounding area directly with a high pressure washer. Shock applied from high pressure water may cause the device to not operate normally.

- Do not bring the nozzle tip close to boots (rubber or resin manufactured cover), connectors or the following parts. The parts may be damaged if they come into contact with high-pressure water.

- Traction related parts
- Steering parts
- Suspension parts
- Brake parts

**NOTICE**

- Keep the cleaning nozzle at least 30 cm (11.9 in.) away from the vehicle body. Otherwise resin section, such as moldings and bumpers, may be deformed and damaged.

Also, do not continuously hold the nozzle in the same place.

- Do not spray the lower part of the windshield continuously.

If water enters the air conditioning system intake located near the lower part of the windshield, the air conditioning system may not operate correctly.

**Cleaning and protecting the vehicle interior**

**Perform cleaning in a manner appropriate to each component and its material.**

**Protecting the vehicle interior**

- Remove dirt and dust using a vacuum cleaner. Wipe dirty surfaces with a cloth dampened with lukewarm water.
- If dirt cannot be removed, wipe it off with a soft cloth dampened with neutral detergent diluted to approximately 1%.  
Wring out any excess water from the cloth and thoroughly wipe off remaining traces of detergent and water.

**Shampooing the carpets**

There are several commercial foaming-type cleaners available. Use a sponge or brush to apply the foam. Rub in overlapping circles. Do not use water. Wipe dirty surfaces and let them dry. Excellent results are obtained by keeping the carpet as dry as possible.

**Handling the seat belts**

Clean with mild soap and lukewarm water using a cloth or sponge. Also check the belts periodically for excessive wear, fraying or cuts.

**When cleaning the carpeted portions of the glove box, console box, etc.**

If a strong adhesive tape is used, there is a possibility that the surface of the carpet could be damaged.

 **WARNING**

■ **Water in the vehicle**

- Do not splash or spill liquid in the vehicle.  
Doing so may cause electrical components, etc. to malfunction or catch fire.
- Do not get any of the SRS components or wiring in the vehicle interior wet. (→P.39)  
An electrical malfunction may cause the airbags to deploy or not function properly, resulting in death or serious injury.

■ **Cleaning the interior (especially instrument panel)**

Do not use polish wax or polish cleaner. The instrument panel may reflect off the windshield, obstructing the driver's view and leading to an accident, resulting in death or serious injury.

 **NOTICE**

■ **Cleaning detergents**

- Do not use the following types of detergent, as they may discolor the vehicle interior or cause streaks or damage to painted surfaces:
  - Areas other than the seats and steering wheel: Organic substances such as benzene or gasoline, alkaline or acidic solutions, dye, and bleach
  - Seats: Alkaline or acidic solutions, such as thinner, benzene, and alcohol
  - Steering wheel: Organic substances, such as thinner, and cleaner that contains alcohol
- Do not use polish wax or polish cleaner. The instrument panel's or other interior part's painted surface may be damaged.

■ **Preventing damage to leather surfaces**

Observe the following precautions to avoid damage to and deterioration of leather surfaces:

- Remove any dust or dirt from leather surfaces immediately.
- Do not expose the vehicle to direct sunlight for extended periods of time. Park the vehicle in the shade, especially during summer.
- Do not place items made of vinyl, plastic, or containing wax on the upholstery, as they may stick to the leather surface if the vehicle interior heats up significantly.

■ **Water on the floor**

Do not wash the vehicle floor with water. Vehicle systems such as the audio system may be damaged if water comes into contact with electrical components such as the audio system above or under the floor of the vehicle. Water may also cause the body to rust.

■ **When cleaning the inside of the windshield (vehicles with Lexus Safety System + A or Lexus Safety System +)**

Do not allow glass cleaner to contact the lens. Also, do not touch the lens. (→P.245, 253)

■ **Cleaning the inside of the rear window**

- Do not use glass cleaner to clean the rear window, as this may cause damage to the rear window defogger heater wires or antenna. Use a cloth dampened with lukewarm water to gently wipe the window clean. Wipe the window in strokes running parallel to the heater wires or antenna.
- Be careful not to scratch or damage the heater wires or antenna.

### Cleaning the areas with satin-finish metal accents

- Remove dirt using a water-dampened soft cloth or synthetic chamois.
- Wipe the surface with a dry, soft cloth to remove any remaining moisture.

#### ■ Cleaning the areas with satin-finish metal accents

The metal areas use a layer of real metal for the surface. It is necessary to clean them regularly. If dirty areas are left uncleaned for long periods of time, they may be difficult to clean.

### Cleaning the leather areas

- Remove dirt and dust using a vacuum cleaner.
- Wipe off any excess dirt and dust with a soft cloth dampened with diluted detergent.

Use a diluted water solution of approximately 5% neutral wool detergent.

- Wring out any excess water from the cloth and thoroughly wipe off all remaining traces of detergent.
- Wipe the surface with a dry, soft cloth to remove any remaining moisture. Allow the leather to dry in a shaded and ventilated area.

#### ■ Caring for leather areas

Lexus recommends cleaning the interior of the vehicle at least twice a year to maintain the quality of the vehicle's interior.

### Cleaning the synthetic leather areas

- Remove dirt and dust using a vacuum cleaner.
- Wipe it off with a soft cloth dampened with neutral detergent diluted to approximately 1%.
- Wring out any excess water from the cloth and thoroughly wipe off remaining traces of detergent and water.

### Cleaning fabric portions of the instrument panel

- To remove dust from the fabric, use a vacuum cleaner or adhesive tape.
- Use a cloth dampened with water to gently wipe the fabric clean.

Do not use detergents to clean the fabric.

## Maintenance requirements

To ensure safe and economical driving, day-to-day care and regular maintenance are essential. Lexus recommends the maintenance below.

### WARNING

#### ■ If your vehicle is not properly maintained

Improper maintenance could result in serious damage to the vehicle and possible death or serious injury.

#### ■ Handling of the battery

Battery posts, terminals and related accessories contain lead and lead compounds which are known to cause brain damage. Wash your hands after handling. (→P.482)

## Scheduled maintenance

- Scheduled maintenance should be performed at specified intervals according to the maintenance schedule.

The interval for scheduled maintenance is determined by the odometer reading or the time interval, whichever comes first, shown in the schedule.

Maintenance beyond the last period should be performed at the same intervals.

- Where to go for maintenance service?

It makes good sense to take your vehicle to your local Lexus dealer for maintenance service as well as other inspections and repairs.

Lexus technicians are well-trained special-

ists receiving the latest service information through technical bulletins, service tips and in-dealership training programs. They learn to work on Lexus before they work on your vehicle, rather than while they are working on it. Doesn't that seem like the best way?

Your Lexus dealer has invested a lot of money in special Lexus tools and service equipment. It helps them to do the job better and at less cost.

Your Lexus dealer's service department will perform all of the scheduled maintenance on your vehicle reliably and economically.

Rubber hoses (for cooling and heater system, brake system and fuel system) should be inspected by a qualified technician according to the Lexus maintenance schedule.

Rubber hoses are particularly important maintenance items. Have any deteriorated or damaged hoses replaced immediately. Note that rubber hoses will deteriorate with age, resulting in swelling, chafing or cracking.

## Do-it-yourself maintenance

What about do-it-yourself maintenance?

Many of the maintenance items are easy to do yourself if you have a little mechanical ability and a few basic automotive tools. Simple instructions for how to perform them are presented in this section.

Note, however, that some maintenance tasks require special tools and skills. These are best performed by qualified technicians. Even if you are an experienced do-it-yourself mechanic, we recommend

that repairs and maintenance be conducted by your Lexus dealer who will keep a record of maintenance on your vehicle. This record could be helpful should you ever require Warranty Service.

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#### ■ Does your vehicle need repairs?

Be on the alert for changes in performance and sounds, and visual tip-offs that indicate service is needed. Some important clues are:

- Engine missing, stumbling or pinging
- Appreciable loss of power
- Strange engine noises
- A fluid leak under the vehicle (However, water dripping from the air conditioning system after use is normal.)
- Change in exhaust sound (This may indicate a dangerous carbon monoxide leak. Drive with the windows open and have the exhaust system checked immediately.)
- Flat-looking tires, excessive tire squeal when cornering, uneven tire wear
- Vehicle pulls to one side when driven straight on a level road
- Strange noises related to suspension movement
- Loss of brake effectiveness, spongy feeling brake pedal, pedal almost touches the floor, vehicle pulls to one side when braking
- Engine coolant temperature continually higher than normal (→P.111, 114)

If you notice any of these clues, take your vehicle to your Lexus dealer as soon as possible. Your vehicle may need adjustment or repair.

**Scheduled maintenance**

Perform maintenance by the schedule as follows:

**Maintenance schedule requirements**

Your vehicle needs to be serviced according to the normal maintenance schedule. (See "Maintenance schedule".)

If you mainly operate your vehicle under one or more of the special operating conditions below, some of the maintenance schedule items need to be serviced more frequently in order to keep your vehicle in good condition. (See "Additional maintenance schedule".)

<p>A. Road Conditions</p> <ol style="list-style-type: none"> <li>1. Operating on rough or muddy roads, or roads with melted snow.</li> <li>2. Operating on dusty roads. (Roads in areas where their pavement rate is low, or a cloud of dust often arises and the air is dry.)</li> </ol>	<p>B. Driving Conditions</p> <ol style="list-style-type: none"> <li>1. Heavily loaded vehicle. (For example, using a car top carrier and so forth.)</li> <li>2. Extensive idling and/or low speed driving for a long distance such as police, professional/private use like taxi or door-to-door delivery use.</li> <li>3. Continuous high speed driving (80% or more of maximum vehicle speed) for over 2 hours.</li> </ol>
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**Maintenance schedule (except for South Africa)**

Maintenance operations:

I = Inspect, correct or replace as necessary

R = Replace, change or lubricate

SERVICE INTERVAL:		ODOMETER READING								MONTHS
(Odometer reading or months, whichever comes first.)	x1000 km	10	20	30	40	50	60	70	80	
	x1000 miles	6	12	18	24	30	36	42	48	
BASIC ENGINE COMPONENTS										
1	Drive belts		I		I		I		I	24
2	Engine oil	Replace when the maintenance reminder appears. <<See note 1.>>								
3	Engine oil filter	Replace when the maintenance reminder appears. <<See note 1.>>								
4	Cooling and heater system <<See note 2.>>				I				I	24
5	Engine coolant (LS500: Include intercooler coolant) <<See note 3.>>				I				I	-
6	Exhaust pipes and mountings		I		I		I		I	12
IGNITION SYSTEM										
7	Spark plugs	LS350	Replace every 100000 km (60000 miles)							-
		LS500						R		-
8	Battery	I	I	I	I	I	I	I	I	12
FUEL AND EMISSION CONTROL SYSTEMS										
9	Fuel filter <<See note 4.>>								R	96
10	Fuel injection system <<See note 5, 6 and 7.>>	Add injector cleaner to the fuel tank every 10000 km (6000 miles).								-
11	Air cleaner filter		I		R		I		R	I: 24 R: 48
12	Fuel tank cap, fuel lines, connections and fuel vapor control valve <<See note 2.>>				I				I	24
13	Charcoal canister <<See note 8.>>				I				I	24
CHASSIS AND BODY										

SERVICE INTERVAL: (Odometer reading or months, whichever comes first.)		ODOMETER READING										MONTHS
		x1000 km	10	20	30	40	50	60	70	80		
		x1000 miles	6	12	18	24	30	36	42	48		
14	Brake pedal and parking brake <<See note 9.>>		I	I	I	I	I	I	I	I	6	
15	Brake linings and drums (including parking brake linings and drums)			I		I		I		I	12	
16	Brake pads and discs		I	I	I	I	I	I	I	I	6	
17	Brake fluid		I	I	I	R	I	I	I	R	I:6 R:24	
18	Brake pipes and hoses			I		I		I		I	12	
19	Vacuum pump for brake booster	LS350	Inspect every 200000 km (120000 miles)								-	
		LS500	Inspect every 200000 km (120000 miles) <<See note 10.>>								-	
20	Steering wheel, linkage and steering gear box			I		I		I		I	12	
21	Drive shaft boots			I		I		I		I	24	
22	Suspension ball joints and dust covers			I		I		I		I	12	
23	Automatic transmission fluid					I				I	24	
24	Automatic transmission fluid cooler hoses and connections					I				I	24	
25	Transfer oil (AWD models)			I		R		I		R	I:12 R:48	
26	Front differential oil (AWD models)			I		R		I		R	I:12 R:48	
27	Rear differential oil			I		R		I		R	I:12 R:48	
28	Front and rear suspension <<See note 11 and 12.>>			I		I		I		I	12	
29	Tires and inflation pressure		I	I	I	I	I	I	I	I	6	

SERVICE INTERVAL: (Odometer reading or months, whichever comes first.)	ODOMETER READING										MONTHS										
	x1000 km	10	20	30	40	50	60	70	80	x1000 miles		6	12	18	24	30	36	42	48		
30	Lights, horns, wipers and washers										I	I	I	I	I	I	I	I	I	I	6
31	Air conditioning filter										R	R	R	R	R	R	R	R	R	R	12

## NOTE:

1. Replace both the engine oil and oil filter, even when the maintenance reminder does not appear, after 12 months have passed, or when driven over 10000 km (6000 miles) since the last oil change. This may cause the maintenance reminder appear even when driven less than 10000 km (6000 miles).

Replace both engine oil and oil filter every 5000 km (3000 miles) or 6 months, in which the vehicle is mainly driven in dirt or dusty roads, when the maintenance reminder does not appear.

2. After 80000 km (48000 miles) or 48 months inspection, inspect every 20000 km (12000 miles) or 12 months.

3. First replace at 160000 km (100000 miles), then replace at every 80000 km (50000 miles).

4. Including the filter in fuel tank.

5. Toyota genuine fuel injector cleaner or equivalent.

6. LS350: For GCC Countries<sup>\*</sup>, Egypt, and Yemen only.

7. LS500: For GCC Countries<sup>\*</sup>, Costa Rica, Dominican Republic, Guatemala, Honduras, Philippines, El Salvador, Bolivia, Aruba, Curacao, Peru, Panama, Republic of Nicaragua, Egypt, and Yemen only.

8. Except for Korea.

9. Parking brake inspection is not necessary.

10. Replace the vacuum pump vane and the vacuum pump vane caps with new ones and never reuse the vacuum pump vane and the vacuum pump vane caps.

11. LS500: For Singapore, replace front and rear air suspension pneumatic cylinder assembly every 7 years.

12. LS500: For GCC Countries<sup>\*</sup>, Yemen, Egypt, Lebanon, Jordan, Philippines, Dominican Republic, Panama, Bolivia, Aruba, Curacao, Peru, Vietnam, Malaysia, Thailand, Indonesia, and Brunei replace front and rear air suspension pneumatic

cylinder assembly every 6 years.

\* : Saudi Arabia, Sultanate of Oman, Bahrain, United Arab Emirates, Qatar and Kuwait

**Additional maintenance schedule (except for South Africa)**

Refer to the following table for normal maintenance schedule items requiring more frequent service specific to the type of severe conditions. (For outline, see "Maintenance schedule requirements".)

A-1: Operating on rough or muddy roads, or roads with melted snow.	
• Inspection <sup>*1</sup> of brake linings and drums (including parking brake linings and drums)	Every 10000 km (6000 miles) or 6 months
• Inspection <sup>*1</sup> of brake pads and discs	Every 5000 km (3000 miles) or 3 months
• Inspection <sup>*1</sup> of brake pipes and hoses	Every 10000 km (6000 miles) or 6 months
• Inspection <sup>*1</sup> of suspension ball joints and dust covers	Every 10000 km (6000 miles) or 6 months
• Inspection <sup>*1</sup> of drive shaft boots	Every 10000 km (6000 miles) or 12 months
• Replacement of transfer oil (AWD models)	Every 20000 km (12000 miles) or 24 months
• Inspection <sup>*1</sup> of steering wheel, linkage and steering gear box	Every 5000 km (3000 miles) or 3 months
• Inspection <sup>*1</sup> of front and rear suspension <<See note 1 and 2.>>	Every 10000 km (6000 miles) or 6 months
• Tightening of bolts and nuts on chassis and body <<See note 3.>>	Every 10000 km (6000 miles) or 6 months

A-2: Operating on dusty roads. (Roads in areas where their pavement rate is low, or a cloud of dust often arises and the air is dry.)	
<ul style="list-style-type: none"> <li>• Inspection <sup>*1</sup> or replacement of air cleaner filter</li> </ul>	I: Every 2500 km (1500 miles) or 3 months R: Every 40000 km (24000 miles) or 48 months
<ul style="list-style-type: none"> <li>• Inspection <sup>*1</sup> of brake linings and drums (including parking brake linings and drums)</li> </ul>	Every 10000 km (6000 miles) or 6 months
<ul style="list-style-type: none"> <li>• Inspection <sup>*1</sup> of brake pads and discs</li> </ul>	Every 5000 km (3000 miles) or 3 months
<ul style="list-style-type: none"> <li>• Replacement of transfer oil (AWD models)</li> </ul>	Every 20000 km (12000 miles) or 24 months

B-1: Heavily loaded vehicle. (For example, using a car top carrier and so forth.)	
<ul style="list-style-type: none"> <li>• Inspection <sup>*1</sup> of brake linings and drums (including parking brake linings and drums)</li> </ul>	Every 10000 km (6000 miles) or 6 months
<ul style="list-style-type: none"> <li>• Inspection <sup>*1</sup> of brake pads and discs</li> </ul>	Every 5000 km (3000 miles) or 3 months
<ul style="list-style-type: none"> <li>• Inspection <sup>*1</sup> or replacement of automatic transmission fluid</li> </ul>	I: Every 40000 km (24000 miles) or 24 months R: Every 80000 km (48000 miles) or 48 months
<ul style="list-style-type: none"> <li>• Replacement of transfer oil (AWD models)</li> </ul>	Every 20000 km (12000 miles) or 24 months
<ul style="list-style-type: none"> <li>• Inspection <sup>*1</sup> of front and rear suspension &lt;&lt;See note 1 and 2.&gt;&gt;</li> </ul>	Every 10000 km (6000 miles) or 6 months
<ul style="list-style-type: none"> <li>• Tightening of bolts and nuts on chassis and body &lt;&lt;See note 3.&gt;&gt;</li> </ul>	Every 10000 km (6000 miles) or 6 months

B-2: Extensive idling and/or low speed driving for a long distance such as police, professional/private use like taxi or door-to-door delivery use.	
<ul style="list-style-type: none"> <li>• Inspection <sup>*1</sup> of brake linings and drums (including parking brake linings and drums)</li> </ul>	Every 10000 km (6000 miles) or 6 months

B-2: Extensive idling and/or low speed driving for a long distance such as police, professional/private use like taxi or door-to-door delivery use.	
• Inspection <sup>*1</sup> of brake pads and discs	Every 5000 km (3000 miles) or 3 months
• Inspection <sup>*1</sup> or replacement of automatic transmission fluid	I: Every 40000 km (24000 miles) or 24 months R: Every 80000 km (48000 miles) or 48 months
B-3: Continuous high speed driving (80% or more of maximum vehicle speed) for over 2 hours.	
• Inspection <sup>*1</sup> or replacement of automatic transmission fluid	I: Every 40000 km (24000 miles) or 24 months R: Every 80000 km (48000 miles) or 48 months
• Replacement of transfer oil (AWD models)	Every 20000 km (12000 miles) or 24 months

NOTE:

1. LS500: For Singapore, replace front and rear air suspension pneumatic cylinder assembly every 7 years.

2. LS500: For GCC Countries <sup>\*2</sup>, Yemen, Egypt, Lebanon, Jordan, Philippines, Dominican Republic, Panama, Bolivia, Aruba, Curacao, Peru, Vietnam, Malaysia, Thailand, Indonesia, and Brunei replace front and rear air suspension pneumatic cylinder assembly every 6 years.

3. For seat mounting bolts, front and rear suspension member retaining bolts.

<sup>\*1</sup>: Perform correction or replacement as necessary.

<sup>\*2</sup>: Saudi Arabia, Sultanate of Oman, Bahrain, United Arab Emirates, Qatar and Kuwait

**Maintenance schedule (for South Africa)**

Maintenance operations:

I = Inspect, correct or replace as necessary

R = Replace, change or lubricate

SERVICE INTERVAL:		ODOMETER READING							MONTHS
(Odometer reading or months, whichever comes first.)		x1000 km	15	30	45	60	75	90	
		x1000 miles	9	18	27	36	45	54	
<b>BASIC ENGINE COMPONENTS</b>									
1	Drive belts	I	I	I	I	I	I	I	12
2	Engine oil	Replace when the maintenance reminder appears. <<See note 1.>>							
3	Engine oil filter	Replace when the maintenance reminder appears. <<See note 1.>>							
4	Cooling and heater system		I		I		I		24
5	Engine coolant (Include intercooler coolant) <<See notes 2.>>		I		I		I		-
6	Exhaust pipes and mountings	I	I	I	I	I	I	I	12
<b>IGNITION SYSTEM</b>									
7	Spark plugs				R				-
8	Battery	I	I	I	I	I	I	I	12
<b>FUEL AND EMISSION CONTROL SYSTEMS</b>									
9	Fuel filter <<See note 3.>>					R			96
10	Air cleaner filter	I	I	I	R	I	I		I: 24 R: 48
11	Fuel tank cap, fuel lines, connections and fuel vapor control valve		I		I		I		24
12	Charcoal canister			I			I		24
<b>CHASSIS AND BODY</b>									
13	Brake pedal and parking brake <<See note 4.>>		I		I		I		24
14	Brake linings and drums (Include parking brake linings and drums)		I		I		I		24
15	Brake pads and discs	I	I	I	I	I	I		12
16	Brake fluid	I	R	I	R	I	R		I: 12 R: 24
17	Brake pipes and hoses	I	I	I	I	I	I		12

SERVICE INTERVAL:		ODOMETER READING						MONTHS	
(Odometer reading or months, whichever comes first.)		x1000 km	15	30	45	60	75		90
		x1000 miles	9	18	27	36	45		54
18	Vacuum pump for brake booster	Inspect every 200000 km (120000 miles) <<See note 5.>>						-	
19	Steering wheel, linkage and steering gear box	I	I	I	I	I	I	12	
20	Drive shaft boots	I	I	I	I	I	I	24	
21	Suspension ball joints and dust covers	I	I	I	I	I	I	12	
22	Automatic transmission fluid			I			I	36	
23	Automatic transmission fluid cooler hoses and connections			I			I	36	
24	Rear differential oil	I	R	I	R	I	R	I: 12 R: 48	
25	Front and rear suspension	I	I	I	I	I	I	12	
26	Tires and inflation pressure	I	I	I	I	I	I	12	
27	Lights, horns, wipers and washers	I	I	I	I	I	I	12	
28	Air conditioning filter	R	R	R	R	R	R	12	

NOTE:

1. Replace both the engine oil and oil filter, even when the maintenance reminder does not appear, after 12 months have passed, or when driven over 15000 km (9000 miles) since the last oil change. This may cause the maintenance reminder appear even when driven less than 15000 km (9000 miles). Replace both engine oil and oil filter every 7500 km (4500 miles) or 6 months, in which the vehicle is mainly driven in dirt or dusty roads, when the maintenance reminder does not appear.
2. First replace at 160000 km (100000 miles), then replace every 80000 km (50000 miles).
3. Including the filter in fuel tank.
4. Parking brake inspection is not necessary.
5. Replace the vacuum pump vane and the vacuum pump vane caps with new ones and never reuse the vacuum pump vane and the vacuum pump vane caps.

**Additional maintenance schedule (for South Africa)**

Refer to the following table for normal maintenance schedule items requiring more frequent service specific to the type of severe conditions. (For outline, see "Maintenance schedule requirements".)

A-1: Operating on rough or muddy roads, or roads with melted snow.	
• Inspection * of brake linings and drums (including parking brake linings and drums)	Every 15000 km (9000 miles) or 12 months
• Inspection * of brake pads and discs	Every 7500 km (4500 miles) or 6 months
• Inspection * of brake pipes and hoses	Every 7500 km (4500 miles) or 6 months
• Inspection * of suspension ball joints and dust covers	Every 7500 km (4500 miles) or 6 months
• Inspection * of drive shaft boots	Every 7500 km (4500 miles) or 12 months
• Inspection * of steering wheel, linkage and steering gear box	Every 7500 km (4500 miles) or 6 months
• Inspection * of front and rear suspension	Every 7500 km (4500 miles) or 6 months
• Tightening of bolts and nuts on chassis and body <<See note.>>	Every 15000 km (9000 miles) or 12 months
A-2: Operating on dusty roads. (Roads in areas where their pavement rate is low, or a cloud of dust often arises and the air is dry.)	
• Inspection * or replacement of air cleaner filter	I: Every 7500 km (4500 miles) or 12 months R: Every 60000 km (36000 miles) or 48 months
• Inspection * of brake linings and drums (including parking brake linings and drums)	Every 15000 km (9000 miles) or 12 months
• Inspection * of brake pads and discs	Every 7500 km (4500 miles) or 6 months
• Replacement of air conditioning filter	Every 7500 km (4500 miles) or 12 months

B-1: Heavily loaded vehicle. (For example, using a car top carrier and so forth.)	
• Inspection * of brake linings and drums (including parking brake linings and drums)	Every 15000 km (9000 miles) or 12 months
• Inspection * of brake pads and discs	Every 7500 km (4500 miles) or 6 months
• Inspection * or replacement of automatic transmission fluid	I: Every 45000 km (27000 miles) or 36 months R: Every 90000 km (54000 miles) or 72 months
• Inspection * of front and rear suspension	Every 7500 km (4500 miles) or 6 months
• Tightening of bolts and nuts on chassis and body <<See note.>>	Every 15000 km (9000 miles) or 12 months

B-2: Extensive idling and/or low speed driving for a long distance such as police, professional/private use like taxi or door-to-door delivery use.	
• Inspection * of brake linings and drums (including parking brake linings and drums)	Every 15000 km (9000 miles) or 12 months
• Inspection * of brake pads and discs	Every 7500 km (4500 miles) or 6 months
• Inspection * or replacement of automatic transmission fluid	I: Every 45000 km (27000 miles) or 36 months R: Every 90000 km (54000 miles) or 72 months

B-3: Continuous high speed driving (80% or more of maximum vehicle speed) for over 2 hours.	
• Inspection * or replacement of automatic transmission fluid	I: Every 45000 km (27000 miles) or 36 months R: Every 90000 km (54000 miles) or 72 months

NOTE:

For seat mounting bolts, front and rear suspension member retaining bolts.

\* : Perform correction or replacement as necessary.

### Do-it-yourself service precautions

If you perform maintenance by yourself, be sure to follow the correct procedure as given in these sections.

### Maintenance

Items	Parts and tools
Battery condition (→P.482)	<ul style="list-style-type: none"> <li>• Grease</li> <li>• Conventional wrench (for terminal clamp bolts)</li> </ul>
Engine/inter-cooler coolant level (→P.478)	<ul style="list-style-type: none"> <li>• "Toyota Super Long Life Coolant" or a similar high quality ethylene glycol-based non-silicate, non-amine, non-nitrite and non-borate coolant with long-life hybrid organic acid technology</li> <li>• "Toyota Super Long Life Coolant" is pre-mixed with 50% coolant and 50% deionized water.</li> <li>• Funnel (used only for adding coolant)</li> </ul>
Engine oil level (→P.475)	<ul style="list-style-type: none"> <li>• "Toyota Genuine Motor Oil" or equivalent</li> <li>• Rag or paper towel</li> <li>• Funnel (used only for adding engine oil)</li> </ul>

Items	Parts and tools
Fuses (→P.505)	<ul style="list-style-type: none"> <li>• Fuse with same amperage rating as original</li> </ul>
Radiator, condenser, inter-cooler radiator and intercooler sub radiator (→P.479)	—
Tire inflation pressure (→P.499)	<ul style="list-style-type: none"> <li>• Tire pressure gauge</li> <li>• Compressed air source</li> </ul>
Washer fluid (→P.479)	<ul style="list-style-type: none"> <li>• Water or washer fluid containing anti-freeze (for winter use)</li> <li>• Funnel (used only for adding water or washer fluid)</li> </ul>

### WARNING

The engine compartment contains many mechanisms and fluids that may move suddenly, become hot, or become electrically energized. To avoid death or serious injury, observe the following precautions.

#### ■ When working on the engine compartment

- Keep hands, clothing and tools away from the moving fan and engine drive belt.
- Be careful not to touch the engine, radiator, exhaust manifold, etc. right after driving as they may be hot. Oil and other fluids may also be hot.
- Do not leave anything that may burn easily, such as paper and rags, in the engine compartment.

**⚠ WARNING**

- Do not smoke, cause sparks or expose an open flame to fuel. Fuel fumes are flammable.
- Take care because brake fluid can harm your hands or eyes and damage painted surfaces. If fluid gets on your hands or in your eyes, flush the affected area with clean water immediately. If you still experience discomfort, consult a doctor.

■ **When working near the electric cooling fan or radiator grille**

Be sure the engine switch is off. With the engine switch in IGNITION ON mode, the electric cooling fan may automatically start to run if the air conditioning is on and/or the coolant temperature is high. (→P.479)

■ **Safety glasses**

Wear safety glasses to prevent flying or falling material, fluid spray, etc. from getting in your eyes.

**⚠ NOTICE**

■ **If you remove the air cleaner filter**

Driving with the air cleaner filter removed may cause excessive engine wear due to dirt in the air.

■ **If the fluid level is low or high**

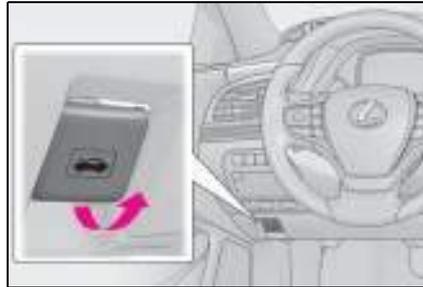
It is normal for the brake fluid level to go down slightly as the brake pads wear or when the fluid level in the accumulator is high. If the reservoir needs frequent refilling, it may indicate a serious problem.

**Hood**

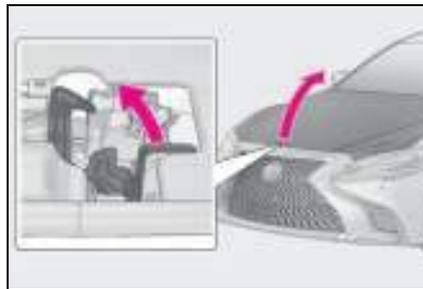
**Opening the hood**

- 1 Pull the hood lock release lever.

The hood will pop up slightly.



- 2 Pull up the auxiliary catch lever and lift the hood.



**⚠ WARNING**

■ **Pre-driving check**

Check that the hood is fully closed and locked. If the hood is not locked properly, it may open while the vehicle is in motion and cause an accident, which may result in death or serious injury.

### Positioning a floor jack

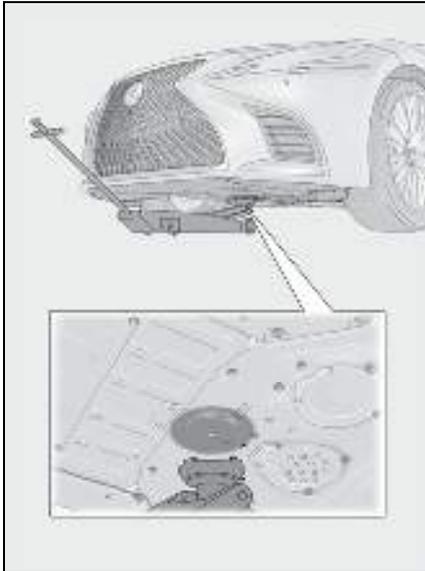
When using a floor jack, follow the instructions in the manual provided with the jack and perform the operation safely.

When raising your vehicle with a floor jack, position the jack correctly. Improper placement may damage your vehicle or cause injury.

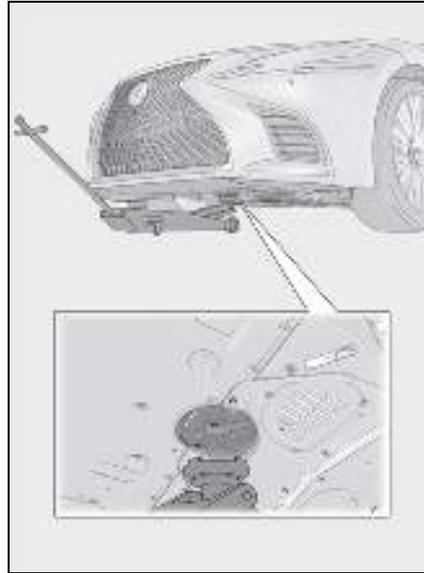
### Location of the jack point

#### ■ Front

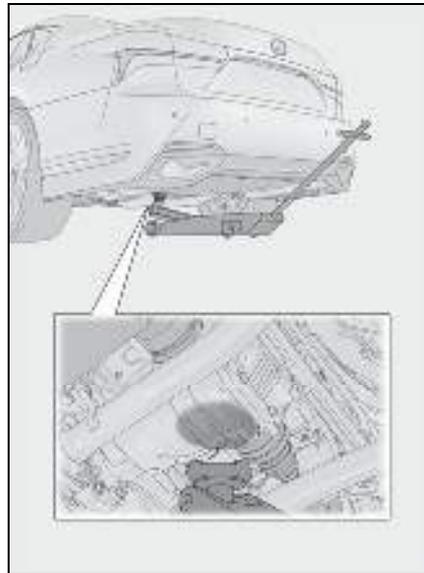
##### ▶ 2WD models



##### ▶ AWD models



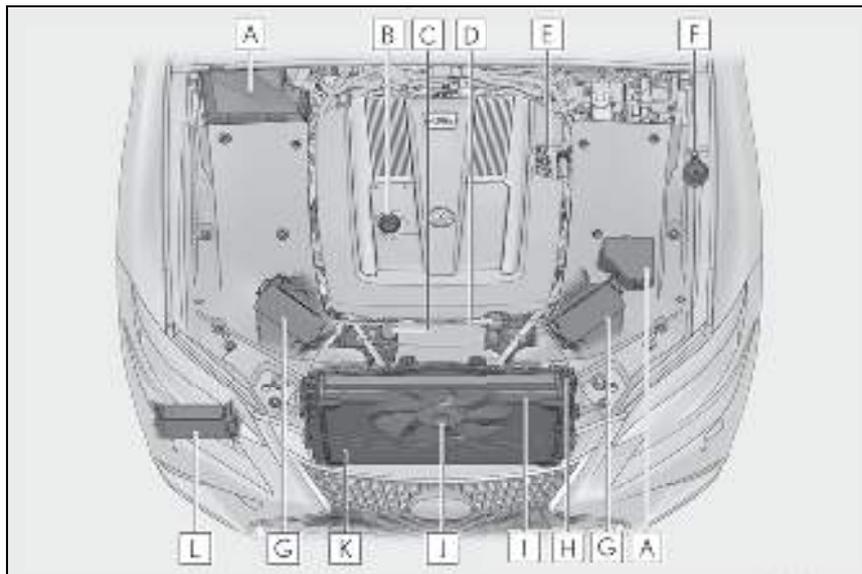
#### ■ Rear



## Engine compartment

### Components

► LS500



- A** Fuse boxes (→P.505)
- B** Engine oil filler cap (→P.476)
- C** Engine coolant reservoir (→P.478)
- D** Intercooler coolant reservoir (→P.478)
- E** Engine oil level dipstick (→P.475)
- F** Washer fluid tank (→P.479)
- G** Air cleaners (→P.480)
- H** Radiator (→P.479)
- I** Intercooler radiator (→P.479)
- J** Electric cooling fan
- K** Condenser (→P.479)
- L** Intercooler sub radiator (→P.479)

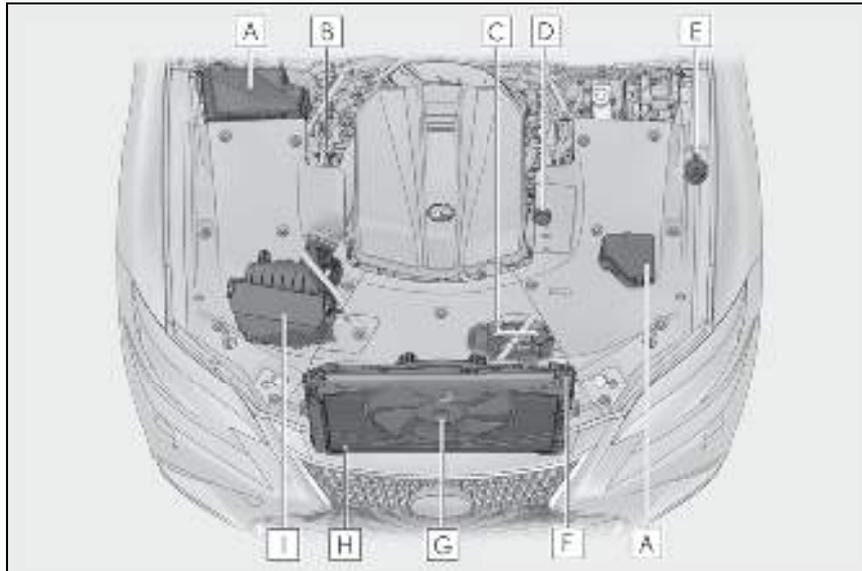
For AWD models:

The engine oil level dipstick is located on the opposite side of the engine.

For right-hand drive vehicles:

The fuse box near the windshield is located on the opposite side of the engine compartment.

► LS350



- A** Fuse boxes (→P.505)
- B** Engine oil level dipstick (→P.475)
- C** Engine coolant reservoir (→P.478)
- D** Engine oil filler cap (→P.476)
- E** Washer fluid tank (→P.479)
- F** Radiator (→P.479)
- G** Electric cooling fan
- H** Condenser (→P.479)
- I** Air cleaner (→P.480)

For right-hand drive vehicles:

The fuse box near the windshield is located on the opposite side of the engine compartment.

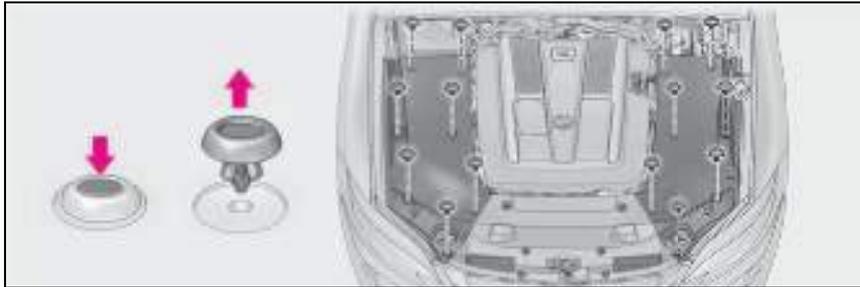
■ **Battery**

→P.482

### Engine compartment cover

#### ■ Removing the engine compartment cover

##### ▶ Outside (LS500)



##### ▶ Outside (LS350)



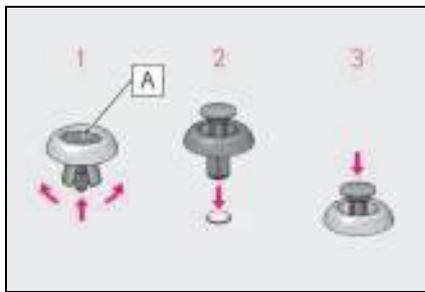
##### ▶ Front (LS500)



► Front (LS350)



■ Installing the clips



- 1 Push up center portion **A**
- 2 Insert
- 3 Press

 NOTICE

■ Checking the engine compartment cover after installation

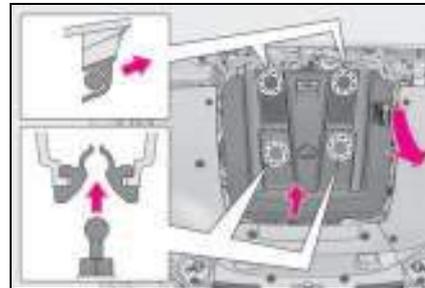
Make sure that the cover is securely installed in its original position.

**Engine cover**

■ Removing the engine cover

► LS500

Lift the front of the engine cover straight up and then pull it forward.

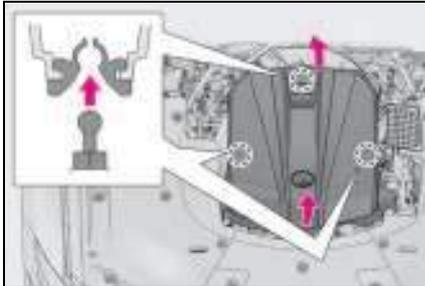


► LS350

- 1 Push the tab in and open the engine compartment cover.



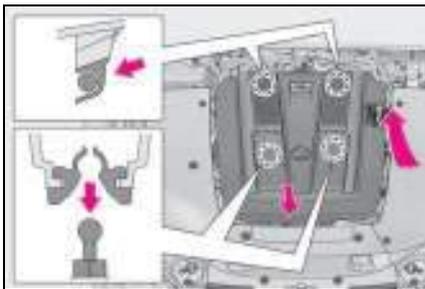
2 Remove the engine cover.



■ Installing the engine cover

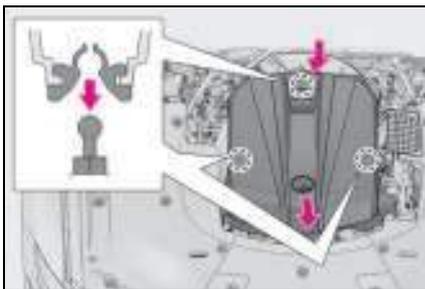
► LS500

Engage the claws of the engine cover to install it.



► LS350

1 Install the engine cover.



2 Install the engine compartment cover.

⚠ NOTICE

■ Checking the engine cover after installation

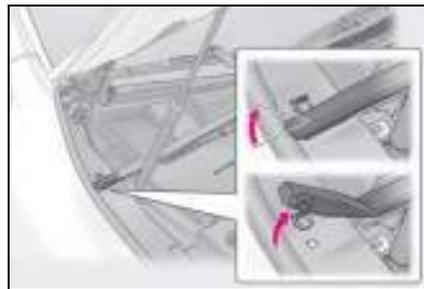
Make sure that the cover is securely installed in its original position.

Service cover

■ Removing the service cover

1 Pull up the passenger side end of the rubber strip to disengage it from the vehicle body.

► Left-hand drive vehicles



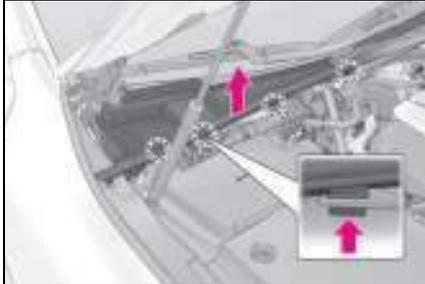
► Right-hand drive vehicles



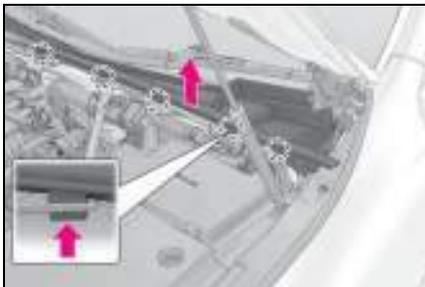
2 Remove the service cover.

Push the tabs and lift away the service cover.

## ▶ Left-hand drive vehicles



## ▶ Right-hand drive vehicles

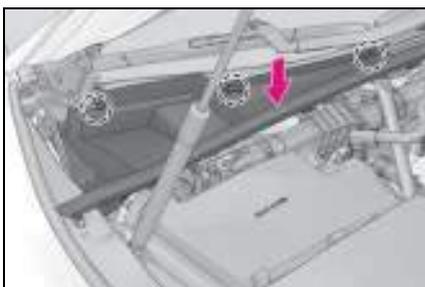


## ■ Installing the service cover

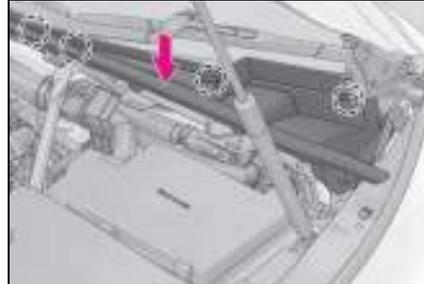
## 1 Install the service cover.

Make sure to engage the claws on the windshield side of the service cover when installing the service cover.

## ▶ Left-hand drive vehicles



## ▶ Right-hand drive vehicles



## 2 Engage the rubber strip to the vehicle body.

## ⚠ NOTICE

## ■ Checking the service cover after installation

Make sure that the cover is securely installed in its original position.

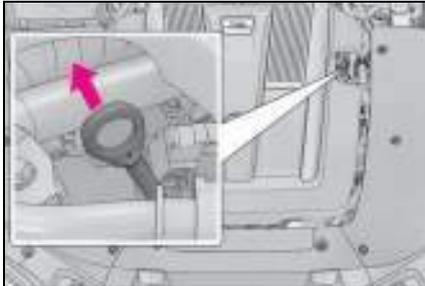
## ■ Checking and adding the engine oil

With the engine at operating temperature and turned off, check the oil level on the dipstick.

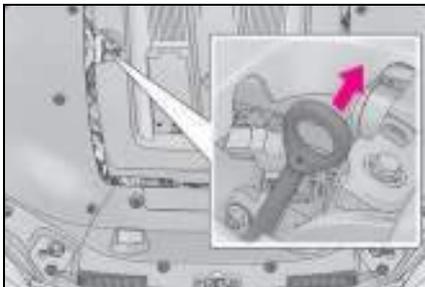
## ■ Checking the engine oil

- 1 Park the vehicle on level ground. After warming up the engine and turning it off, wait more than 5 minutes for the oil to drain back into the bottom of the engine.
- 2 Holding a rag under the end, pull the dipstick out.

▶ LS500 (2WD models)



▶ LS500 (AWD models)

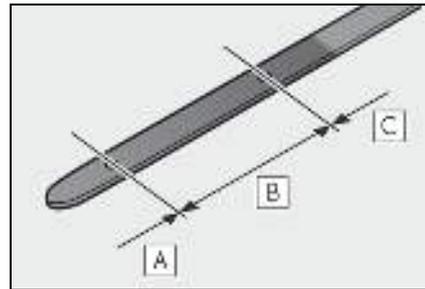


▶ LS350



- 3 Wipe the dipstick clean.
- 4 Reinsert the dipstick fully.

- 5 Holding a rag under the end, pull the dipstick out and check the oil level.



- A Low
- B Normal
- C Excessive

The shape of the dipstick may differ depending on the type of vehicle or engine.

- 6 Wipe the dipstick and reinsert it fully.

■ **Checking the oil type and preparing the item needed**

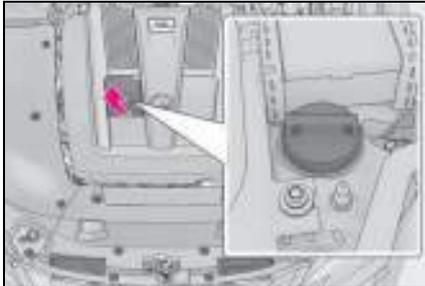
Make sure to check the oil type and prepare the items needed before adding oil.

- Engine oil selection  
→P.557, 558
- Oil quantity (Low → Full)  
1.5 L (1.6 qt., 1.3 Imp. qt.)
- Item  
Clean funnel

■ **Adding engine oil**

If the oil level is below or near the low level mark, add engine oil of the same type as that already in the engine.

## ▶ LS500 (2WD models)



## ▶ LS500 (AWD models)



## ▶ LS350



- 1 Remove the oil filler cap by turning it counterclockwise.
- 2 Add engine oil slowly, checking the dipstick.
- 3 Install the oil filler cap by turning it clockwise.

## ■ Engine oil consumption

A certain amount of engine oil will be con-

sumed while driving. In the following situations, oil consumption may increase, and engine oil may need to be refilled in between oil maintenance intervals.

- When the engine is new, for example directly after purchasing the vehicle or after replacing the engine
- If low quality oil or oil of an inappropriate viscosity is used
- When driving at high engine speeds or with a heavy load, or when driving while accelerating or decelerating frequently
- When leaving the engine idling for a long time, or when driving frequently through heavy traffic

## ■ After changing the engine oil

The engine oil maintenance data should be reset. Perform the following procedures:

- 1 Press **◀** or **▶** of the meter control switch to select .
- 2 Press **▲** or **▼** to select "Vehicle Settings" and then press **OK**.
- 3 Press **▲** or **▼** to select "Oil Maintenance" and then press **OK**.
- 4 Press **▲** or **▼** to select "Yes" and then press **OK**.

A message will be displayed on the multi-information display when the reset procedure has been completed.

▲ **WARNING**

## ■ Used engine oil

- Used engine oil contains potentially harmful contaminants which may cause skin disorders such as inflammation and skin cancer, so care should be taken to avoid prolonged and repeated contact. To remove used engine oil from your skin, wash thoroughly with soap and water.

**⚠ WARNING**

- Dispose of used oil and filters only in a safe and acceptable manner. Do not dispose of used oil and filters in household trash, in sewers or onto the ground. Call your Lexus dealer, service station or auto parts store for information concerning recycling or disposal.
- Do not leave used engine oil within the reach of children.

**⚠ NOTICE**

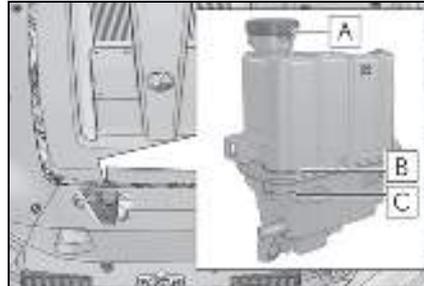
- **To prevent serious engine damage**  
Check the oil level on a regular basis.
- **When replacing the engine oil**
  - Be careful not to spill engine oil on the vehicle components.
  - Avoid overfilling, or the engine could be damaged.
  - Check the oil level on the dipstick every time you refill the vehicle.
  - Be sure the engine oil filler cap is properly tightened.

**Checking the coolant**

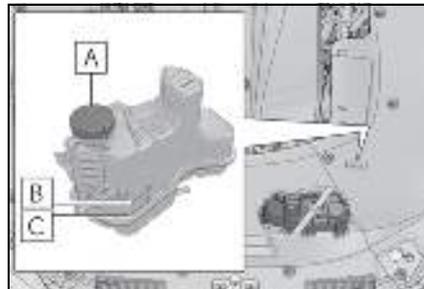
■ **Engine coolant reservoir**

The coolant level is satisfactory if it is between the "F" and "L" lines on the reservoir when the engine is cold.

▶ **LS500**



▶ **LS350**



**A** Reservoir cap

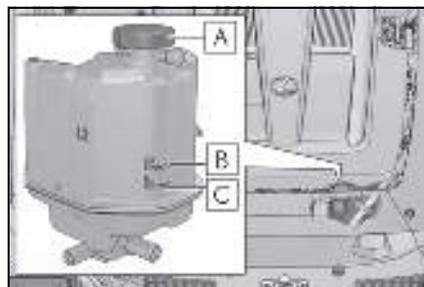
**B** "F" line

**C** "L" line

If the level is on or below the "L" line, add coolant up to the "F" line. (→P.547)

■ **Intercooler coolant reservoir (LS500)**

The coolant level is satisfactory if it is between the "F" and "L" lines on the reservoir when the engine is cold.



**A** Reservoir cap

**B** "F" line

**C** "L" line

If the level is on or below the "L" line, add coolant up to the "F" line. (→P.547)

#### ■ Coolant selection

Only use "Toyota Super Long Life Coolant" or a similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology.

"Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water. (Minimum temperature: -35°C [-31°F])

For more details about coolant, contact your Lexus dealer.

#### ■ If the coolant level drops within a short time of replenishing

Visually check the radiator, hoses, engine coolant reservoir caps, drain cock and water pump.

If you cannot find a leak, have your Lexus dealer test the cap and check for leaks in the cooling system.

#### WARNING

##### ■ When the engine is hot

LS500: Do not remove the engine coolant reservoir cap, the intercooler coolant reservoir cap and the coolant inlet cap. (→P.550)

LS350: Do not remove the engine coolant reservoir cap and the coolant inlet cap. (→P.550)

The cooling system may be under pressure and may spray hot coolant if the cap is removed, causing serious injuries, such as burns.

#### NOTICE

##### ■ When adding coolant

Coolant is neither plain water nor straight antifreeze. The correct mixture of water and antifreeze must be used to provide proper lubrication, corrosion protection and cooling. Be sure to read the antifreeze or coolant label.

##### ■ If you spill coolant

Be sure to wash it off with water to prevent it from damaging parts or paint.

#### Checking the radiator, condenser, intercooler radiator (if equipped) and intercooler sub radiator (if equipped)

Check the radiator, condenser, intercooler radiator and intercooler sub radiator and clear away any foreign objects. If either of the above parts is extremely dirty or you are not sure of their condition, have your vehicle inspected by your Lexus dealer.

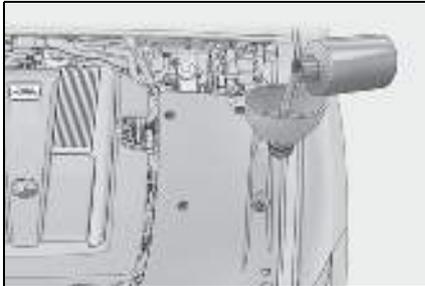
#### WARNING

##### ■ When the engine is hot

Do not touch the radiator, condenser, intercooler radiator or intercooler sub radiator as they may be hot and cause serious injuries, such as burns.

#### Adding the washer fluid

If any washer does not work or the warning message appears on the multi-information display, the washer tank may be empty. Add washer fluid.



**⚠ WARNING**

■ **When adding washer fluid**

Do not add washer fluid when the engine is hot or running as washer fluid contains alcohol and may catch fire if spilled on the engine, etc.

**⚠ NOTICE**

■ **Do not use any fluid other than washer fluid**

Do not use soapy water or engine anti-freeze instead of washer fluid. Doing so may cause streaking on the vehicle's painted surfaces, as well as damaging the pump leading to problems of the washer fluid not spraying.

■ **Diluting washer fluid**

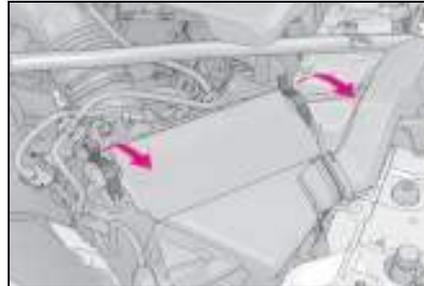
Dilute washer fluid with water as necessary. Refer to the freezing temperatures listed on the label of the washer fluid bottle.

**Checking the air cleaner filter**

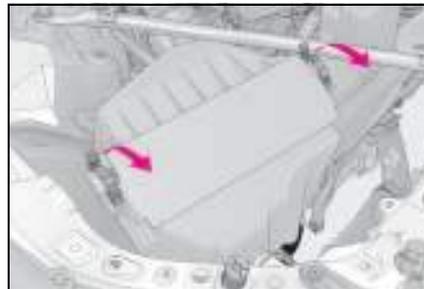
Check the air cleaner filter as follows:

- 1 Remove the engine compartment cover. (→P.472)
- 2 Release the clips.

▶ LS500



▶ LS350

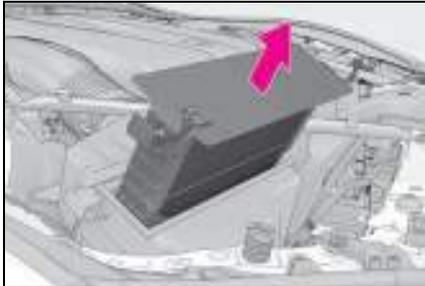


3 Lift the filter case.

▶ LS500



## ▶ LS350



4 Take out the air cleaner filter.

## ▶ LS500



## ▶ LS350



Inspect the outer surface of the filter, and replace the filter if it is extremely dirty. If the filter is only moderately dusty, use compressed air to blow dust out of the filter.

**⚠ WARNING**

■ **To prevent inhaling dust**

Wear a respirator when using compressed air to clean the air cleaner filter.

**⚠ NOTICE**

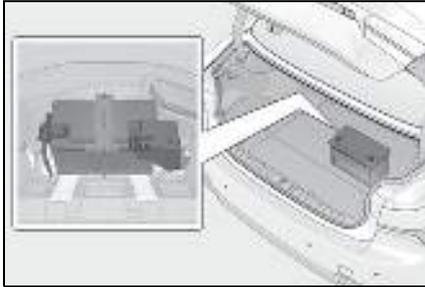
■ **To prevent damaging the engine**

Do not drive with the air cleaner filter removed. Doing so causes excessive engine wear.

## Battery

### Location

The battery is located in the trunk under the luggage mat.



Removing the luggage mat: →P.429

### ■ Before recharging

When recharging, the battery produces hydrogen gas which is flammable and explosive. Therefore, observe the following precautions before recharging:

- If recharging with the battery installed on the vehicle, be sure to disconnect the ground cable.
- Make sure the charger is off when connecting and disconnecting the charger cables to the battery.

### ■ After recharging/reconnecting the battery

- Unlocking the doors using the smart entry & start system may not be possible immediately after reconnecting the battery. If this happens, use the wireless remote control or the mechanical key to lock/unlock the doors.
- Start the engine with the engine switch in ACCESSORY mode. The engine may not start with the engine switch turned off. However, the engine will operate normally from the second attempt.
- The engine switch mode is recorded by the vehicle. If the battery is reconnected, the vehicle will return the engine switch

mode to the status it was in before the battery was disconnected. Make sure to turn off the engine switch before disconnecting the battery. Take extra care when connecting the battery if the engine switch mode prior to discharge is unknown.

If the system will not start even after multiple attempts, contact your Lexus dealer.

### ⚠ WARNING

#### ■ Chemicals in the battery

The battery contains poisonous and corrosive sulfuric acid and may produce hydrogen gas which is flammable and explosive. To reduce the risk of death or serious injury, take the following precautions while working on or near the battery:

- Do not cause sparks by touching the battery terminals with tools.
- Do not smoke or light a match near the battery.
- Avoid contact with eyes, skin and clothes.
- Never inhale or swallow electrolyte.
- Wear protective safety glasses when working near the battery.
- Keep children away from the battery.

#### ■ When there is insufficient battery fluid (vehicles with Stop & Start System)

Do not use if there is insufficient fluid in the battery. There is a possible danger that the battery may explode.

#### ■ Where to safely charge the battery

Always charge the battery in an open area. Do not charge the battery in a garage or closed room where there is insufficient ventilation.

**⚠ WARNING**

■ **Emergency measures regarding electrolyte**

- If electrolyte gets in your eyes  
Flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while traveling to the nearest medical facility.
- If electrolyte gets on your skin  
Wash the affected area thoroughly. If you feel pain or burning, get medical attention immediately.
- If electrolyte gets on your clothes  
It can soak through clothing on to your skin. Immediately take off the clothing and follow the procedure above if necessary.
- If you accidentally swallow electrolyte  
Drink a large quantity of water or milk. Get emergency medical attention immediately.

■ **When replacing the battery**  
Use a battery designed for this vehicle. Failure to do so may cause gas (hydrogen) to enter the passenger compartment, causing a fire or explosion.  
For replacement of the battery, contact your Lexus dealer.

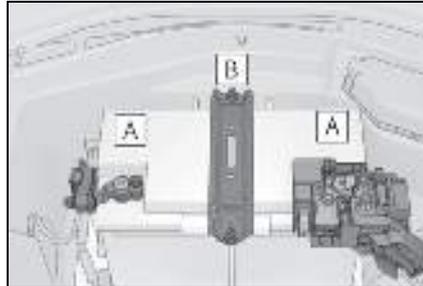
**⚠ NOTICE**

■ **When recharging the battery**  
Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.

**Exterior**

Make sure that the battery terminals are not corroded and that there are no loose connections, cracks, or loose

clamps.



- A** Terminals
- B** Hold-down clamp

**Caution symbols**

The meanings of each caution symbol on the top of the battery are as follows:

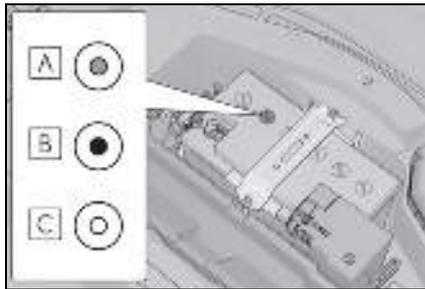
	No smoking, no naked flames, no sparks
	Battery acid
	Shield eyes
	Note operating instructions
	Keep away from children
	Explosive gas

**Checking the battery condition**

Lexus dealer.

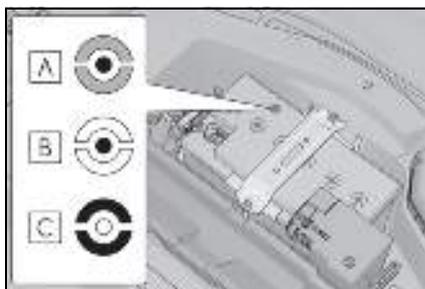
Check the battery condition by indicator color.

► Type A



- A** Blue: Good condition
- B** Red: Charging is necessary.  
Have the vehicle inspected by your Lexus dealer.
- C** Clear: Replacement is necessary.  
Have the battery checked by your Lexus dealer.

► Type B



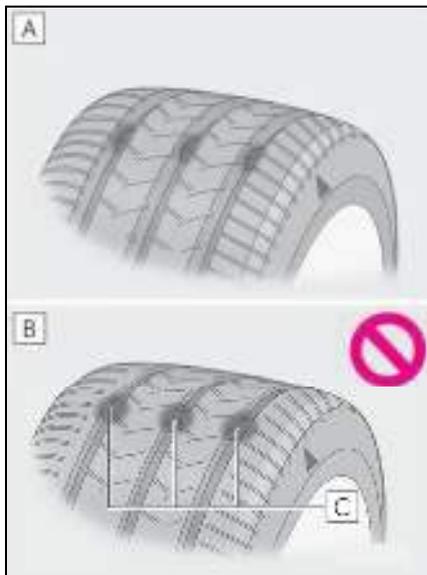
- A** Blue: Good condition
- B** White: Charging is necessary.  
Have the vehicle inspected by your Lexus dealer.
- C** Red: Not working properly.  
Have the battery checked by your

**Tires**

Replace or rotate tires in accordance with maintenance schedules and treadwear.

**Checking tires**

Check if the treadwear indicators are showing on the tires. Also check the tires for uneven wear, such as excessive wear on one side of the tread.



- A** New tread
- B** Worn tread
- C** Treadwear indicator

The location of treadwear indicators is shown by a "TWI" or "▲" mark, etc., molded into the sidewall of each tire. Replace the tires if the treadwear indicators are showing on a tire.

**When to replace your vehicle's tires**

Tires should be replaced if:

- The treadwear indicators are showing on a tire.
- You have tire damage such as cuts, splits, cracks deep enough to expose the fabric, and bulges indicating internal damage
- A tire goes flat repeatedly or cannot be properly repaired due to the size or location of a cut or other damage

If you are not sure, consult with your Lexus dealer.

**Tire life**

Any tire over 6 years old must be checked by a qualified technician even if it has seldom or never been used or damage is not obvious.

**If the tread on snow tires wears down below 4 mm (0.16 in.)**

The effectiveness of the tires as snow tires is lost.

**WARNING**

**When inspecting or replacing tires**

Observe the following precautions to prevent accidents. Failure to do so may cause damage to parts of the drive train as well as dangerous handling characteristics, which may lead to an accident resulting in death or serious injury.

- Do not mix tires of different makes, models or tread patterns. Also, do not mix tires of remarkably different treadwear.
- Do not use tire sizes other than those recommended by Lexus.
- Do not mix differently constructed tires (radial, bias-belted or bias-ply tires).
- Do not mix summer, all season and snow tires.

**⚠ WARNING**

- Do not use tires that have been used on another vehicle. Do not use tires if you do not know how they were used previously.

**⚠ NOTICE**

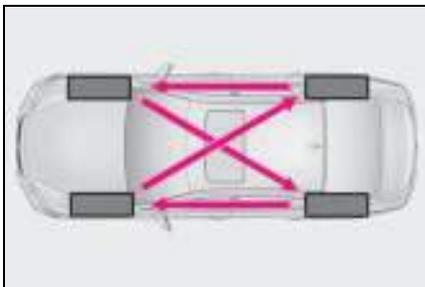
**■ Driving on rough roads**

Take particular care when driving on roads with loose surfaces or potholes. These conditions may cause losses in tire inflation pressure, reducing the cushioning ability of the tires. In addition, driving on rough roads may cause damage to the tires themselves, as well as the vehicle's wheels and body.

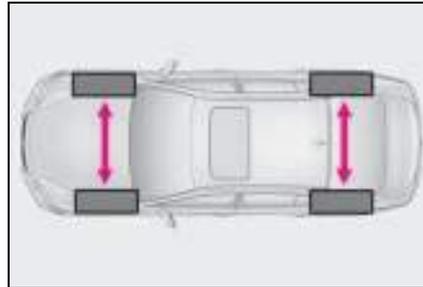
**Tire rotation**

Rotate the tires in the order shown.

- ▶ Vehicles with front and rear tires of the same size



- ▶ Vehicles with front and rear tires of differing sizes



To equalize tire wear and help extend tire life, Lexus recommends that tire rotation is carried out approximately every 10000 km (6000 miles) for 2WD models or 5000 km (3000 miles) for AWD models.

Do not fail to initialize the tire pressure warning system after tire rotation.

**Run-flat tires**

When run-flat tires are installed, the vehicle can be driven for a maximum of 160 km (100 miles) at a speed below 80 km/h (50 mph) after any tire goes flat. (However, the vehicle speed may not increase to near 80 km/h [50 mph] depending on weather or driving conditions.)

A run-flat tire has a  mark on the side wall.

Make sure to replace the flat tire before the vehicle has been driven for near 160 km (100 miles). Also, do not use a repaired tire.

**■ Run-flat tires**

- The run-flat tires are for only this vehicle. Do not use the tires on other vehicles.
- Do not mix run-flat tires and normal tires.

- If non-genuine Lexus wheels are used, it may be impossible to sufficiently demonstrate the performance of run-flat tires.

### Tire pressure warning system

Your vehicle is equipped with a tire pressure warning system that uses tire pressure warning valves and transmitters to detect low tire inflation pressure before serious problems arise.

- The tire pressure detected by the tire pressure warning system can be displayed on the multi-information display. (→P.118)



- If the tire pressure drops below a predetermined level, the driver is warned by a screen display and a warning light. (→P.525)



### Routine tire inflation pressure checks

The tire pressure warning system does not replace routine tire inflation pressure

checks. Make sure to check tire inflation pressure as part of your routine of daily vehicle checks.

### Tire inflation pressure

- It may take a few minutes to display the tire inflation pressure after the engine switch is turned to IGNITION ON mode. It may also take a few minutes to display the tire inflation pressure after inflation pressure has been adjusted.
- Tire inflation pressure changes with temperature. The displayed values may also be different from the values measured using a tire pressure gauge.

### Situations in which the tire pressure warning system may not operate properly

- In the following cases, the tire pressure warning system may not operate properly.
  - If non-genuine Lexus wheels are used.
  - If a tire has been replaced with a tire that is not an OE (Original Equipment) tire.
  - If a tire has been replaced with a tire that is not of the specified size.
  - If tire chains, etc. are installed.
  - An auxiliary-supported run-flat tire is equipped.
  - If a window tint that affects the radio wave signals is installed.
  - If there is a lot of snow or ice on the vehicle, particularly around the wheels or wheel housings.
  - If the tire inflation pressure is much higher than the specified level.
  - If wheels not equipped with tire pressure warning valves and transmitter are used.
  - If the ID code on the tire pressure warning valves and transmitters is not registered in the tire pressure warning computer.
- Performance may be affected in the following situations.
  - When driving near a TV tower, electric power plant, gas station, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
  - When carrying a portable radio, cellular phone, cordless phone or other wireless

communication device

If tire position information is not correctly displayed due to the radio wave conditions, the display may be corrected by changing the location of the vehicle as the radio wave conditions may change.

- When the vehicle is stopped, the time taken for the warning to start or turn off may be longer.
- When the inflation pressure of a tire drops rapidly, for example when a tire has

■ **Tire pressure warning system certification**

- ▶ For vehicles sold in Indonesia

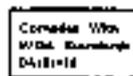


burst, the warning may not operate.

■ **Warning performance of the tire pressure warning system**

The warning of the tire pressure warning system will change in accordance with driving conditions. For this reason, the system may give a warning even if the tire pressure does not reach a low enough level, or if the pressure is higher than the pressure that was adjusted to when the system was initialized.

- ▶ For vehicles sold in Singapore



## ▶ For vehicles sold in Taiwan

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

## ▶ For vehicles sold in Korea

Identification Number: MSIP-CRM-PCX-PMV-C215

Equipment Name (Model Number): 특정소출력무선기기(PMV-C215)

Manufactured date: See product

Applicant: Pacific Industrial Co., Ltd.

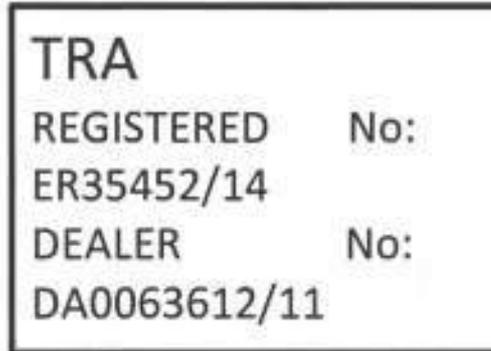
Manufacturer: Pacific Industrial Co., Ltd.

Country of Origin: Japan

## ▶ For vehicles sold in Vietnam



- ▶ For vehicles sold in United Arab Emirates



- ▶ For vehicles sold in Jordan

Type approval No.: TRC/LPD/2014/249

- ▶ For vehicles sold in Argentina



- ▶ For vehicles sold in Brazil



"Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário."

- ▶ For vehicles sold in South Africa

TPMS (Tire Pressure Monitoring System) Transmitter conforms to the requirement of ICASA.



- ▶ For vehicles sold in Morocco

AGREE PAR L' ANRT MAROC  
 Numéro d' agrément :MR 10126 ANRT 2015  
 Date d' agrément :02/03/2015

- ▶ For vehicles sold in Paraguay



NR: 2018-07-I-000350

Name and Address of local dealer  
 Toyotoshi S.A,  
 Av. Mariscal López esq. Victor Cáceres,  
 San Lorenzo, Central, Paraguay

#### Installing tire pressure warning valves and transmitters

When replacing the tires or wheels, the tire pressure warning valve and transmitters must be installed to the wheels which will be installed to the vehicle.

When new tire pressure warning valves and transmitters are installed, new ID codes must be registered in the tire pressure warning computer and the tire pressure warning system must be initialized. (→P.494)

#### ■ Replacing tires and wheels

If the ID codes of the tire pressure warning valve and transmitters are not registered, the tire pressure warning system will not work properly. In this case, after driving for about 10 minutes, the tire pressure warning light will blink for approximately 1 minute and then illuminate to indicate a system malfunction.

 NOTICE

- **Repairing or replacing tires, wheels, tire pressure warning valves, transmitters and tire valve caps**
- When removing or fitting the wheels, tires or the tire pressure warning valves and transmitters, contact your Lexus dealer as the tire pressure warning valves and transmitters may be damaged if not handled correctly.
- Make sure to install the tire valve caps. If the tire valve caps are not installed, water may enter the valves of the tire pressure warning valve and transmitters and the valves may become stuck.
- When replacing tire valve caps, do not use tire valve caps other than those specified. The cap may become stuck.

**Initializing the tire pressure warning system**

- **The tire pressure warning system must be initialized in the following circumstances:**
  - When the tire inflation pressure is changed such as when changing traveling speed or load weight.
  - When the tire inflation pressure is changed such as when the tire size is changed.
  - When rotating the tires.
  - After performing the transmitter ID code registration procedure. (→P.494)

When the tire pressure warning system is initialized, the current tire inflation pressure is set as the benchmark pressure.

■ **How to initialize the tire pressure warning system**

- 1 Park the vehicle in a safe place, turn the engine switch off and wait 20 minutes or more.

The initialization procedure cannot be started while the vehicle is moving.

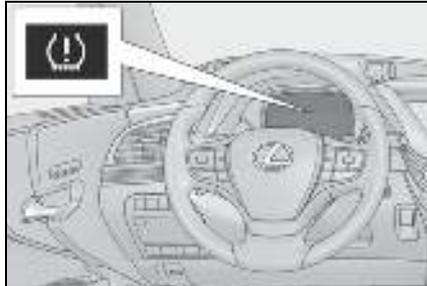
- 2 Adjust the tire inflation pressure to the specified cold tire inflation pressure level.

Make sure to adjust the tire pressure to the specified cold tire inflation pressure level. The tire pressure warning system will operate based on this pressure level.

- 3 Start the engine.
- 4 Press  or  of the meter control switch to select .
- 5 Press  or  to select "Vehicle Settings" and then press .
- 6 Press  or  to select "TPWS" and then press .
- 7 Press  or  to select "Set Pressure". Then press and hold  until the tire pressure warning light blinks 3 times.

Then a message will be displayed on the multi-information display. "---" will be displayed on the multi-information display for the inflation pressure of each tire while initialization is being per-

formed.



- 8** Drive straight (with occasional left and right turns) at approximately 40 km/h (25 mph) or more for approximately 10 to 30 minutes.

Initialization is complete when the position of each tire is determined and the inflation pressure of each tire is displayed on the multi-information display.

Initialization may take longer than normal to complete if the vehicle speed cannot be maintained at approximately 40 km/h (25 mph) or more. If initialization cannot be completed after driving for 1 hour or more, park the vehicle in a safe place, turn the engine switch off and wait 20 minutes or more before performing the driving procedure again. (→P.493)

#### ■ Initialization procedure

- Make sure to perform the initialization procedure after adjusting the tire inflation pressure.  
Also, make sure the tires are cold before performing the initialization procedure or adjusting the tire inflation pressure.
  - If the engine switch is turned off during initialization, it is not necessary to restart the initialization procedure from the beginning as it will begin automatically when the engine switch is turned back to IGNITION ON mode.
  - If initialization has accidentally been started when it is not necessary, adjust the tire inflation pressure to the specified level when the tires are cold and then perform the initialization procedure again.
- While the position of each tire is being determined and the inflation pressures are not being displayed on the multi-information display, if the inflation pressure of a tire drops, the tire pressure warning light will come on.
- If the tire pressure warning system is not initialized properly
- In the following situations, initialization may take longer than usual to be completed or may not be possible. (Usually, the vehicle will need to be driven for approximately 10 to 30 minutes to complete initialization.) If initialization is not complete after driving approximately 30 minutes, continue driving for a while.
    - If the vehicle is driven on an unpaved road, it may take longer to complete initialization.
    - If the vehicle is backed up while performing initialization, data collected during initialization will be cleared and it will take longer than normal to complete.
    - If the vehicle is driven in heavy traffic or another situation where other vehicles are driven close by, it may take time for the system to recognize the tire pressure warning valve and transmitters of your vehicle over those of other vehicles.
- If initialization is not complete after driving for approximately 1 hour, park the vehicle in a safe place for approximately 20 minutes and then drive the vehicle again.
- In the following situations, initialization will not be started or was not completed properly and the system will not operate properly. Perform the initialization procedure again.
    - If, when attempting to start initialization, the tire pressure warning light does not blink 3 times.
    - If, when the vehicle has been driven for about 20 minutes after performing initialization, the tire pressure warning light blinks for approximately 1 minute and then illuminates.
  - If initialization cannot be completed after performing the above procedure, contact your Lexus dealer.

**⚠ WARNING****■ When initializing the tire pressure warning system**

Do not initialize the tire pressure warning system without first adjusting the tire inflation pressure to the specified level. Otherwise, the tire pressure warning light may not come on even if the tire inflation pressure is low, or it may come on when the tire inflation pressure is actually normal.

**Registering ID codes**

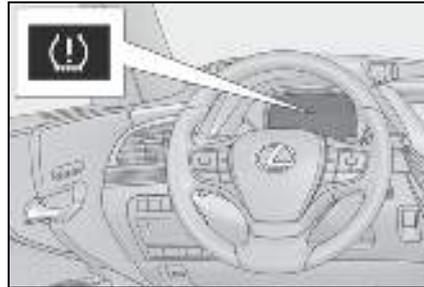
Every tire pressure warning valve and transmitter has a unique ID code. When replacing a tire pressure warning valve and transmitter, it is necessary to register the ID codes.

The ID codes can be registered on  of the multi-information display.

- 1 Park the vehicle in a safe place, turn the engine switch off, wait 20 minutes or more, and then start the engine.
- 2 Press  or  of the meter control switch to select .
- 3 Press  or  to select "Vehicle Settings" and then press .
- 4 Press  or  to select "TPWS" and then press .
- 5 Press  or  to select "Change Wheel Set". Then press and hold  until the tire pressure warning light blinks slowly 3 times.

Then a message will be displayed on the multi-information display.

When registration is being performed, the tire pressure warning light will blink for approximately 1 minute then illuminate and "---" will be displayed for the inflation pressure of each tire on the multi-information display.



- 6 Drive straight (with occasional left and right turns) at approximately 40 km/h (25 mph) or more for approximately 10 to 30 minutes.

Registration is complete when the tire pressure warning light turns off and the inflation pressure of each tire is displayed on the multi-information display.

Registration may take longer than normal to complete if the vehicle speed cannot be maintained at approximately 40 km/h (25 mph) or more. If registration cannot be completed after driving for 1 hour or more, perform the registration procedure again from the beginning. (→P.495)

After registering the ID codes, make sure to initialize the tire pressure warning system. (→P.492)

**■ When registering ID codes**

- Before performing ID code registration, make sure that no wheels with tire pressure warning valve and transmitters installed are near the vehicle.
- Make sure to initialize the tire pressure warning system after registering the ID codes. If the system is initialized before registering the ID codes, the initialized values will be invalid.
- As the tires will be warm when registra-

tion is completed, make sure to allow the tires to cool before performing initialization.

#### ■ Canceling ID code registration

- To cancel ID code registration after it has been started, turn the engine switch off before driving the vehicle.  
If the vehicle is driven after ID code registration is started, to cancel registration, perform the ID code registration start procedure again and turn the engine switch off before driving.
- If ID code registration has been canceled, the tire pressure warning light will blink for approximately 1 minute when the engine switch is turned to IGNITION ON mode and then illuminate. The tire pressure warning system will be operational when the tire pressure warning light turns off.
- If the warning light does not turn off even after several minutes have elapsed, ID code registration may not have been canceled correctly. To cancel registration, perform the ID code registration start procedure again and then turn the engine switch off before driving.

#### ■ If ID codes are not registered properly

- In the following situations, ID code registration may take longer than usual to be completed or may not be possible. (Usually, the vehicle will need to be driven for approximately 10 to 30 minutes to complete ID code registration.)  
If ID code registration is not complete after driving for approximately 30 minutes, continue driving for a while.
  - If the vehicle is driven on an unpaved road, it may take longer than normal to complete registration.
  - If the vehicle is backed up while performing registration, data collected during registration will be cleared, and it will take longer than normal to complete.
  - If the vehicle is driven in heavy traffic or another situation where other vehicles are driven close by, it may take time for the system to recognize the tire pressure warning valve and transmitters of your vehicle over those of other vehicles.

- If a wheel with a tire pressure warning valve and transmitter installed is inside or near the vehicle, registration of the ID codes for the installed wheels may not be possible.

If ID registration is not complete after driving for approximately 1 hour, park the vehicle in a safe place for approximately 20 minutes and then perform the ID code registration procedure again.

- In the following situations, ID code registration will not be started or was not completed properly and the system will not operate properly. Perform the ID code registration procedure again.
  - If, when attempting to start ID code registration, the tire pressure warning light does not blink slowly 3 times.
  - If, when the vehicle has been driven for about 10 minutes after performing ID code registration, the tire pressure warning light blinks for approximately 1 minute and then illuminates.
- If ID code registration cannot be completed after performing the above procedure, contact your Lexus dealer.

## Replacing the tire

**When raising your vehicle with a jack, position the jack correctly. Improper placement may damage your vehicle or cause injury. If necessary tire replacement seems difficult to perform, contact your Lexus dealer.**

### Before jacking up the vehicle

- Stop the vehicle in a safe place on a hard, flat surface.
- Set the parking brake.
- Shift the shift position to P.
- Disabling the height control. (if equipped) (→P.379)
- Stop the engine.

#### ■ Jack and tools

As your vehicle is equipped with run-flat tires, the following tools for replacing a tire are not included with your vehicle. They can be purchased at your Lexus dealer.

- Wheel nut wrench
- Jack
- Jack handle

#### WARNING

##### ■ Using the tire jack

Observe the following precautions. Improper use of the tire jack may cause the vehicle to suddenly fall off the jack, leading to death or serious injury.

- Do not use the tire jack for any purpose other than replacing tires or installing and removing tire chains.

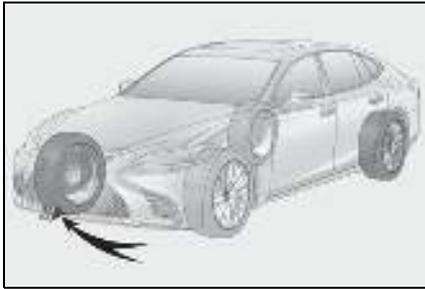
- Do not use other tire jacks for replacing tires on this vehicle.
- Put the jack properly in its jack point.
- Do not put any part of your body under the vehicle while it is supported by the jack.
- Do not start the engine or drive the vehicle while the vehicle is supported by the jack.
- Do not raise the vehicle while someone is inside.
- When raising the vehicle, do not put an object on or under the jack.
- Do not raise the vehicle to a height greater than that required to replace the tire.
- Use a jack stand if it is necessary to get under the vehicle.
- Make sure to disable all functions of the vehicle height control of the electronically modulated air suspension and then stopping the engine. (→P.379)
- When lowering the vehicle, make sure that there is no-one near the vehicle. If there are people nearby, warn them vocally before lowering.

#### ■ Replacing a flat tire for vehicles with power trunk lid

In cases such as when replacing tires, make sure to turn off the trunk opener main switch (→P.149). Failure to do so may cause the trunk lid to operate unintentionally if the power trunk lid switch is accidentally touched, resulting in hands and fingers being caught and injured.

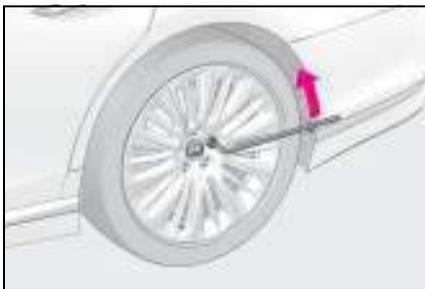
## Removing a tire

- 1 Check the tires.



Tire	Wheel chock positions
Front left-hand side	Behind the rear right-hand side tire
Front right-hand side	Behind the rear left-hand side tire
Rear left-hand side	In front of the front right-hand side tire
Rear right-hand side	In front of the front left-hand side tire

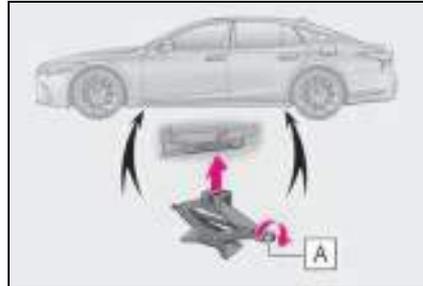
- 2 Slightly loosen the wheel nuts (one turn).



- 3 Turn the tire jack portion **A** by hand until the notch of the jack is in contact with the jack point.

The jack point guides are located under the rocker panel. They indicate the jack

point positions.

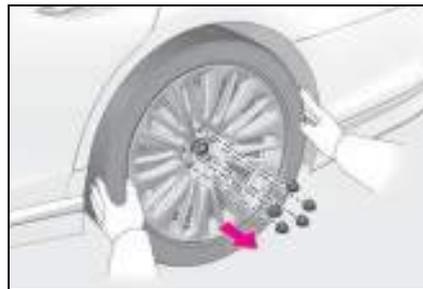


- 4 Raise the vehicle until the tire is slightly raised off the ground.



- 5 Remove all the wheel nuts and the tire.

When resting the tire on the ground, place the tire so that the wheel design faces up to avoid scratching the wheel surface.



**⚠ WARNING**

**■ Replacing a tire**

Do not touch the disc wheels or the area around the brakes immediately after the vehicle has been driven.

After the vehicle has been driven the disc wheels and the area around the brakes will be extremely hot. Touching these areas with hands, feet or other body parts while changing a tire, etc. may result in burns.

**Installing the tire**

- 1 Remove any dirt or foreign matter from the wheel contact surface.

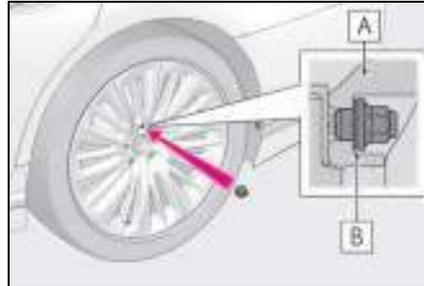
If foreign matter is on the wheel contact surface, the wheel nuts may loosen while the vehicle is in motion, causing the tire to come off.



- 2 Install the tire and loosely tighten each wheel nut by hand by approximately the same amount.

Turn the wheel nuts until the washers come

into contact with the disc wheel.



**A** Disc wheel

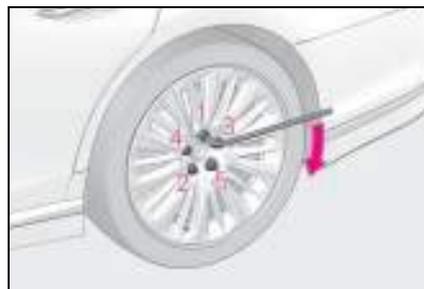
**B** Washer

- 3 Lower the vehicle.



- 4 Firmly tighten each wheel nut two or three times in the order shown in the illustration.

Tightening torque:  
140 N•m (14.3 kgf•m, 103 ft•lbf)



**⚠ WARNING****■ When installing the tire**

Failure to follow these precautions could cause the wheel nuts to loosen and the tire to fall off, resulting in death or serious injury.

- Never use oil or grease on the wheel bolts or wheel nuts. Oil and grease may cause the wheel nuts to be excessively tightened, leading to bolt or disc wheel damage. In addition, the oil or grease can cause the wheel nuts to loosen and the wheel may fall off, causing a serious accident. Remove any oil or grease from the wheel bolts or wheel nuts.
- Have the wheel nuts tightened with a torque wrench to 140 N•m (14.3 kgf•m, 103 ft•lbf) as soon as possible after changing wheels.
- Do not attach a heavily damaged wheel ornament, as it may fly off the wheel while the vehicle is moving.
- When installing a tire, only use wheel nuts that have been specifically designed for that wheel.
- If there are any cracks or deformations in the bolt screws, nut threads or bolt holes of the wheel, have the vehicle inspected by your Lexus dealer.

**⚠ NOTICE****■ Repairing or replacing tires, wheels, tire pressure warning valves, transmitters and tire valve caps**

→P.491

**Tire inflation pressure**

**Make sure to maintain proper tire inflation pressure. Tire inflation pressure should be checked at least once per month. However, Lexus recommends that tire inflation pressure be checked once every two weeks.**

**■ Effects of incorrect tire inflation pressure**

Driving with incorrect tire inflation pressure may result in the following:

- Reduced fuel economy
- Reduced driving comfort and poor handling
- Reduced tire life due to wear
- Reduced safety
- Damage to the drive train

If a tire needs frequent inflating, have it checked by your Lexus dealer.

**■ Instructions for checking tire inflation pressure**

When checking tire inflation pressure, observe the following:

- Check only when the tires are cold. If your vehicle has been parked for at least 3 hours or has not been driven for more than 1.5 km or 1 mile, you will get an accurate cold tire inflation pressure reading.
- Always use a tire pressure gauge. It is difficult to judge if a tire is properly inflated based only on its appearance.
- It is normal for the tire inflation pressure to be higher after driving as heat is generated in the tire. Do not reduce tire inflation pressure after driving.
- Passengers and luggage weight should be placed so that the vehicle is balanced.

**⚠ WARNING****■ Proper inflation is critical to save tire performance**

Keep your tires properly inflated. If the tires are not properly inflated, the following conditions may occur which could lead to an accident resulting in death or serious injury:

- Excessive wear
- Uneven wear
- Poor handling
- Possibility of blowouts resulting from overheated tires
- Air leaking from between tire and wheel
- Wheel deformation and/or tire damage
- Greater possibility of tire damage while driving (due to road hazards, expansion joints, sharp edges in the road, etc.)

**⚠ NOTICE****■ When inspecting and adjusting tire inflation pressure**

Be sure to put the tire valve caps back on. If a valve cap is not installed, dirt or moisture may get into the valve and cause an air leak, resulting in decreased tire inflation pressure.

**Wheels**

**If a wheel is bent, cracked or heavily corroded, it should be replaced. Otherwise, the tire may separate from the wheel or cause a loss of handling control.**

**Wheel selection**

When replacing wheels, care should be taken to ensure that they are equivalent to those removed in load capacity, diameter, rim width and inset\*.

Replacement wheels are available at your Lexus dealer.

\*: Conventionally referred to as offset.

Lexus does not recommend using the following:

- Wheels of different sizes or types
- Used wheels
- Bent wheels that have been straightened

**■ When replacing wheels**

The wheels of your vehicle are equipped with tire pressure warning valves and transmitters that allow the tire pressure warning system to provide advance warning in the event of a loss in tire inflation pressure. Whenever wheels are replaced, the tire pressure warning valves and transmitters must be installed. (→P.491)

**⚠ WARNING****■ When replacing wheels**

- Do not use wheels that are a different size from those recommended in the Owner's Manual, as this may result in a loss of handling control.
- Never use an inner tube in a leaking wheel which is designed for a tubeless tire. Doing so may result in an accident, causing death or serious injury.

**■ Use of defective wheels prohibited**

Do not use cracked or deformed wheels. Doing so could cause the tire to leak air during driving, possibly causing an accident.

**⚠ NOTICE****■ Replacing tire pressure warning valves and transmitters**

- Because tire repair or replacement may affect the tire pressure warning valves and transmitters, make sure to have tires serviced by your Lexus dealer or other qualified service shop. In addition, make sure to purchase your tire pressure warning valves and transmitters at your Lexus dealer.
- Ensure that only genuine Lexus wheels are used on your vehicle. Tire pressure warning valves and transmitters may not work properly with non-genuine wheels.

**Aluminum wheel precautions**

- Use only Lexus wheel nuts and wheel nut wrenches designed for use with your aluminum wheels.
- When rotating, repairing or changing your tires, check that the wheel nuts are still tight after driving 1600

km (1000 miles).

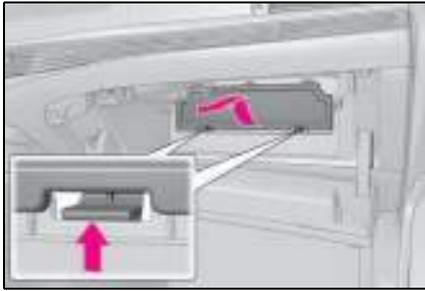
- Be careful not to damage the aluminum wheels when using tire chains.
- Use only Lexus genuine balance weights or equivalent and a plastic or rubber hammer when balancing your wheels.

### Air conditioning filter

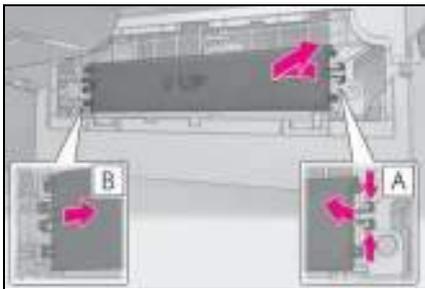
The air conditioning filter must be changed regularly to maintain air conditioning efficiency.

#### Removing the air conditioning filter

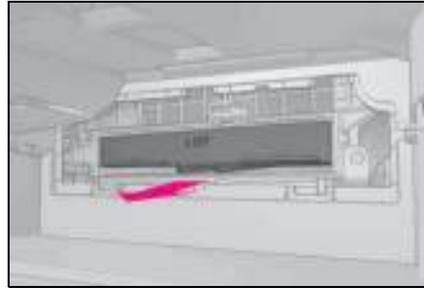
- 1 Turn the engine switch off.
- 2 Open the glove box. Remove the partition. (→P.425)
- 3 Remove the panel.



- 4 Unlock the filter cover (A), pull the filter cover out of the claws (B), and remove the filter cover.

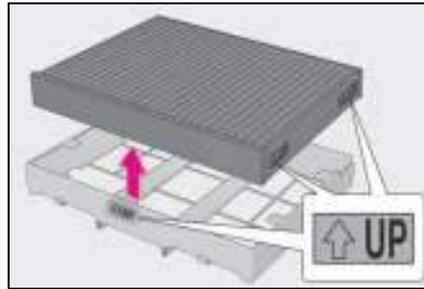


- 5 Remove the filter case.



- 6 Remove the air conditioning filter from the filter case and replace it with a new one.

The “↑ UP” marks shown on the filter and the filter case should be pointing up.



#### ■ Checking interval

Inspect and replace the air conditioning filter according to the maintenance schedule. In dusty areas or areas with heavy traffic flow, early replacement may be required.

#### ■ If air flow from the vents decreases dramatically

The filter may be clogged. Check the filter and replace if necessary.

#### ■ Air conditioning filter with deodorizing function

When fragrances are placed in your vehicle, the deodorizing effect may become significantly weakened in a short period. When an air conditioning odor comes out continuously, replace the air conditioning filter.

#### ■ Rear air conditioning filter (if equipped)

If it is necessary to replace the filter, contact your Lexus dealer.

#### ⚠ NOTICE

##### ■ When using the air conditioning system

Make sure that a filter is always installed. Using the air conditioning system without a filter may cause damage to the system.

##### ■ To prevent damage to the filter cover

When moving the filter cover in the direction of arrow to release the fitting, pay attention not to apply excessive force to the claws. Otherwise, the claws may be damaged.



### Electronic key battery

Replace the battery with a new one if it is depleted.

As the key may be damaged if the following procedure is not performed properly, it is recommended that key battery replacement be performed by your Lexus dealer.

#### ■ If the electronic key battery is depleted

The following symptoms may occur:

- The smart entry & start system and wireless remote control will not function properly.
- The operational range will be reduced.

#### ■ When the card key battery needs to be replaced (if equipped)

The battery for the card key is available only at Lexus dealers. Your Lexus dealer can replace the battery for you.

### Items to prepare

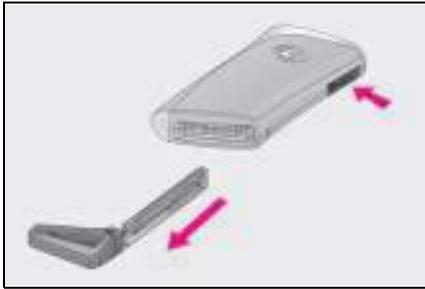
- Flathead screwdriver
- Small flathead screwdriver
- Lithium battery CR2032

#### ■ Use a CR2032 lithium battery

- Batteries can be purchased at your Lexus dealer, local electrical appliance shops or camera stores.
- Replace only with the same or equivalent type recommended by the manufacturer.
- Dispose of used batteries according to local laws.

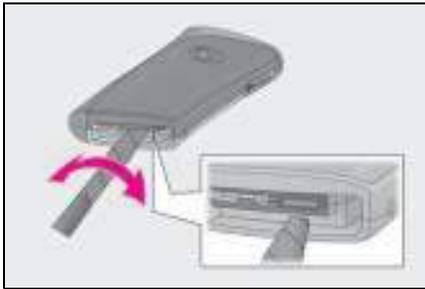
### Replacing the battery

- 1 Take out the mechanical key.



- 2 Remove the cover.

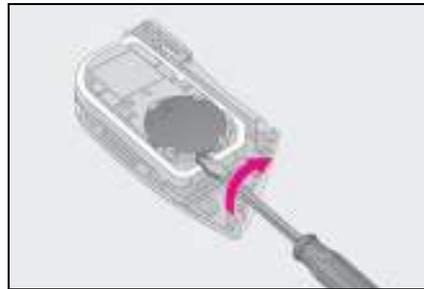
To prevent damage to the key, cover the tip of the flathead screwdriver with a tape.



- 3 Remove the depleted battery.

Insert a new battery with the "+" terminal

facing up.



#### ⚠ WARNING

##### ■ Removed battery and other parts

These parts are small and if swallowed by a child, they can cause choking. Keep away from children. Failure to do so could result in death or serious injury.

#### ⚠ NOTICE

##### ■ When replacing the battery

Use a flathead screwdriver of appropriate size. Applying excessive force may deform or damage the cover.

##### ■ For normal operation after replacing the battery

Observe the following precautions to prevent accidents:

- Always work with dry hands. Moisture may cause the battery to rust.
- Do not touch or move any other component inside the remote control.
- Do not bend either of the battery terminals.

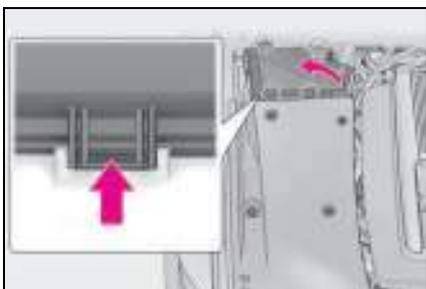
### Checking and replacing fuses

If any of the electrical components do not operate, a fuse may have blown. If this happens, check and replace the fuses as necessary.

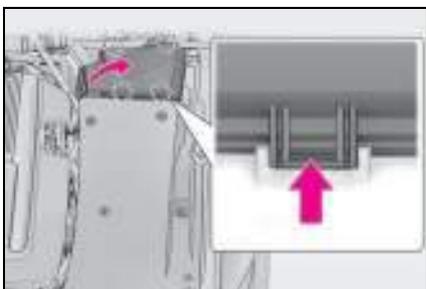
### Checking and replacing fuses

- 1 Turn the engine switch off.
  - 2 Open the fuse box cover.
- ▶ Engine compartment: type A fuse box (LS500)

Left-hand drive vehicles:  
Remove the service cover (→P.474) and push the tabs in and lift the lid off.

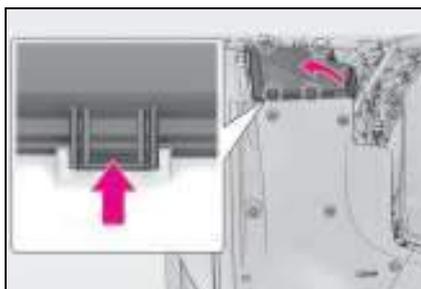


Right-hand drive vehicles:  
Remove the service cover (→P.474) and push the tabs in and lift the lid off.

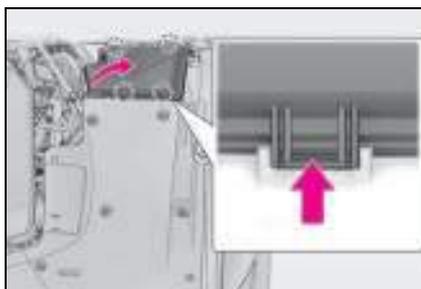


- ▶ Engine compartment: type A fuse box (LS350)

Left-hand drive vehicles:  
Remove the service cover (→P.474) and push the tabs in and lift the lid off.

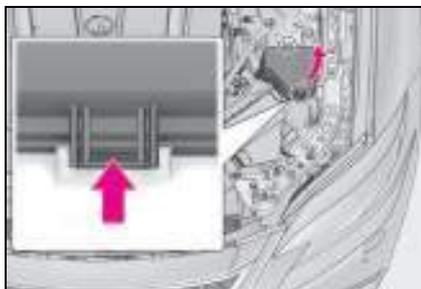


Right-hand drive vehicles:  
Remove the service cover (→P.474) and push the tabs in and lift the lid off.



- ▶ Engine compartment: type B fuse box

Remove the engine compartment cover (→P.472) and push the tabs in and lift the lid off.

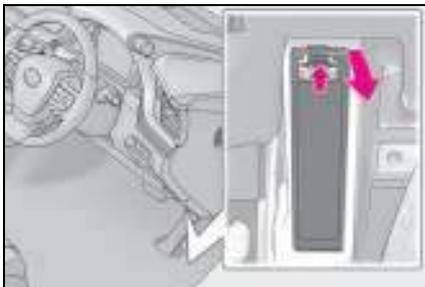


► Driver's side instrument panel

Left-hand drive vehicles:  
Push the tab in and remove the lid.  
Make sure to push the tab in during  
removal or installation.

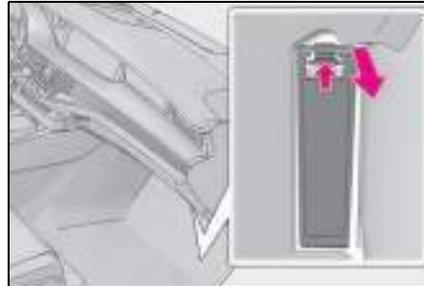


Right-hand drive vehicles:  
Push the tab in and remove the lid.  
Make sure to push the tab in during  
removal or installation.



► Passenger's side instrument panel

Left-hand drive vehicles:  
Push the tab in and remove the lid.  
Make sure to push the tab in during  
removal or installation.

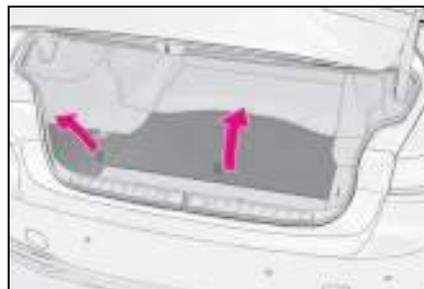


Right-hand drive vehicles:  
Push the tab in and remove the lid.  
Make sure to push the tab in during  
removal or installation.

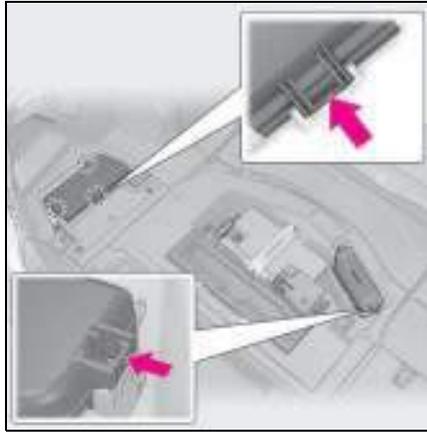


► Trunk

Remove the luggage mat. (→P.429)



Push the tab in and lift the lid off.



- 3** Remove the fuse with the pullout tool.  
Only type A fuse can be removed using the pullout tool.

- Left-hand drive vehicles



- Right-hand drive vehicles

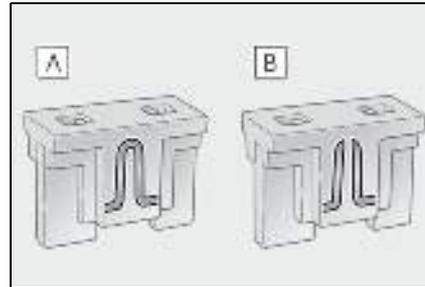


- 4** Check if the fuse is blown.  
Type A and B:

Replace the blown fuse with a new fuse of an appropriate amperage rating. The amperage rating can be found on the fuse box lid.

Type C and D:  
Contact your Lexus dealer.

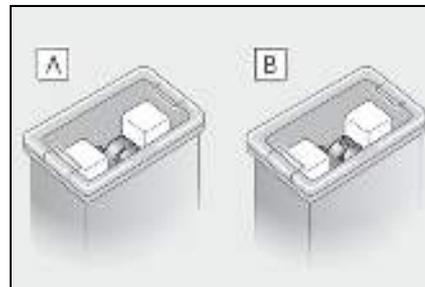
- ▶ Type A



**A** Normal fuse

**B** Blown fuse

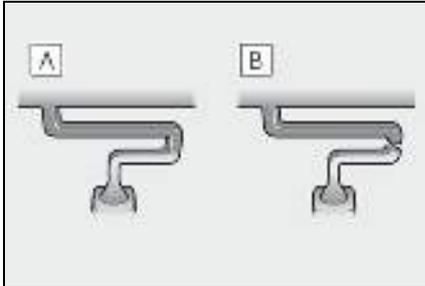
- ▶ Type B



**A** Normal fuse

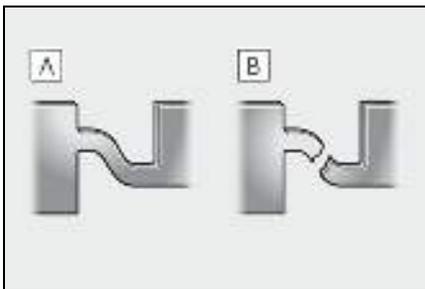
**B** Blown fuse

▶ Type C



- A** Normal fuse
- B** Blown fuse

▶ Type D



- A** Normal fuse
- B** Blown fuse

■ After a fuse is replaced

- When installing the lid, make sure that the tab is installed securely.
- If the lights do not turn on even after the fuse has been replaced, a bulb may need replacement.
- If the replaced fuse blows again, have the vehicle inspected by your Lexus dealer.

■ If there is an overload in a circuit

The fuses are designed to blow, protecting the wiring harness from damage.

**! WARNING**

■ To prevent system breakdowns and vehicle fire

Observe the following precautions. Failure to do so may cause damage to the vehicle, and possibly a fire or injury.

- Never use a fuse of a higher amperage rating than that indicated, or use any other object in place of a fuse.
- Always use a genuine Lexus fuse or equivalent. Never replace a fuse with a wire, even as a temporary fix.
- Do not modify the fuses or fuse boxes.

**! NOTICE**

■ Before replacing fuses

Have the cause of electrical overload determined and repaired by your Lexus dealer as soon as possible.

## Light bulbs

**If any lights burn out, have it replaced by your Lexus dealer.**

### ■ LED Lights

The lights consist of a number of LEDs. If any of the LEDs burn out, take your vehicle to your Lexus dealer to have the light replaced.

### ■ Condensation build-up on the inside of the lens

Temporary condensation build-up on the inside of the headlight lens does not indicate a malfunction. Contact your Lexus dealer for more information in the following situations:

- Large drops of water have built up on the inside of the lens.
- Water has built up inside the headlight.



## When trouble arises

## 7

## 7-1. Essential information

Emergency flashers ..... 512

If your vehicle has to be stopped in  
an emergency..... 512

If the vehicle is trapped in rising  
water..... 513

## 7-2. Steps to take in an emergency

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operate properly ..... 538

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If your vehicle overheats..... 547

If the vehicle becomes stuck  
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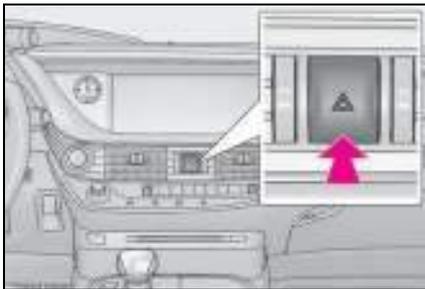
### Emergency flashers

The emergency flashers are used to warn other drivers when the vehicle has to be stopped on the road due to a breakdown, etc.

### Operating instructions

Press the switch to flash all of the turn signal lights.

To turn them off, press the switch once again.



### Emergency flashers

- If the emergency flashers are used for a long time while the engine is not running, the battery may discharge.
- If any of the SRS airbags deploy (inflate) or in the event of a strong rear impact, the emergency flashers will turn on automatically. The emergency flashers will turn off automatically after operating for approximately 20 minutes. To manually turn the emergency flashers off, press the switch twice. (The emergency flashers may not turn on automatically depending on the force of the impact and conditions of the collision.)

### If your vehicle has to be stopped in an emergency

Only in an emergency, such as if it becomes impossible to stop the vehicle in the normal way, stop the vehicle using the following procedure:

### Stopping the vehicle

- 1 Steadily step on the brake pedal with both feet and firmly depress it.

Do not pump the brake pedal repeatedly as this will increase the effort required to slow the vehicle.

- 2 Shift the shift position to N.
  - ▶ If the shift position is shifted to N
- 3 After slowing down, stop the vehicle in a safe place by the road.
- 4 Stop the engine.
  - ▶ If the shift position cannot be shifted to N
- 3 Keep depressing the brake pedal with both feet to reduce vehicle speed as much as possible.
- 4 To stop the engine, press and hold the engine switch for 2 consecutive

seconds or more, or press it briefly 3 times or more in succession.



- 5 Stop the vehicle in a safe place by the road.

**⚠ WARNING**

■ **If the engine has to be turned off while driving**

Power assist for the steering wheel will be lost, making the steering wheel heavier to turn. Decelerate as much as possible before turning off the engine.

**If the vehicle is trapped in rising water**

**In the event the vehicle is submerged in water, remain calm and perform the following.**

- Remove the seat belt first.
- If the door can be opened, open the door and exit the vehicle.
- If the door can not be opened, open the window using the power window switch and exit the vehicle through the window.
- If the window can not be opened using the power window switch, remain calm, wait until the water level inside the vehicle rises to the point that the water pressure inside of the vehicle equals the water pressure outside of the vehicle, and then open the door and exit the vehicle.

**⚠ WARNING**

■ **Using an emergency hammer\* for emergency escape**

The rear window of this vehicle can be shattered by an emergency hammer\* used for emergency escape, however, since the windshield, front side windows and rear side windows are laminated glass they can not be shattered by an emergency hammer\*.

\*: Contact your Lexus dealer or aftermarket accessory manufacturer for further information about an emergency hammer.



**WARNING**

■ **Escaping the vehicle from the window**

There are cases where escaping the vehicle from the window is not possible due to seating position, passenger body type, etc.

When using an emergency hammer, consider your seat location and the size of the window opening to ensure that the opening is accessible and large enough to escape.

### If your vehicle needs to be towed

If towing is necessary, we recommend having your vehicle towed by your Lexus dealer or commercial towing service, using a wheel-lift type truck or flatbed truck.

Use a safety chain system for all towing, and abide by all state/provincial and local laws.

#### WARNING

Observe the following precautions. Failure to do so may result in death or serious injury.

#### ■ When towing the vehicle

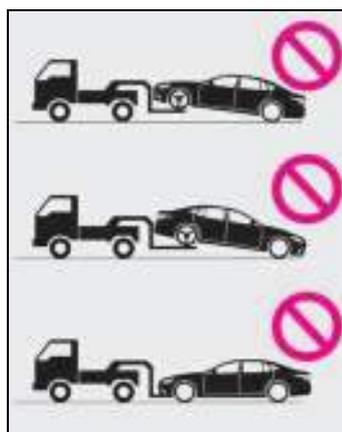
##### ▶ 2WD models

Be sure to transport the vehicle with all four wheels raised off the ground. If the vehicle is towed with the tires contacting the ground, the drivetrain and related parts may be damaged or an accident may occur due to a change in direction of the vehicle.



##### ▶ AWD models

Be sure to transport the vehicle with all four wheels raised off the ground. If the vehicle is towed with the tires contacting the ground, the drivetrain or related parts may be damaged, the vehicle may fly off the truck.



#### ■ While towing

- When towing using cables or chains, avoid sudden starts, etc. which place excessive stress on the towing eyelets, cables or chains. The towing eyelets, cables or chains may become damaged, broken debris may hit people, and cause serious damage.
- Make sure to disable all functions of the vehicle height control of the electronically modulated air suspension. Otherwise, the vehicle height may change and part of your body may be caught under the vehicle, possibly causing injury. (→P.379)
- Do not turn the engine switch off. This may lead to an accident as the rear wheels will be locked by the parking lock. Also, there is a possibility that the steering wheel is locked and cannot be operated.

**⚠ WARNING**

■ **Installing towing eyelets to the vehicle**

Make sure that towing eyelets are installed securely. If not securely installed, towing eyelets may come loose during towing.

**⚠ NOTICE**

■ **To prevent damage to the vehicle when towing using a wheel-lift type truck**

● Do not tow the vehicle from the rear when the engine switch is off. The steering lock mechanism is not strong enough to hold the front wheels straight.

● When raising the vehicle, ensure adequate ground clearance for towing at the opposite end of the raised vehicle. Without adequate clearance, the vehicle could be damaged while being towed.

■ **To prevent damage to the vehicle when towing with a sling-type truck**

Do not tow with a sling-type truck, either from the front or rear.

■ **To prevent damage to the vehicle during emergency towing**

Do not secure cables or chains to the suspension components.

**Situations when it is not possible to be towed by another vehicle**

In the following situations, it is not possible to be towed by another vehicle using cables or chains, as the rear wheels may be locked due to the parking lock. Contact your Lexus dealer or commercial towing service.

- There is a malfunction in the shift control system. (→P.215, 530)
- There is a malfunction in the engine immobilizer system. (→P.97)
- There is a malfunction in the smart entry & start system. (→P.538)
- The battery is discharged. (→P.540)

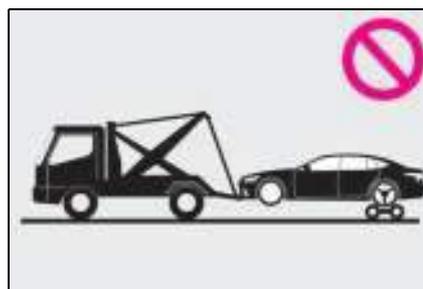
**Situations when it is necessary to contact dealers before towing**

The following may indicate a problem with your transmission. Contact your Lexus dealer or commercial towing service before towing.

- The engine is running but the vehicle does not move.
- The vehicle makes an abnormal sound.

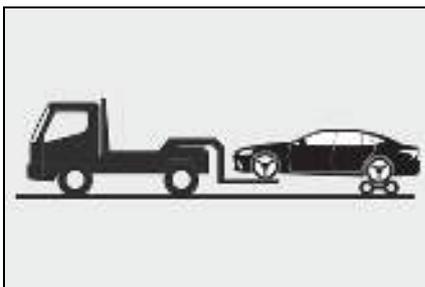
**Towing with a sling-type truck**

Do not tow with a sling-type truck to prevent body damage.



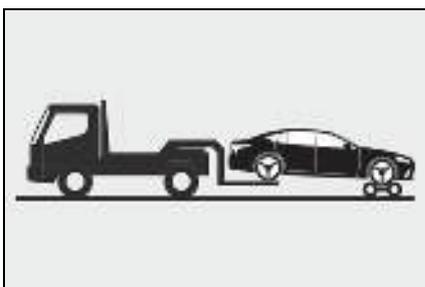
### Towing with a wheel-lift type truck

- ▶ From the front



Use a towing dolly under the rear wheels.

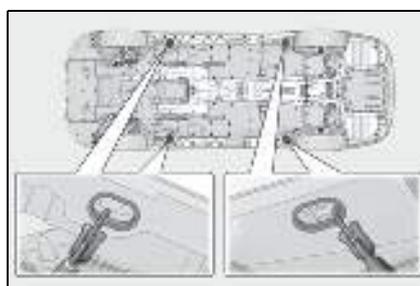
- ▶ From the rear



Use a towing dolly under the front wheels.

### Using a flatbed truck

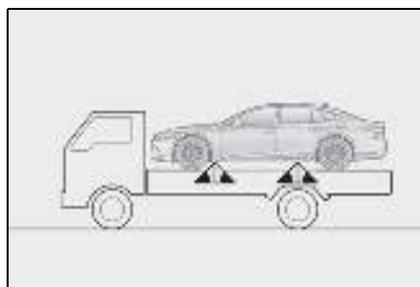
If your vehicle is transported by a flatbed truck, it should be tied down at the locations shown in the illustration.



If you use chains or cables to tie down your vehicle, the angles shaded in black must be 45°.

Do not overly tighten the tie downs or the vehicle may be damaged.

Make sure to disable all functions of the vehicle height control of the electronically modulated air suspension. Otherwise, the vehicle height may change and the vehicle may be damaged. (→P.379)



### Emergency towing

If a tow truck is not available in an emergency, your vehicle may be temporarily towed using cables or chains secured to the emergency towing eyelets. This should only be attempted on hard surfaced roads for short distances at under 30 km/h (18 mph).

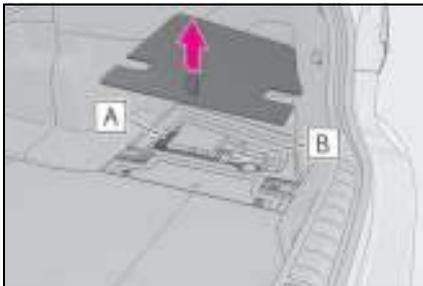
A driver must be in the vehicle to steer

and operate the brakes. The vehicle's wheels, drive train, axles, steering and brakes must be in good condition.

### Emergency towing procedure

To have your vehicle towed by another vehicle, the towing eyelet must be installed to your vehicle. Install the towing eyelet using the following procedure.

- 1 Take out the phillips-head screwdriver and towing eyelet.



**A** Phillips-head screwdriver

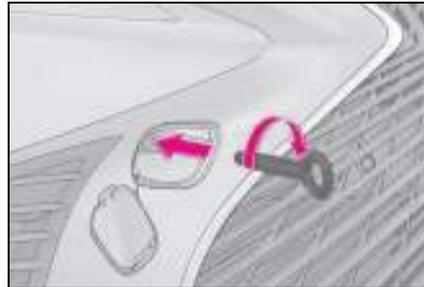
**B** Towing eyelet

- 2 Remove the eyelet cover using a flathead screwdriver.

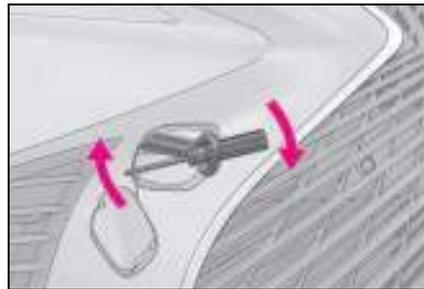
To protect the bodywork, place a rag between the screwdriver and the vehicle body as shown in the illustration.



- 3 Insert the towing eyelet into the hole and tighten partially by hand.



- 4 Tighten down the towing eyelet securely using a phillips-head screwdriver or hard metal bar.



- 5 Securely attach cables or chains to the towing eyelet.

Take care not to damage the vehicle body.

- 6 Enter the vehicle being towed and start the engine.

If the engine does not start, turn the engine switch to IGNITION ON mode.

- 7 Shift the shift position to N and release the parking brake.

#### ■ While towing

If the engine is not running, the power assist for the brakes and steering will not function, making steering and braking more difficult.

**If you think something is wrong**

If you notice any of the following symptoms, your vehicle probably needs adjustment or repair. Contact your Lexus dealer as soon as possible.

**Visible symptoms**

- Fluid leaks under the vehicle. (Water dripping from the air conditioning after use is normal.)
- Flat-looking tires or uneven tire wear
- Engine coolant temperature gauge needle continually points higher than normal.

**Audible symptoms**

- Changes in exhaust sound
- Excessive tire squeal when cornering
- Strange noises related to the suspension system
- Pinging or other noises related to the engine

**Operational symptoms**

- Engine missing, stumbling or running roughly
- Appreciable loss of power
- Vehicle pulls heavily to one side

when braking

- Vehicle pulls heavily to one side when driving on a level road
- Loss of brake effectiveness, spongy feeling, pedal almost touches the floor

### Fuel pump shut off system

To minimize the risk of fuel leakage when the engine stalls or when an airbag inflates upon collision, the fuel pump shut off system stops the supply of fuel to the engine.

### Restarting the engine

Follow the procedure below to restart the engine after the system is activated.

- 1 Turn the engine switch to ACCESSORY mode or turn it off.
- 2 Restart the engine.



#### NOTICE

##### ■ Before starting the engine

Inspect the ground under the vehicle. If you find that fuel has leaked onto the ground, the fuel system has been damaged and is in need of repair. Do not restart the engine.

### If a warning light turns on or a warning buzzer sounds

Calmly perform the following actions if any of the warning lights comes on or flashes. If a light comes on or flashes, but then goes off, this does not necessarily indicate a malfunction in the system. However, if this continues to occur, have the vehicle inspected by your Lexus dealer.

#### Actions to the warning lights or warning buzzers

##### ■ Brake system warning light (warning buzzer)

Warning light	Details/Actions
 (red)	Indicates that: <ul style="list-style-type: none"> <li>● The brake fluid level is low; or</li> <li>● The brake system is malfunctioning</li> </ul> → <b>Immediately stop the vehicle in a safe place and contact your Lexus dealer. Continuing to drive the vehicle may be dangerous.</b> Indicates that the brake pads are worn out (only the right-side pads can be detected) → <b>Have the vehicle inspected by your Lexus dealer.</b>

##### ■ Brake system warning light (warning buzzer)

Warning light	Details/Actions
 (yellow)	Indicates a malfunction in: <ul style="list-style-type: none"> <li>● The electronically controlled brake system (vehicles with Lexus Safety System + A); or</li> <li>● The parking brake system</li> </ul> → <b>Have the vehicle inspected by your Lexus dealer immediately.</b>

##### ■ High coolant temperature warning light\* (warning buzzer)

Warning light	Details/Actions
	Indicates that the engine coolant temperature is too high → <b>Immediately stop the vehicle in a safe place.</b> <b>Handling method (→P.547)</b>

\* : This light illuminates on the multi-information display.

■ **Charging system warning light\* (warning buzzer)**

Warning light	Details/Actions
	Indicates a malfunction in the vehicle's charging system → <b>Immediately stop the vehicle in a safe place and contact your Lexus dealer.</b>

\*: This light illuminates on the multi-information display.

■ **Low engine oil pressure warning light\* (warning buzzer)**

Warning light	Details/Actions
	Indicates that the engine oil pressure is too low → <b>Immediately stop the vehicle in a safe place and contact your Lexus dealer.</b>

\*: This light illuminates on the multi-information display.

■ **Malfunction indicator lamp (warning buzzer)**

Warning light	Details/Actions
	Indicates a malfunction in: ● The electronic engine control system; ● The electronic throttle control system; or ● The electronic automatic transmission control system → <b>Immediately stop the vehicle in a safe place and contact your Lexus dealer.</b>

■ **SRS warning light (warning buzzer)**

Warning light	Details/Actions
	Indicates a malfunction in: ● The SRS airbag system; ● The front passenger occupant classification system (if equipped); or ● The seat belt pretensioner system → <b>Have the vehicle inspected by your Lexus dealer immediately.</b>

### ■ Pop Up Hood warning light (warning buzzer)

Warning light	Details/Actions
	<p>Indicates that the Pop Up Hood system has operated → <b>The Pop Up Hood system cannot be reused once it has operated. Have it replaced by your Lexus dealer.</b></p> <p>Indicates a malfunction in the Pop Up Hood system → <b>Have the vehicle inspected by your Lexus dealer immediately.</b></p>

### ■ ABS warning light (warning buzzer)

Warning light	Details/Actions
	<p>Indicates a malfunction in:</p> <ul style="list-style-type: none"> <li>● The ABS; or</li> <li>● The brake assist system</li> </ul> <p>→ <b>Have the vehicle inspected by your Lexus dealer immediately.</b></p>

### ■ Brake Override System warning light/Drive-Start Control warning light\* (warning buzzer)

Warning light	Details/Actions
	<p>When a buzzer sounds:</p> <ul style="list-style-type: none"> <li>● Brake Override System is malfunctioning;</li> <li>● Drive-Start Control is operating; or</li> <li>● Drive-Start Control is malfunctioning</li> </ul> <p>→ <b>Follow the instructions displayed on the multi-information display.</b></p> <p>When a buzzer does not sound:</p> <p>Brake Override System is operating → <b>Release the accelerator pedal and depress the brake pedal.</b></p>

\*: This light illuminates on the multi-information display.

■ Electric power steering system warning light (warning buzzer)

Warning light	Details/Actions
 (red) or  (yellow)	Indicates a malfunction in the EPS (Electric Power Steering) system → <b>Have the vehicle inspected by your Lexus dealer immediately.</b>

■ Low fuel level warning light

Warning light	Details/Actions
	Indicates that remaining fuel is approximately 13 L (3.4 gal., 2.8 Imp. gal.) or less → <b>Refuel the vehicle.</b>

■ Driver's and front passenger's seat belt reminder light (warning buzzer)<sup>\*1,2</sup>

Warning light	Details/Actions
	Warns the driver and/or front passenger to fasten their seat belts → <b>Fasten the seat belt.</b> If the front passenger's seat is occupied, the front passenger's seat belt also needs to be fastened to make the warning light (warning buzzer) turn off.

<sup>\*1</sup>: Except for GCC countries <sup>\*3</sup>, Egypt, Yemen, Lebanon, Jordan and Iraq

Driver's and front passenger's seat belt warning buzzer:

The driver's and front passenger's seat belt warning buzzer sounds to alert the driver and front passenger that his or her seat belt is not fastened. If the seat belt is unfastened, the buzzer sounds intermittently for a certain period of time after the vehicle reaches a certain speed.

<sup>\*2</sup>: For GCC countries <sup>\*3</sup>, Egypt, Yemen, Lebanon, Jordan and Iraq

Driver's seat belt warning buzzer:

The driver's seat belt warning buzzer sounds to alert the driver that his or her seat belt is not fastened. Once the engine switch is turned to IGNITION ON mode, the buzzer sounds. If the seat belt is still unfastened, the buzzer sounds intermittently for a certain period of time after the vehicle reaches a certain speed.

Front passenger's seat belt warning buzzer:

The front passenger's seat belt warning buzzer sounds to alert the front passenger that his or her seat belt is not fastened. If the seat belt is unfastened, the buzzer sounds intermittently for a certain period of time after the vehicle reaches a certain speed.

\*3: Saudi Arabia, Sultanate of Oman, Bahrain, United Arab Emirates, Qatar and Kuwait

### ■ Rear passengers' seat belt reminder lights <sup>\*1</sup>(warning buzzer) <sup>\*2</sup>

Warning light	Details/Actions
 or 	Warns the rear passengers to fasten their seat belts → <b>Fasten the seat belt.</b>

\*1: This light illuminates on the center panel.

\*2: Rear passengers' seat belt warning buzzer:

#### ▶ Except for South Africa

The rear passengers' seat belt warning buzzer sounds to alert the rear passenger that his or her seat belt is not fastened. If the seat belt is unfastened, the buzzer sounds intermittently for a certain period of time, after the seat belt is fastened and unfastened and the vehicle reaches a certain speed.

#### ▶ For South Africa

The rear passengers' seat belt warning buzzer sounds to alert the rear passenger that his or her seat belt is not fastened. If the seat belt is unfastened, the buzzer sounds intermittently for a certain period of time after the vehicle reaches a certain speed.

### ■ Tire pressure warning light

Warning light	Details/Actions
	When the light comes on after blinking for approximately 1 minute: Malfunction in the tire pressure warning system → <b>Have the system checked by your Lexus dealer.</b>  When the light comes on: Low tire inflation pressure such as ● Natural causes ● Flat tire → <b>Immediately stop the vehicle in a safe place.</b> <b>Handling method (→P.529)</b>

■ LTA indicator/LDA indicator (warning buzzer)

Warning light	Details/Actions
 <p>(orange) (if equipped)</p>	<p>Indicates a malfunction in the LTA (Lane Tracing Assist) or LDA (Lane Departure Alert with steering control)</p> <p>→ Follow the instructions displayed on the multi-information display. (→P.292, 300)</p>

■ Stop & Start cancel indicator (warning buzzer)

Warning light	Details/Actions
 <p>(flashes) (if equipped)</p>	<p>Indicates a malfunction in the Stop &amp; Start system</p> <p>→ Have the vehicle inspected by your Lexus dealer immediately.</p>

■ Lexus parking assist-sensor OFF indicator (warning buzzer)

Warning light	Details/Actions
 <p>(flashes)</p>	<p>Indicates a malfunction in the Lexus parking assist-sensor function</p> <p>→ Have the vehicle inspected by your Lexus dealer immediately.</p> <p>Indicates that the system is temporarily unavailable, possibly due to a sensor being dirty or covered with ice, etc.</p> <p>→ Follow the instructions displayed on the multi-information display. (→P.342)</p>

■ RCTA OFF indicator (warning buzzer)

Warning light	Details/Actions
 <p>(flashes) (if equipped)</p>	<p>Indicates a malfunction in the RCTA (Rear Cross Traffic Alert) function</p> <p>→ Have the vehicle inspected by your Lexus dealer immediately.</p> <p>Indicates that the rear bumper around the radar sensor is covered with dirt, etc. (→P.334)</p> <p>→ Follow the instructions displayed on the multi-information display. (→P.347)</p>

### ■ RCD OFF indicator (warning buzzer)

Warning light	Details/Actions
 (flashes) (if equipped)	<p>When a buzzer sounds:            Indicates a malfunction in the RCD (Rear Camera Detection) function            → <b>Have the vehicle inspected by your Lexus dealer immediately.</b></p> <p>When a buzzer does not sound:            Indicates that the function temporarily cannot be used due to the camera being dirty, etc.            → <b>Follow the instructions displayed on the multi-information display.</b>            (→P.352, 530)</p>

### ■ PKSB OFF indicator (warning buzzer)

Warning light	Details/Actions
 (flashes) (if equipped)	<p>When a buzzer sounds:            Indicates a malfunction in the PKSB (Parking Support Brake) system            → <b>Have the vehicle inspected by your Lexus dealer immediately.</b></p> <p>When a buzzer does not sound:            Indicates that the system is temporarily unavailable, possibly due to a sensor being dirty or covered with ice, etc.            → <b>Follow the instructions displayed on the multi-information display.</b>            (→P.358, 530)</p>

### ■ PCS warning light

Warning light	Details/Actions
 (flashes or illuminates) (if equipped)	<p>When a buzzer sounds simultaneously:            Indicates a malfunction has occurred in the PCS (Pre-Collision System).            → <b>Have the vehicle inspected by your Lexus dealer immediately.</b></p> <p>When a buzzer does not sound:            The PCS (Pre-Collision System) has become temporarily unavailable, corrective action may be necessary.            → <b>Follow the instructions displayed on the multi-information display.</b>            (→P.251, 258, 533)</p> <p>If the PCS (Pre-Collision System) or VSC (Vehicle Stability Control) system is disabled, the PCS warning light will illuminate.            → P.271, 279</p>

■ Slip indicator

Warning light	Details/Actions
	<p>Indicates a malfunction in:</p> <ul style="list-style-type: none"> <li>● The VSC system;</li> <li>● The TRC system;</li> <li>● The hill-start assist control system;</li> <li>● The VGRS system (if equipped); or</li> <li>● The DRS system (if equipped)</li> </ul> <p>→ Have the vehicle inspected by your Lexus dealer immediately.</p>

■ Parking brake indicator (warning buzzer)

Warning light	Details/Actions
 (flashes)	<p>Indicates a malfunction in the parking brake system</p> <p>→ Have the vehicle inspected by your Lexus dealer immediately.</p>

■ Brake hold operated indicator (warning buzzer)

Warning light	Details/Actions
 (flashes)	<p>Indicates a malfunction in the brake hold system</p> <p>→ Have the vehicle inspected by your Lexus dealer immediately.</p>

■ Master warning light (warning buzzer)

Warning light	Details/Actions
	<p>A buzzer sounds and the warning light comes on and flashes to indicate that the master warning system has detected a malfunction.</p> <p>→ P.530</p>

■ Warning buzzer

In some cases, the buzzer may not be heard due to being in a noisy location or audio sound.

■ Front passenger detection sensor, seat belt reminder and warning buzzer

- If luggage is placed on the front passenger seat, the front passenger detection sensor may cause the warning light to flash and the warning buzzer to sound even if a passenger is not sitting in the

seat.

- If a cushion is placed on the seat, the sensor may not detect a passenger, and the warning light may not operate properly.

■ If the malfunction indicator lamp comes on while driving (for Korea)

First check the following:

- Is the fuel tank empty?  
If it is, fill the fuel tank immediately.
- Is the fuel tank cap loose?  
If it is, tighten it securely.

The light will go off after several driving trips.

If the light does not go off even after several trips, contact your Lexus dealer as soon as possible.

■ **If the malfunction indicator lamp comes on while driving (except for Korea)**

For some models, the malfunction indicator lamp will come on if the fuel tank becomes completely empty. If the fuel tank is empty, refuel the vehicle immediately. The malfunction indicator lamp will go off after several trips.

If the malfunction indicator lamp does not go off, contact your Lexus dealer as soon as possible.

■ **Electric power steering system warning light (warning buzzer)**

When the battery charge becomes insufficient or the voltage temporarily drops, the electric power steering system warning light may come on and the warning buzzer may sound.

■ **When the tire pressure warning light comes on**

Inspect the tires to check if a tire is punctured.

If a tire is punctured: →P.534

If none of the tires are punctured:

Turn the engine switch off then turn it to IGNITION ON mode. Check if the tire pressure warning light comes on or blinks.

- ▶ If the tire pressure warning light blinks for approximately 1 minute then stays on

There may be a malfunction in the tire pressure warning system. Have the vehicle inspected by your Lexus dealer immediately.

- ▶ If the tire pressure warning light comes on

- 1 After the temperature of the tires has lowered sufficiently, check the inflation pressure of each tire and adjust them to the specified level.
- 2 If the warning light does not turn off even after several minutes have elapsed, check that the inflation pres-

sure of each tire is at the specified level and perform initialization. (→P.492)

■ **The tire pressure warning light may come on due to natural causes**

The tire pressure warning light may come on due to natural causes such as natural air leaks and tire inflation pressure changes caused by temperature. In this case, adjusting the tire inflation pressure will turn off the warning light (after a few minutes).

■ **Conditions that the tire pressure warning system may not function properly**

→P.487



**WARNING**

■ **If both the ABS and the brake system warning lights remain on**

Stop your vehicle in a safe place immediately and contact your Lexus dealer. The vehicle will become extremely unstable during braking, and the ABS system may fail, which could cause an accident resulting in death or serious injury.

■ **When the electric power steering system warning light comes on**

When the light comes on yellow, the assist to the power steering is restricted. When the light comes on red, the assist to the power steering is lost and handling operations of the steering wheel become extremely heavy.

When steering wheel operations are heavier than usual, grip the steering wheel firmly and operate it using more force than usual.

■ **If the tire pressure warning light comes on**

Be sure to observe the following precautions.

Failure to do so could cause a loss of vehicle control and result in death or serious injury.

**⚠ WARNING**

- Decelerate to the lowest appropriate speed as soon as possible. Do not drive over 80 km/h (50 mph).
- Check and adjust the tire inflation pressure immediately.
- If the tire pressure warning light comes on even after tire inflation pressure adjustment, it is probable that you have a flat tire. Have the flat tire replaced by the nearest Lexus dealer.
- Avoid abrupt maneuvering and braking. If the vehicle tires deteriorate, you could lose control of the steering wheel or the brakes.

■ **If a blowout or sudden air leakage should occur**

The tire pressure warning system may not activate immediately.

**⚠ NOTICE**

■ **To ensure the tire pressure warning system operates properly**

Do not install tires with different specifications or makers, as the tire pressure warning system may not operate properly.

**If a warning message is displayed**

The multi-information display shows warnings of system malfunctions, incorrectly performed operations, and messages that indicate a need for maintenance. When a message is shown, perform the correction procedure appropriate to the message.

Except F SPORT models:



**A** Master warning light

The master warning light also comes on or flashes in order to indicate that a message is currently being displayed on the multi-information display.

The location of master warning light may differ depending on the intended destination of the vehicle.

**B** Multi-information display

Follow the instructions of the message on the multi-information display.

If any of the warning messages are shown again after the appropriate actions have been performed, contact your Lexus dealer.

F SPORT models (main meter in center position):



**A** Master warning light

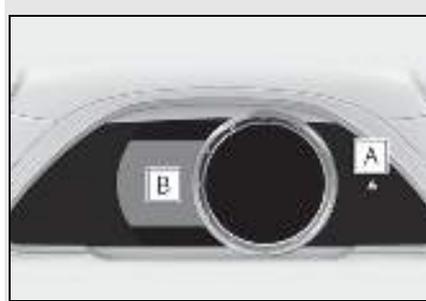
The master warning light also comes on or flashes in order to indicate that a message is currently being displayed on the multi-information display.

**B** Multi-information display

Follow the instructions of the message on the multi-information display.

If any of the warning messages are shown again after the appropriate actions have been performed, contact your Lexus dealer.

F SPORT models (main meter moved to the right):



**A** Master warning light

The master warning light also comes on or flashes in order to indicate that a message is currently being displayed on the multi-information display.

**B** Multi-information display

Follow the instructions of the message on the multi-information display.

If any of the warning messages are shown again after the appropriate actions have been performed, contact your Lexus dealer.

**Messages and warnings**

The master warning light and warning buzzers operate as follows depending on the content of the message. If a message indicates the need for inspection by a dealer, have the vehicle inspected by your Lexus dealer immediately.

	Warning buzzer *	Warning
Comes on	Sounds	Indicates an important situation, such as when a system related to driving is malfunctioning or that danger may result if the correction procedure is not performed
Flashes	Sounds	Indicates a situation, such as when damage to the vehicle or danger may result
Comes on	Does not sound	Indicates a condition, such as malfunction of electrical components, their condition, or indicates the need for maintenance
Flashes	Does not sound	Indicates a situation, such as when an operation has been performed incorrectly, or indicates how to perform an operation correctly

- In some situations, the master warning light and warning buzzer may not operate as specified. In this case, follow the instructions displayed in the warning message.
- If a warning light comes on or flashes at the same time that a warning message is displayed, take corrective action according to the warning light. (→P.521)

\* : A buzzer sounds the first time a message is shown on the multi-information display.

■ **Warning messages**

The warning messages explained below may differ from the actual messages according to operation conditions and vehicle specifications.

■ **Warning buzzer**

In some cases, the buzzer may not be heard due to being in a noisy location or audio sound.

■ **If “Engine Oil Level Low Add or Replace” is displayed**

The engine oil level is low. Check the level

of the engine oil, and add if necessary.

This message may appear if the vehicle is stopped on a slope. Move the vehicle to a level surface and check to see if the message disappears.

■ **If “Engine Stopped Steering Power Low” is displayed**

This message is displayed if the engine is stopped while driving.

When steering wheel operations are heavier than usual, grip the steering wheel firmly and operate it using more force than usual.

■ **If “Auto Power Off to Conserve Battery” is displayed**

Power was turned off due to the automatic power off function. Next time when starting the engine, increase the engine speed slightly and maintain that level for approximately 5 minutes to recharge the battery.

■ **If “Headlight System Malfunction Visit Your Dealer” is displayed**

The following systems may be malfunctioning. Have the vehicle inspected by your Lexus dealer immediately.

- The LED headlight system
- The automatic headlight leveling system
- AHS (Adaptive High-beam System) (if equipped)
- AHB (Automatic High Beam) (if equipped)
- Multi Weather Lights (if equipped)

■ **If “Radar Cruise Control Unavailable See Owner’s Manual” is displayed (on some models)**

The dynamic radar cruise control with full-speed range system or dynamic radar cruise control system is suspended temporarily or until the problem shown in the message is resolved. (causes and coping methods: →P.251, 258)

■ **If “Radar Cruise Control Unavailable” is displayed (on some models)**

The dynamic radar cruise control with full-speed range system or dynamic radar cruise control system cannot be used temporarily. Use the system when it becomes available again.

■ **If “Front Camera Unavailable” or “Front Camera Unavailable See Owner’s Manual” is displayed**

The following systems may be suspended until the problem shown in the message is resolved. (→P.251, 258, 527)

- PCS (Pre-Collision system) (if equipped)
- LTA (Lane Tracing Assist) (if equipped)
- LDA (Lane Departure Alert with steering control) (if equipped)

- Dynamic radar cruise control with full-speed range (if equipped)

- Dynamic radar cruise control (if equipped)

- AHS (Adaptive High-beam System) (if equipped)

- AHB (Automatic High Beam) (if equipped)

■ **If “Oil Maintenance Required Soon” is displayed**

Indicates that the engine oil should be scheduled to be changed.

Check the engine oil and change it if necessary. After changing the engine oil, make sure to reset the message. (→P.477)

■ **If “Oil Maintenance Required” is displayed**

Indicates that the engine oil should be changed.

Check and change the engine oil, and oil filter by your Lexus dealer. After changing the engine oil, make sure to reset the message. (→P.477)

■ **If “Speed Limit Exceeded” is displayed (on some models)**

The vehicle speed has reached or exceeded 120 km/h (75 mph). At this time, a buzzer also sounds. The buzzer will stop sounding after 6 seconds or if you decelerate to below 120 km/h (75 mph). Reduce your vehicle speed.

■ **If “Shift System Malfunction Driving Unavailable” is displayed**

There is a malfunction in the shift control system. Have the vehicle inspected by your Lexus dealer immediately.

■ **If a message that indicates the need for the shift lever operation is displayed**

To prevent the shift lever from being operated incorrectly or the vehicle from moving unexpectedly, a message that requires shifting the shift position may be displayed on the multi-information display. In that case, follow the instruction of the message and shift the shift position.

■ If a message that indicates the need for visiting your Lexus dealer is displayed

The system or part shown on the multi-information display is malfunctioning. Have the vehicle inspected by your Lexus dealer immediately.

■ If a message that indicates the need for referring to Owner's Manual is displayed

- If any of the following messages are shown on the multi-information display, follow the instructions.
  - "Engine Coolant Temp High" (→P.547)
  - "Battery Low" (→P.540)
  - "Transmission Fluid Temp High" (→P.216)
- If any of the following messages are shown on the multi-information display, it may indicate a malfunction. Have the vehicle inspected by your Lexus dealer immediately.
  - "Entry & Start System Malfunction"
  - "Shift System Malfunction"
  - "P Switch Malfunction"
  - "Shift System Unavailable"
- If any of the following messages are shown on the multi-information display, it may indicate a malfunction. Immediately stop the vehicle and contact your Lexus dealer.
  - "Braking Power Low"
  - "Charging System Malfunction"
  - "Oil Pressure Low"

 NOTICE

■ If "High Power Consumption Partial Limit On AC/Heater Operation" is displayed frequently

There is a possible malfunction relating to the charging system or the battery may be deteriorating. Have the vehicle inspected by your Lexus dealer.

**If you have a flat tire**

Your vehicle is not equipped with a spare tire, but instead you can continue driving the vehicle with run-flat tires even if any tire goes flat.

In this case, slow down and drive with extra caution.

**Run-flat tires**

Take your vehicle to the nearest Lexus dealer or authorized tire dealer as soon as possible if any tire goes flat.

The vehicle can be driven for a maximum of 160 km (100 miles) at a speed below 80 km/h (50 mph) after the tire pressure warning light comes on. (→P.525)

A run-flat tire has a  mark on the side wall.



■ In some conditions (such as at high temperatures)

You cannot continue driving for up to 100 km (160 miles).

■ For the detailed information on run-flat tires

See the tire warranty booklet.

 NOTICE

**■ When replacing the tires**

When removing or fitting the wheels, tires or the tire pressure warning valve and transmitter, contact your Lexus dealer as the tire pressure warning valve and transmitter may be damaged if not handled correctly.

**■ When driving over bumps**

If a vehicle has a flat tire, the vehicle height will be lower than usual. Ensure that nothing strikes the bottom of the vehicle.

**■ To avoid damage to the tire pressure warning valves and transmitters**

When a tire is repaired with liquid sealants, the tire pressure warning valve and transmitter may not operate properly. If a liquid sealant is used, contact your Lexus dealer or other qualified service shop as soon as possible. Make sure to replace the tire pressure warning valve and transmitter when replacing the tire. (→P.491)

**If the engine will not start**

**If the engine will not start even though correct starting procedures are being followed (→P.212), consider each of the following points:**

**The engine will not start even though the starter motor operates normally.**

One of the following may be the cause of the problem:

- There may not be sufficient fuel in the vehicle's tank.  
Refuel the vehicle.
- The engine may be flooded.  
Try to restart the engine again following correct starting procedures. (→P.212)
- There may be a malfunction in the engine immobilizer system. (→P.97)
- There may be a malfunction in the shift control system. \* (→P.215, 533)

\* : It may not be possible to shift the shift position from P.

**The starter motor turns over slowly, the interior lights and headlights are dim, or the horn does not sound or sounds at a low volume.**

One of the following may be the cause of the problem:

- The battery may be discharged. (→P.540)
- The battery terminal connections may be loose or corroded. (→P.482)

**The starter motor does not turn over**

The engine starting system may be malfunctioning due to an electrical problem such as electronic key battery depletion or a blown fuse. However, an interim measure is available to start the engine. (→P.536)

**The starter motor does not turn over, the interior lights and headlights do not turn on, or the horn does not sound.**

One of the following may be the cause of the problem:

- One or both of the battery terminals may be disconnected. (→P.482)
- The battery may be discharged. (→P.540)
- There may be a malfunction in the steering lock system.

Contact your Lexus dealer if the problem cannot be repaired, or if repair procedures are unknown.

**Starting the engine in an emergency**

When the engine does not start, the following steps can be used as an

interim measure to start the engine if the engine switch is functioning normally.

Do not use this starting procedure except in cases of emergency.

- 1 Press the parking brake switch to check that the parking brake is set. (→P.223)

Parking brake indicator will come on.

- 2 Turn the engine switch to ACCESSORY mode.
- 3 Press and hold the engine switch for about 15 seconds while depressing the brake pedal firmly.

Even if the engine can be started using the above steps, the system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

### If you lose your keys

New genuine mechanical keys can be made by your Lexus dealer using another mechanical key and the key number stamped on your key number plate.

Keep the plate in a safe place such as your wallet, not in the vehicle.

#### NOTICE

##### ■ When an electronic key is lost

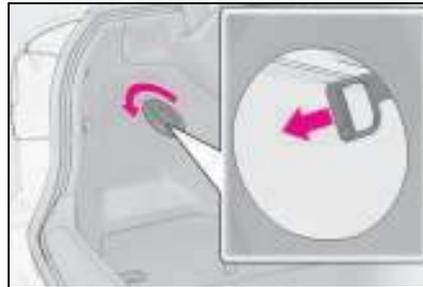
If the electronic key remains lost, the risk of vehicle theft increases significantly. Visit your Lexus dealer immediately with all remaining electronic keys and the card key (if equipped) that were provided with your vehicle.

### If the fuel filler door cannot be opened

If the fuel filler door opener switch cannot be operated, contact your Lexus dealer to service the vehicle. In case where refueling is urgently necessary, the following procedure can be used to open the fuel filler door.

#### Opening the fuel filler door

Remove the cover inside the trunk and pull the lever.



**If the electronic key does not operate properly**

If communication between the electronic key and vehicle is interrupted (→P.152) or the electronic key cannot be used because the battery is depleted, the smart entry & start system and wireless remote control cannot be used. In such cases, the doors and trunk can be opened and the engine can be started by following the procedure below.

■ When the electronic key does not work properly

- Make sure that the smart entry & start system has not been disabled using the Remote Touch or at your Lexus dealer. If it has been disabled, re-enable it.
- Check if battery-saving mode is set. If it is set, cancel the function. (→P.152)

 NOTICE

■ In case of a smart entry & start system malfunction or other key-related problems

Take your vehicle with all the electronic keys provided with your vehicle to your Lexus dealer.

**Locking and unlocking the doors, unlocking the trunk**

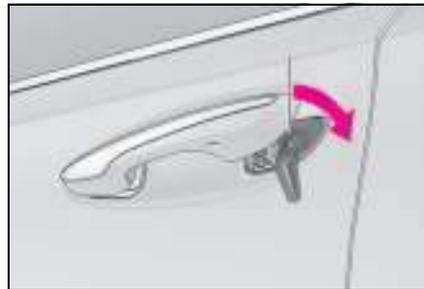
■ Unlocking the door

Use the mechanical key (→P.137) in order to perform the following operations:

- 1 Pull the driver's door handle and insert the mechanical key.



- 2 Unlock the door. (→P.101)



- 3 Remove the key, return the handle, and then pull the handle again.

■ Locking the door

- 1 With the door open, push down the inside lock button.



- ▶ For the front doors
- 2 For Korea: Close the door.  
Except for Korea: Close the door while pulling the door handle.

- ▶ For the rear doors
- 2 Close the door.

#### ■ Trunk

Turn the mechanical key clockwise to open. (→P.101)



#### ■ Key linked functions



- 1 Closes the windows and the moon roof\* or panoramic moon roof\* (turn and hold)
- 2 Opens the windows and the moon roof\* or panoramic moon roof\* (turn and hold)

These settings must be customized at your Lexus dealer.

\*: If equipped

#### ⚠ WARNING

##### ■ When using the mechanical key and operating the power windows or the moon roof or panoramic moon roof

Operate the power window or the moon roof or panoramic moon roof after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the window or the moon roof or panoramic moon roof. Also, do not allow children to operate the mechanical key. It is possible for children and other passengers to get caught in the power window or the moon roof or panoramic moon roof.

#### Starting the engine

- 1 Depress the brake pedal.
- 2 Touch the Lexus emblem side of the electronic key to the engine switch.

When the electronic key is detected, a buzzer sounds and the engine switch will turn to IGNITION ON mode.

When the smart entry & start system is deactivated in customization setting, the engine switch will turn to ACCESSORY mode.



- 3 Firmly depress the brake pedal and check that  is shown on the multi-information display.
- 4 Press the engine switch.

In the event that the engine still cannot

be started, contact your Lexus dealer.

■ **Stopping the engine**

Set the parking brake, shift the shift position to P and press the engine switch as you normally do when stopping the engine.

■ **Electronic key battery**

As the above procedure is a temporary measure, it is recommended that the electronic key battery be replaced immediately when the battery is depleted. (→P.503)

■ **Alarm (for Malaysia, South Africa and Egypt)**

Using the mechanical key to lock the doors will not set the alarm system.

If a door is unlocked using the mechanical key when the alarm system is set, the alarm may be triggered. (→P.100)

■ **Changing engine switch modes**

Release the brake pedal and press the engine switch in step 3 above. The engine does not start and modes will be changed each time the switch is pressed. (→P.214)

**If the vehicle battery is discharged**

The following procedures may be used to start the engine if the vehicle's battery is discharged.

You can also call your Lexus dealer or a qualified repair shop.

**Restarting the engine**

If you have a set of jumper (or booster) cables and a second vehicle with a 12-volt battery, you can jump start your vehicle by following the steps below.

▶ Method connecting jumper (or booster) cables to the battery

1 Confirm that the electronic key is being carried.

When connecting the jumper (or booster) cables, depending on the situation, the alarm may activate and doors locked. (→P.101)

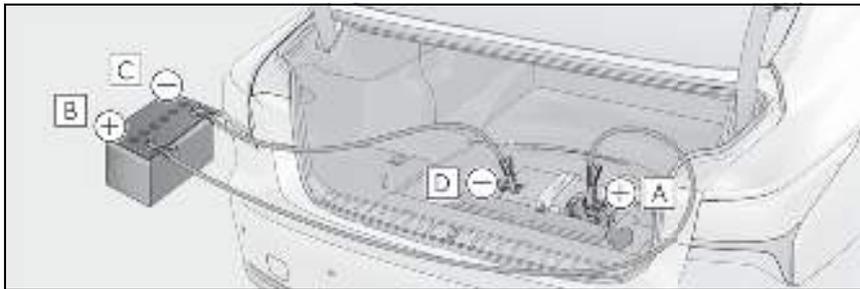


2 Open the trunk lid and remove the luggage mat. (→P.429)

In the event that the trunk opener cannot be used, use the mechanical key to open the trunk. (→P.538)

3 Connect a positive jumper cable clamp to **A** on your vehicle and connect the clamp on the other end of the positive cable to **B** on the second vehicle. Then,

connect a negative cable clamp to **C** on the second vehicle and connect the clamp at the other end of the negative cable to **D**.



- A** Positive (+) battery terminal (your vehicle)
- B** Positive (+) battery terminal (second vehicle)
- C** Negative (-) battery terminal (second vehicle)
- D** Negative (-) battery terminal (your vehicle)

- 4** Start the engine of the second vehicle. Increase the engine speed slightly and maintain at that level for approximately 5 minutes to recharge the battery of your vehicle.
- 5** Open and close any of the doors of your vehicle with the engine switch off.
- 6** Maintain the engine speed of the second vehicle and start the engine of your vehicle by turning the engine switch to IGNITION ON mode.
- 7** Once the vehicle's engine has started, remove the jumper cables in the exact reverse order from which they were connected.
- 8** Press the Stop & Start cancel switch to disable the Stop & Start system. (→P.329)

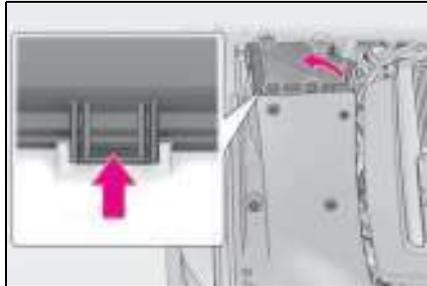
▶ Method connecting jumper (or booster) cables to the exclusive jump starting terminal

- 1** Confirm that the electronic key is being carried.

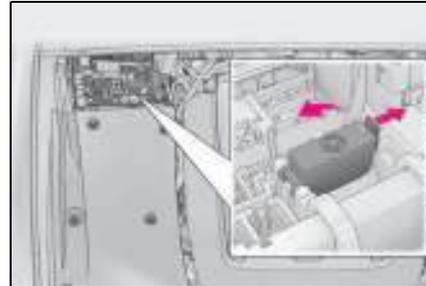
When connecting the jumper (or booster) cables, depending on the situation, the alarm may activate and doors locked. (→P.101)



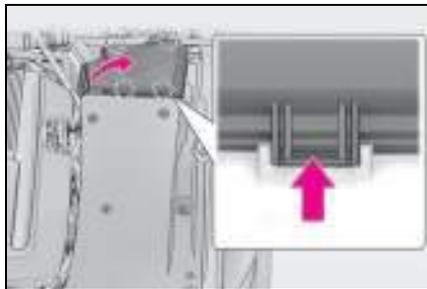
- 2** Open the hood. Remove the service cover. (→P.468, 474)
- 3** Open the fuse box cover. Push the tab in and lift the lid off.
  - Left-hand drive vehicles



● Right-hand drive vehicles

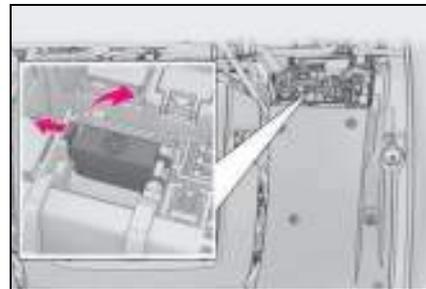


● Right-hand drive vehicles



**4** Open the exclusive jump starting terminal cover.

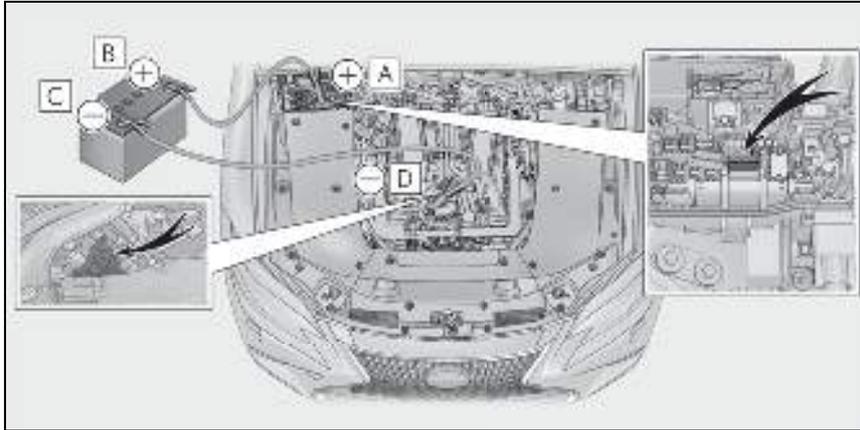
● Left-hand drive vehicles



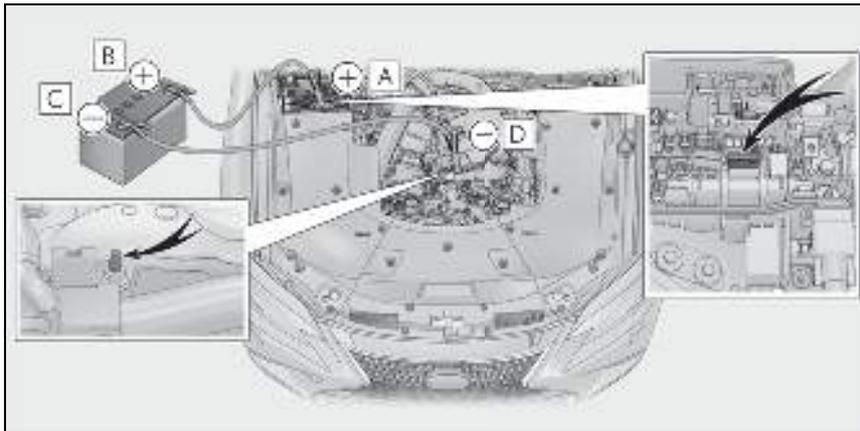
**5** Remove the engine cover. (→P.473)

**6** Connect a positive jumper cable clamp to **A** on your vehicle and connect the clamp on the other end of the positive cable to **B** on the second vehicle. Then, connect a negative cable clamp to **C** on the second vehicle and connect the clamp at the other end of the negative cable to **D**.

- LS500



- LS350



- A** Exclusive jump starting terminal (your vehicle)
- B** Positive (+) battery terminal (second vehicle)
- C** Negative (-) battery terminal (second vehicle)
- D** Solid, stationary, unpainted metallic point away from the exclusive jump starting terminal and any moving parts as shown in the illustration

For right-hand drive vehicles:  
The fuse box near the windshield is located on the opposite side of the engine compartment.

- 7** Start the engine of the second vehicle. Increase the engine speed

slightly and maintain at that level for approximately 5 minutes to recharge the battery of your vehicle.

- 8 Open and close any of the doors of your vehicle with the engine switch off.
- 9 Maintain the engine speed of the second vehicle and start the engine of your vehicle by turning the engine switch to IGNITION ON mode.
- 10 Once the vehicle's engine has started, remove the jumper cables in the exact reverse order from which they were connected.
- 11 Close the exclusive jump starting terminal cover, and reinstall the fuse box cover to its original position.
- 12 Install the service cover. (→P.475)
- 13 Install the engine cover. (→P.475)
- 14 Press the Stop & Start cancel switch to disable the Stop & Start system. (→P.329)

Once the engine starts, have the vehicle inspected at your Lexus dealer as soon as possible.

**■ Starting the engine when the battery is discharged**

The engine cannot be started by push-starting.

**■ To prevent battery discharge**

- Turn off the headlights and the audio system while the engine is off. (Except when the engine is stopped by the Stop & Start system.)
- Turn off any unnecessary electrical components when the vehicle is running at a low speed for an extended period, such as in heavy traffic.

**■ When the battery is removed or discharged**

- Information stored in the ECU is cleared. When the battery is depleted, have the vehicle inspected at your Lexus dealer.
- Some systems may require initialization. (→P.585)

**■ When removing the battery terminals**

When the battery terminals are removed, the information stored in the ECU is cleared. Before removing the battery terminals, contact your Lexus dealer.

**■ Charging the battery**

The electricity stored in the battery will discharge gradually even when the vehicle is not in use, due to natural discharge and the draining effects of certain electrical appliances. If the vehicle is left for a long time, the battery may discharge, and the engine may be unable to start. (The battery recharges automatically during driving.)

**■ After jump starting the vehicle**

Be sure to disable the Stop & Start system so that the battery can be charged. (→P.329)

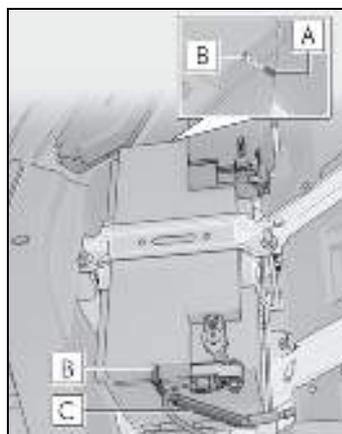
**■ When recharging or replacing the battery**

- In some cases, it may not be possible to unlock the doors using the smart entry & start system when the battery is discharged. Use the wireless remote control or the mechanical key to lock or unlock the doors.
- The engine may not start on the first attempt after the battery has recharged but will start normally after the second attempt. This is not a malfunction.
- The engine switch mode is memorized by the vehicle. When the battery is reconnected, the system will return to the mode it was in before the battery was discharged. Before disconnecting the battery, turn the engine switch off. If you are unsure what mode the engine switch was in before the battery discharged, be especially careful when reconnecting the battery.

- Vehicles with Stop & Start system: For a while after the battery terminals have been disconnected and reconnected, for a while after the battery has been replaced, the Stop & Start system may not automatically stop the engine for approximately 5 to 60 minutes.

#### ■ When replacing the battery

- Use a Central Degassing type battery (European Regulations).
- Vehicles with Stop & Start system: Use a genuine battery specifically designed for use with the Stop & Start system or a battery with equivalent specifications to a genuine battery. If an unsupported battery is used, Stop & Start system functions may be restricted to protect the battery. Also, battery performance may decrease and the engine may not be able to restart. Contact your Lexus dealer for details.
- Use a battery with the same case size as the previous battery and an equivalent 20 hour rate capacity (20HR) or greater.
  - If the sizes differ, the battery cannot be properly secured.
  - If the 20 hour rate capacity is low, even if the time period where the vehicle is not used is a short time, the battery may discharge and the engine may not be able to start.
- Use a battery with a handle. If a battery without a handle is used, removal is more difficult.
- After replacing, firmly attach the following items to the exhaust hole of the battery.
  - Use the exhaust hose that was attached to the battery before replacing and confirm that it is firmly connected to the hole section of the vehicle.
  - Use the exhaust hole plug included with the battery replaced or the one installed on the battery prior to the replacement. (Depending on the battery to be replaced, the exhaust hole may be plugged.)



**A** Exhaust hole plug

**B** Exhaust hole

**C** Exhaust hose

For details, consult your Lexus dealer.

#### ⚠ WARNING

##### ■ When removing the battery terminals

Always remove the negative (-) terminal first. If the positive (+) terminal contacts any metal in the surrounding area when the positive (+) terminal is removed, a spark may occur, leading to a fire in addition to electrical shocks and death or serious injury.

##### ■ Avoiding battery fires or explosions

Observe the following precautions to prevent accidentally igniting the flammable gas that may be emitted from the battery:

- Make sure each jumper cable is connected to the correct terminal and that it is not unintentionally in contact with any other than the intended terminal.
- Do not allow the other end of the jumper cable connected to the "+" terminal to come into contact with any other parts or metal surfaces in the area, such as brackets or unpainted metal.

 **WARNING**

- Do not allow the + and - clamps of the jumper cables to come into contact with each other.
- Do not smoke, use matches, cigarette lighters or allow open flame near the battery.

■ **Battery precautions**

The battery contains poisonous and corrosive acidic electrolyte, while related parts contain lead and lead compounds. Observe the following precautions when handling the battery:

- When working with the battery, always wear safety glasses and take care not to allow any battery fluids (acid) to come into contact with skin, clothing or the vehicle body.
- Do not lean over the battery.
- In the event that battery fluid comes into contact with the skin or eyes, immediately wash the affected area with water and seek medical attention. Place a wet sponge or cloth over the affected area until medical attention can be received.
- Always wash your hands after handling the battery support, terminals, and other battery-related parts.
- Do not allow children near the battery.

■ **After recharging the battery**

Have the battery inspected at your Lexus dealer as soon as possible. If the battery is deteriorating, continued use may cause the battery to emit a malodorous gas, which may be detrimental to the health of passengers.

■ **When replacing the battery**

- When the vent plug and indicator are close to the hold down clamp, the battery fluid (sulfuric acid) may leak.

- For information regarding battery replacement, contact your Lexus dealer.

- After replacing, securely attach the exhaust hose and exhaust hole plug to the exhaust hole of the replaced battery. If not properly installed, gases (hydrogen) may leak into the vehicle interior, and there is the possible danger of the gas igniting and exploding.

 **NOTICE**

■ **When handling jumper cables**

When connecting the jumper cables, ensure that they do not become entangled in the cooling fan or engine drive belt.

■ **To prevent damaging the vehicle**

The exclusive jump starting terminal is to be used when charging the battery from another vehicle in an emergency. It cannot be used to jump start another vehicle.

### If your vehicle overheats

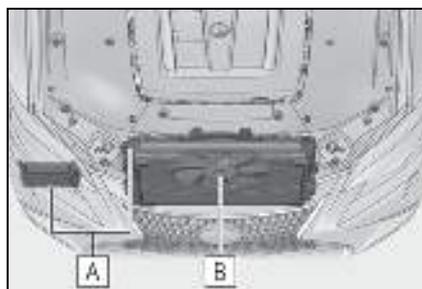
The following may indicate that your vehicle is overheating.

- The engine coolant temperature gauge (→P.111, 114) is in the red zone or a loss of engine power is experienced. (For example, the vehicle speed does not increase.)
- “Engine Coolant Temp High Stop in a Safe Place See Owner’s Manual” is shown on the multi-information display.
- Steam comes out from under the hood.

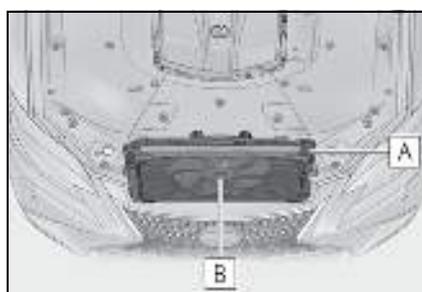
### Correction procedures

- 1 Stop the vehicle in a safe place and turn off the air conditioning system, and then stop the engine.
- 2 If you see steam:  
Carefully lift the hood after the steam subsides.  
If you do not see steam:  
Carefully lift the hood.
- 3 After the engine has cooled down sufficiently, inspect the hoses and radiator core (radiator) for any leaks.

#### ▶ LS500



#### ▶ LS350



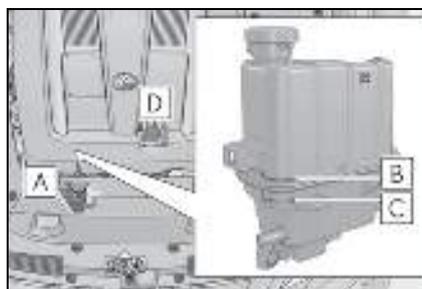
**A** Radiators

**B** Cooling fan

If a large amount of coolant leaks, immediately contact your Lexus dealer.

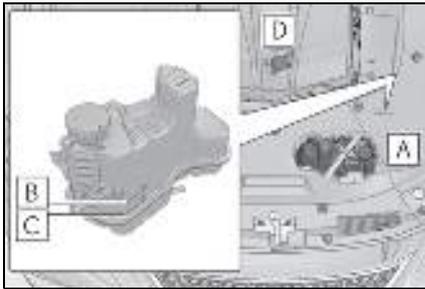
- 4 The coolant level is satisfactory if it is between the “F” and “L” lines on the reservoir.

#### ▶ Engine (LS500)

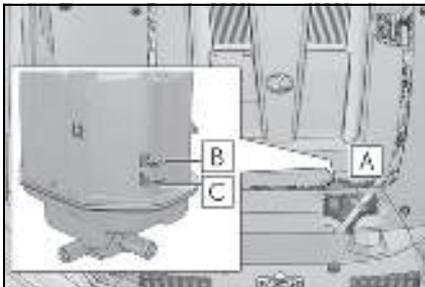


**A** Reservoir

- B** "F" line
- C** "L" line
- D** Coolant inlet cap
- ▶ Engine (LS350)



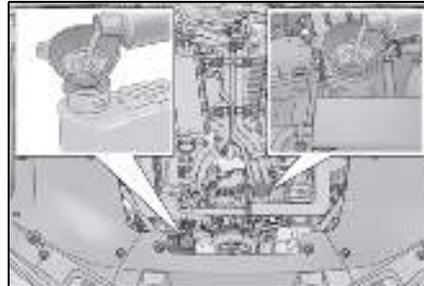
- A** Reservoir
- B** "F" line
- C** "L" line
- D** Coolant inlet cap
- ▶ Intercooler (LS500)



- A** Reservoir
- B** "F" line
- C** "L" line
- 5** Add coolant if necessary.

Water can be used in an emergency if coolant is unavailable.

- ▶ Engine (LS500)
- P.549

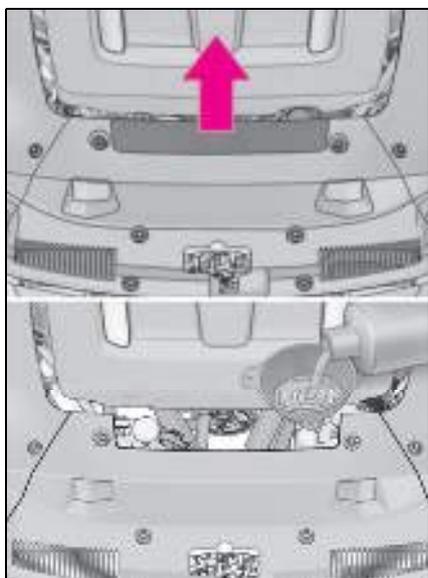


- ▶ Engine (LS350)
- P.549



- ▶ Intercooler (LS500)

Remove the engine compartment cover and add coolant.



- 6 Start the engine and turn the air conditioning system on to check that the radiator cooling fan operates and to check for coolant leaks from the radiator or hoses.

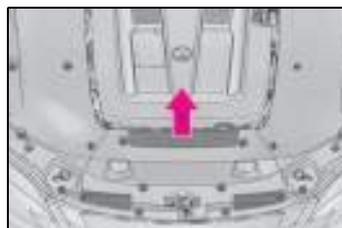
The fan operates when the air conditioning system is turned on immediately after a cold start. Confirm that the fan is operating by checking the fan sound and air flow. If it is difficult to check these, turn the air conditioning system on and off repeatedly. (The fan may not operate in freezing temperatures.)

- 7 If the fan is not operating:  
Stop the engine immediately and contact your Lexus dealer.  
If the fan is operating:  
Have the vehicle inspected at the nearest Lexus dealer.

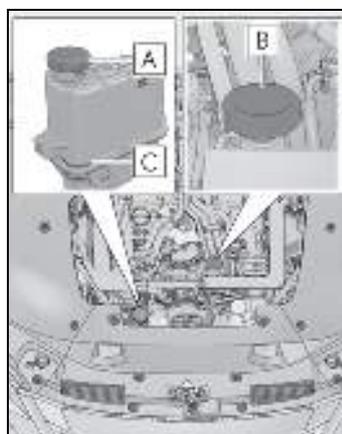
■ **When adding engine coolant (LS500)**

Add coolant in accordance with the following procedure.

- 1 Remove the engine compartment cover.



- 2 Remove the engine cover. (→P.473)  
3 Remove the caps **A** and **B**.

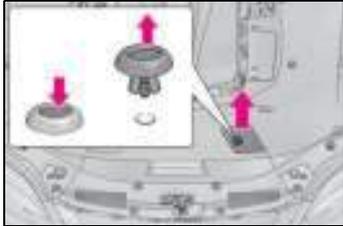


- 4 Add coolant through the inlet of the cap **A** up to the "F" line **C**, and then replace the cap **A**.  
5 Add coolant through the inlet of the cap **B** until it is full, and then replace the cap **B**.  
6 Install the engine compartment cover and engine cover. (→P.474)

■ **When adding engine coolant (LS350)**

Add coolant in accordance with the following procedure.

- 1 Remove the engine compartment cover.



- 2 Remove the engine cover. (→P.473)
- 3 Remove the caps **A** and **B**.



- 4 Add coolant through the inlet of the cap **A** up to the "F" line **C**, and then replace the cap **A**.
- 5 Add coolant through the inlet of the cap **B** until it is full, and then replace the cap **B**.
- 6 Install the engine compartment cover and engine cover. (→P.474)

**⚠ WARNING**

■ **When inspecting under the hood of your vehicle**

Observe the following precautions. Failure to do so may result in serious injury such as burns.

- If steam is seen coming from under the hood, do not open the hood until the steam has subsided. The engine compartment may be very hot.
- Keep hands and clothing (especially a tie, a scarf or a muffler) away from the fan and belts. Failure to do so may cause the hands or clothing to be caught, resulting in serious injury.
- Do not loosen the coolant inlet cap, the engine coolant reservoir cap or the intercooler coolant reservoir cap while the engine and radiator are hot. High temperature steam or coolant could spray out.

**⚠ NOTICE**

■ **When adding engine coolant**

Add coolant slowly after the engine has cooled down sufficiently. Adding cool coolant to a hot engine too quickly can cause damage to the engine.

■ **To prevent damage to the cooling system**

Observe the following precautions:

- Avoid contaminating the coolant with foreign matter (such as sand or dust etc.).
- Do not use any coolant additive.

### If the vehicle becomes stuck

Carry out the following procedures if the tires spin or the vehicle becomes stuck in mud, dirt or snow:

#### Recovering procedure

- 1 Stop the engine. Set the parking brake and shift the shift position to P.
- 2 Remove the mud, snow or sand from around the rear wheels.
- 3 Place wood, stones or some other material under the rear wheels to help provide traction.
- 4 Restart the engine.
- 5 Shift the shift position to D or R and release the parking brake. Then, while exercising caution, depress the accelerator pedal.

#### ■ When it is difficult to free the vehicle

Press the  switch to turn off TRC.



#### WARNING

##### ■ When attempting to free a stuck vehicle

If you choose to push the vehicle back and forth to free it, make sure the surrounding area is clear to avoid striking other vehicles, objects or people. The vehicle may also lunge forward or lunge back suddenly as it becomes free. Use extreme caution.

##### ■ When shifting the shift position

Be careful not to shift the shift position with the accelerator pedal depressed. This may lead to unexpected rapid acceleration of the vehicle that may cause an accident resulting in death or serious injury.

#### NOTICE

##### ■ To avoid damaging the transmission and other components

- Avoid spinning the rear wheels and depressing the accelerator pedal more than necessary.
- If the vehicle remains stuck even after these procedures are performed, the vehicle may require towing to be freed.



## Vehicle specifications

8

553

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8

Vehicle specifications

**Maintenance data (fuel, oil level, etc.)**

**Dimensions**

Overall length		5235 mm (206.1 in.)	
Overall width		1900 mm (74.8 in.)	
Overall height* <sup>1</sup>	2WD models	1460 mm (57.5 in.) <sup>*2</sup> 1450 mm (57.1 in.) <sup>*3</sup>	
	AWD models	1470 mm (57.9 in.) <sup>*2</sup> 1460 mm (57.5 in.) <sup>*3</sup>	
Wheelbase		3125 mm (123.0 in.)	
Tread* <sup>1</sup>	Front	2WD models	1630 mm (64.2 in.)
		AWD models	1630 mm (64.2 in.) <sup>*2</sup> 1635 mm (64.4 in.) <sup>*3</sup>
	Rear	1635 mm (64.4 in.) <sup>*4</sup> 1615 mm (63.6 in.) <sup>*5</sup>	

\*1: Unladen vehicles

\*2: Without electronically modulated air suspension

\*3: With electronically modulated air suspension

\*4: Except F SPORT models

\*5: F SPORT models

**Vehicle identification**

■ **Vehicle identification number**

The vehicle identification number (VIN) is the legal identifier for your vehicle. This is the primary identification number for your Lexus. It is used in registering the ownership of your vehicle.

This number is stamped on the top left of the instrument panel.



This number is also stamped under the

right-hand front seat.



This number is also on the Certification Regulation label\*<sup>1</sup> or the manufacturer's label\*<sup>2</sup>.



\*<sup>1</sup>: For Korea, GCC countries \*<sup>3</sup>, Yemen, Lebanon, Jordan and Iraq

\*<sup>2</sup>: Except for Korea, GCC countries \*<sup>3</sup>, Yemen, Lebanon, Jordan and Iraq

\*<sup>3</sup>: Saudi Arabia, Sultanate of Oman, Bahrain, United Arab Emirates, Qatar, Kuwait

■ **Year of manufacture and country of origin (GCC countries \*, Yemen, Lebanon, Jordan and Iraq)**

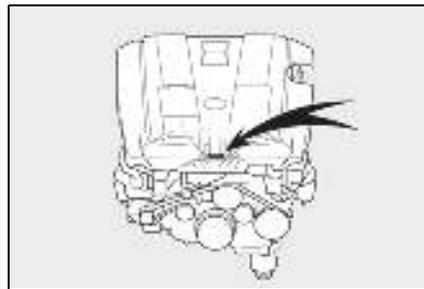
The year of the manufacture and country of origin are shown on the Certification Regulation label.

\*: Saudi Arabia, Sultanate of Oman, Bahrain, United Arab Emirates, Qatar, Kuwait

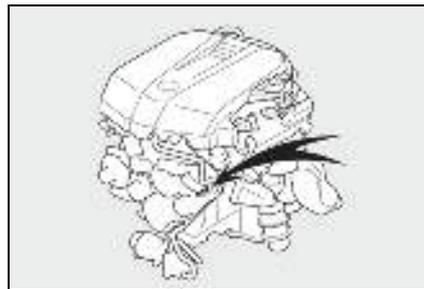
■ **Engine number**

The engine number is stamped on the engine block as shown.

▶ **LS500**



▶ **LS350**



**Engine**

► LS500

Model	V35A-FTS
Type	6-cylinder V type, 4-cycle, gasoline (with turbocharger)
Bore and stroke	85.5 × 100.0 mm (3.37 × 3.94 in.)
Displacement	3445 cm <sup>3</sup> (210.2 cu. in.)
Valve clearance	Automatic adjustment
Drive belt tension	Automatic adjustment
Maximum vehicle speed <sup>*1</sup>	250 km/h (155 mph)
Maximum torque (NET) <sup>*1</sup>	600 N•m@1600—4800 rpm
Maximum output (NET) <sup>*1</sup>	310 kW@6000 rpm

► LS350

Model	8GR-FKS
Type	6-cylinder V type, 4-cycle, gasoline
Bore and stroke	94.0 × 83.0 mm (3.70 × 3.27 in.)
Displacement	3456 cm <sup>3</sup> (210.9 cu. in.)
Valve clearance	Automatic adjustment
Drive belt tension	Automatic adjustment
Maximum vehicle speed <sup>*1</sup>	250 km/h (155 mph)
Maximum torque (NET) <sup>*1</sup>	380 N•m@4800 rpm
Maximum output (NET) <sup>*1</sup>	232 kW@6600 rpm

\*1: For vehicles with model code<sup>\*2</sup> that has "V" as the last letter

\*2: The model code is indicated on the manufacturer's label or the Certification Regulation label. (→P.554)

Fuel	
Fuel type	Unleaded gasoline only
Research Octane Number	95 or higher
Fuel tank capacity (Reference)	82.0 L (21.7 gal., 18.0 Imp. gal.)

**Lubrication system**

- ▶ LS500
- Oil capacity (Drain and refill [Reference \*])

With filter	▶ 2WD models 6.3 L (6.7 qt., 5.5 Imp. qt.) ▶ AWD models 7.1 L (7.5 qt., 6.2 Imp. qt.)
Without filter	▶ 2WD models 5.8 L (6.1 qt., 5.1 Imp. qt.) ▶ AWD models 6.6 L (7.0 qt., 5.8 Imp. qt.)

\*: The engine oil capacity is a reference quantity to be used when changing the engine oil. Warm up and turn off the engine, wait more than 5 minutes, and check the oil level on the dipstick.

■ Engine oil selection

“Toyota Genuine Motor Oil” is used in your Lexus vehicle. Use Lexus approved “Toyota Genuine Motor Oil” or equivalent to satisfy the following grade and viscosity.

Oil grade:

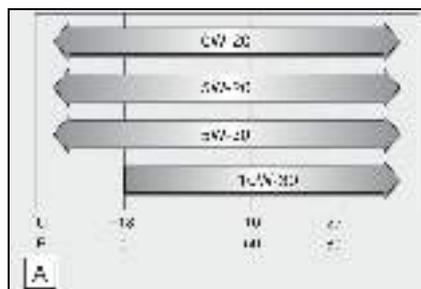
API grade SL “Energy-Conserving”, SM “Energy-Conserving” or SN “Resource-Conserving” or SN PLUS

“Resource-Conserving”; or ILSAC multigrade engine oil

Viscosity grade:

SAE 0W-20, 5W-20, 5W-30 and 10W-30

Recommended viscosity (SAE):



**A** Temperature range anticipated before next oil change

If you use SAE 10W-30 engine oil in extremely low temperatures, the engine may become difficult to start, so SAE 0W-20, 5W-20 or 5W-30 engine oil is recommended.

Oil viscosity (0W-20 is explained here as an example):

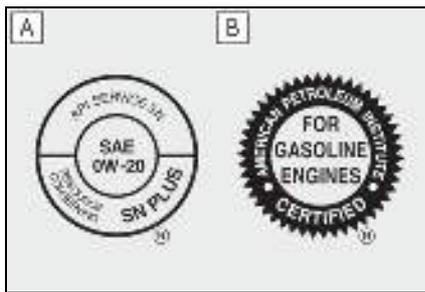
- The 0W in 0W-20 indicates the characteristic of the oil which allows cold startability. Oils with a lower value before the W allow for easier

starting of the engine in cold weather.

- The 20 in OW-20 indicates the viscosity characteristic of the oil when the oil is at high temperature. An oil with a higher viscosity (one with a higher value) may be better suited if the vehicle is operated at high speeds, or under extreme load conditions.

How to read oil container labels:

Either or both API registered marks are added to some oil containers to help you select the oil you should use.



**A** API Service Symbol

Top portion: "APISERVICE SN" means the oil quality designation by American Petroleum Institute (API).

Center portion: "SAE OW-20" means the SAE viscosity grade.

Lower portion: "Resource-Conserving" means that the oil has fuel-saving and environmental protection capabilities.

**B** ILSAC Certification Mark

The International Lubricant Specification Advisory Committee (ILSAC) Certification Mark is displayed on the front of the container.

► LS350

■ Oil capacity (Drain and refill [Reference\*])

With filter	5.8 L (6.1 qt., 5.1 Imp. qt.)
Without filter	5.5 L (5.8 qt., 4.8 Imp. qt.)

\*: The engine oil capacity is a reference quantity to be used when changing the engine oil. Warm up and turn off the engine, wait more than 5 minutes, and check the oil level on the dipstick.

■ Engine oil selection

"Toyota Genuine Motor Oil" is used in your Lexus vehicle. Use Lexus approved "Toyota Genuine Motor Oil" or equivalent to satisfy the following grade and viscosity.

Oil grade:

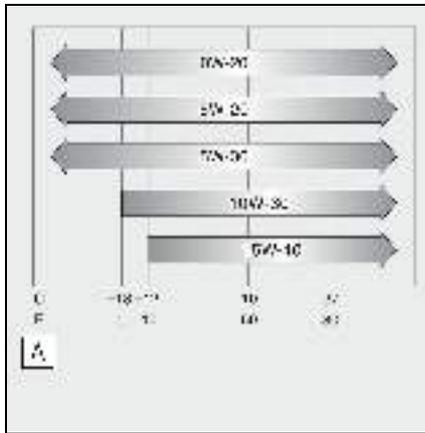
0W-20, 5W-20, 5W-30 and 10W-30:

API grade SL "Energy-Conserving", SM "Energy-Conserving", SN "Resource-Conserving" or SN PLUS "Resource-Conserving"; or ILSAC multigrade engine oil

15W-40:

API grade SL, SM, SN or SN PLUS multigrade engine oil

Recommended viscosity (SAE):



**A** Temperature range anticipated before next oil change

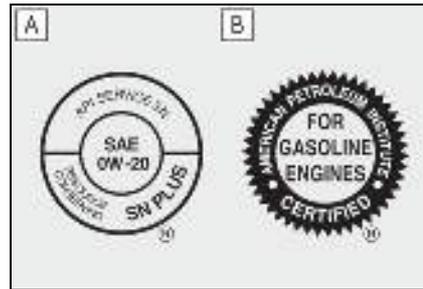
If you use SAE 10W-30 or a higher viscosity engine oil in extremely low temperatures, the engine may become difficult to start, so SAE 0W-20, 5W-20 or 5W-30 engine oil is recommended.

Oil viscosity (0W-20 is explained here as an example):

- The OW in 0W-20 indicates the characteristic of the oil which allows cold startability. Oils with a lower value before the W allow for easier starting of the engine in cold weather.
- The 20 in 0W-20 indicates the viscosity characteristic of the oil when the oil is at high temperature. An oil with a higher viscosity (one with a higher value) may be better suited if the vehicle is operated at high speeds, or under extreme load conditions.

How to read oil container labels:

Either or both API registered marks are added to some oil containers to help you select the oil you should use.



**A** API Service Symbol

Top portion: "API SERVICE SN" means the oil quality designation by American Petroleum Institute (API).

Center portion: "SAE 0W-20" means the SAE viscosity grade.

Lower portion: "Resource-Conserving" means that the oil has fuel-saving and environmental protection capabilities.

**B** ILSAC Certification Mark

The International Lubricant Specification Advisory Committee (ILSAC) Certification Mark is displayed on the front of the container.

**Cooling system**

Capacity (Reference)	LS500	▶ Engine 2WD models: 10.6 L (11.2 qt., 9.3 Imp. qt.) AWD models: 10.5 L (11.1 qt., 9.2 Imp. qt.) ▶ Intercooler 4.3 L (4.5 qt., 3.8 Imp. qt.)
	LS350	10.9 L (11.5 qt., 9.6 Imp. qt.)
Coolant type	Use either of the following: <ul style="list-style-type: none"> <li>• “Toyota Super Long Life Coolant”</li> <li>• Similar high-quality ethylene glycol-based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology</li> </ul> Do not use plain water alone.	

**Ignition system (spark plug)**

	LS500	LS350
Make	DENSO EC22HPR-D7	DENSO FK20HBR8
Gap	0.7 mm (0.028 in.)	0.8 mm (0.031 in.)

 NOTICE

**■ Iridium-tipped spark plugs**

Use only iridium-tipped spark plugs. Do not adjust the spark plug gap.

**Electrical system (battery)**

Open voltage at 20°C (68°F):	12.3 V or higher (Turn the engine switch off and turn on the headlights for 20 to 30 seconds.)
Charging rates	
Quick charge	15 A max.
Slow charge	5 A max.

### Automatic transmission

Fluid capacity *	LS500	▶ Vehicles without Stop & Start System 9.0 L (9.5 qt., 7.9 Imp. qt.) ▶ Vehicles with Stop & Start System 8.9 L (9.4 qt., 7.8 Imp. qt.)
	LS350	8.8 L (9.3 qt., 7.7 Imp. qt.)
Fluid type	Toyota Genuine ATF WS	

\*: The fluid capacity is a reference quantity.  
If replacement is necessary, contact your Lexus dealer.

#### NOTICE

##### ■ Automatic transmission fluid type

Using transmission fluid other than "Toyota Genuine ATF WS" may cause deterioration in shift quality, locking up of your transmission accompanied by vibration, and ultimately damage the transmission of your vehicle.

### Transfer (AWD models)

Oil capacity	0.70 L (0.74 qt., 0.62 Imp. qt.)
Oil type and viscosity *	Toyota Genuine Transfer gear oil LL 80 or equivalent

\*: Your Lexus vehicle is filled with Toyota genuine gear oil at the factory. Use Lexus approved Toyota genuine gear oil or an equivalent of matching quality to satisfy the above specification. Please contact your Lexus dealer for further details.

### Front differential (AWD models)

Oil capacity	0.65 L (0.69 qt., 0.57 Imp. qt.)
Oil type and viscosity *	Toyota Genuine Differential gear oil LT 75W-85 GL-5 or equivalent

\*: Your Lexus vehicle is filled with "Toyota Genuine Differential Gear Oil" at the factory. Use Lexus approved "Toyota Genuine Differential Gear Oil" or an equivalent oil of matching quality to satisfy the above specification. Please contact your Lexus dealer for further details.

### Rear differential

► LS500 (2WD models)

Oil capacity	0.85 L (0.90 qt., 0.75 Imp. qt.)
Oil type and viscosity *	Toyota Genuine Differential gear oil LT 75W-85 GL-5 or equivalent

► LS500 (AWD models) and LS350

Oil capacity	1.35 L (1.42 qt., 1.19 Imp. qt.)
Oil type and viscosity *	Toyota Genuine Differential gear oil LT 75W-85 GL-5 or equivalent

\*: Your Lexus vehicle is filled with "Toyota Genuine Differential Gear Oil" at the factory. Use Lexus approved "Toyota Genuine Differential Gear Oil" or an equivalent oil of matching quality to satisfy the above specification. Please contact your Lexus dealer for further details.

### Brakes

Pedal clearance *1	121 mm (4.8 in.) Min. *3 122 mm (4.8 in.) Min. *4
Pedal free play	1—6 mm (0.04—0.24 in.)
Brake pad wear limit	1 mm (0.04 in.)
Parking brake indicator *2	When pushing the parking brake switch for 1 to 2 seconds: comes on When pulling the parking brake switch for 1 to 2 seconds: turns off
Fluid type	SAE J1703 or FMVSS No.116 DOT 3 SAE J1704 or FMVSS No.116 DOT 4

\*1: Minimum pedal clearance when depressed with a force of 500 N (51 kgf, 112 lbf) while the engine is running.  
When performing the brake pedal inspection, also be sure to check that the brake system warning light is not illuminated when the engine is running. (If the brake system warning light is illuminated, refer to P.521.)

\*2: Make sure to confirm that the brake warning light (yellow) does not illuminate. (If the brake warning light illuminates, refer to P.521.)

\*3: Vehicles without Lexus Safety System + A

\*4: Vehicles with Lexus Safety System + A

### Steering

Free play	Less than 30 mm (1.2 in.)
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### Tires and wheels (for Korea)

#### ► 19-inch tires

Tire manufacturer	Dunlop	Michelin
Tire rolling resistance rating (5 levels)*	4	4
Tire wet grip rating (5 levels)*	2	4
Tire size	245/50RF19 101V	
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 250 kPa (2.5 kgf/cm <sup>2</sup> or bar, 36 psi) Rear: 250 kPa (2.5 kgf/cm <sup>2</sup> or bar, 36 psi) Driving at high speeds above 160 km/h (100 mph) (in countries where such speeds are permitted by law) Add 60 kPa (0.6 kgf/cm <sup>2</sup> or bar, 9 psi) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.	
Wheel size	19 × 8J	
Wheel nut torque	140 N•m (14.3 kgf•m, 103 ft•lbf)	

\*: A rating closer to "1" indicates higher performance.

#### ► 20-inch tires (type A)

Tire manufacturer	Bridgestone	
Tire rolling resistance rating (5 levels)*	4	
Tire wet grip rating (5 levels)*	3	
Tire size	245/45RF20 99V	

Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 240 kPa (2.4 kgf/cm <sup>2</sup> or bar, 35 psi) Rear: 240 kPa (2.4 kgf/cm <sup>2</sup> or bar, 35 psi) Driving at high speeds above 160 km/h (100 mph) (in countries where such speeds are permitted by law) Add 60 kPa (0.6 kgf/cm <sup>2</sup> or bar, 9 psi) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	20 × 8 1/2J
Wheel nut torque	140 N•m (14.3 kgf•m, 103 ft•lbf)

\* : A rating closer to “1” indicates higher performance.

► 20-inch tires (type B)

Tire manufacturer	Bridgestone
Tire rolling resistance rating (5 levels)*	4
Tire wet grip rating (5 levels)*	3
Tire size	Front tires: 245/45RF20 99V Rear tires: 275/40RF20 102V
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 250 kPa (2.5 kgf/cm <sup>2</sup> or bar, 36 psi) Rear: 250 kPa (2.5 kgf/cm <sup>2</sup> or bar, 36 psi) Driving at high speeds above 160 km/h (100 mph) (in countries where such speeds are permitted by law) Add 60 kPa (0.6 kgf/cm <sup>2</sup> or bar, 9 psi) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	Front wheels: 20 × 8 1/2J Rear wheels: 20 × 9 1/2J
Wheel nut torque	140 N•m (14.3 kgf•m, 103 ft•lbf)

\* : A rating closer to “1” indicates higher performance.

### Tires and wheels (except for Korea)

#### ▶ 19-inch tires

Tire size	245/50RF19 101W		
Tire inflation pressure (Recommended cold tire inflation pressure)	Vehicle speed	Front wheel kPa (kgf/cm <sup>2</sup> or bar, psi)	Rear wheel kPa (kgf/cm <sup>2</sup> or bar, psi)
	More than 190 km/h (118 mph)	310 (3.1, 45)	310 (3.1, 45)
	190 km/h (118 mph) or less	250 (2.5, 36)	250 (2.5, 36)
Wheel size	19 × 8J		
Wheel nut torque	140 N•m (14.3 kgf•m, 103 ft•lbf)		

#### ▶ 20-inch tires (type A)

Tire size	245/45RF20 99Y		
Tire inflation pressure (Recommended cold tire inflation pressure)	Vehicle speed	Front wheel kPa (kgf/cm <sup>2</sup> or bar, psi)	Rear wheel kPa (kgf/cm <sup>2</sup> or bar, psi)
	More than 220 km/h (137 mph) More than 190 km/h (118 mph) <sup>*1</sup>	310 (3.1, 45)	310 (3.1, 45)
	220 km/h (137 mph) or less 190 km/h (118 mph) or less <sup>*1</sup>	250 (2.5, 36)	250 (2.5, 36)
Wheel size	20 × 8 1/2J		
Wheel nut torque	140 N•m (14.3 kgf•m, 103 ft•lbf)		

\*1: For vehicles with model code<sup>\*2</sup> that has "V" as the last letter

\*2: The model code is indicated on the manufacturer's label or the Certification Regulation label. (→P.554)

► 20-inch tires (type B)

Tire size	Front tires: 245/45RF20 99Y Rear tires: 275/40RF20 102Y		
Tire inflation pressure (Recommended cold tire inflation pressure)	Vehicle speed	Front wheel kPa (kgf/cm <sup>2</sup> or bar, psi)	Rear wheel kPa (kgf/cm <sup>2</sup> or bar, psi)
	More than 220 km/h (137 mph) More than 190 km/h (118 mph) <sup>*1</sup>	310 (3.1, 45)	310 (3.1, 45)
	220 km/h (137 mph) or less 190 km/h (118 mph) or less <sup>*1</sup>	250 (2.5, 36)	250 (2.5, 36)
Wheel size	Front wheels: 20 × 8 1/2J Rear wheels: 20 × 9 1/2J		
Wheel nut torque	140 N•m (14.3 kgf•m, 103 ft•lbf)		

\*1: For vehicles with model code<sup>\*2</sup> that has "V" as the last letter

\*2: The model code is indicated on the manufacturer's label or the Certification Regulation label. (→P.554)

## Fuel information

You must only use unleaded gasoline.

Select premium unleaded gasoline with a Research Octane Number of 95 or higher for optimum engine performance.

If this premium type cannot be obtained, you may temporarily use unleaded gasoline with a Research Octane Number as low as 91.

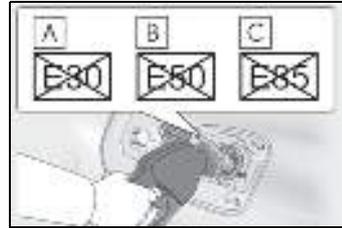
**LS500:** The use of such gasoline may cause the engine to knock or drastically reduce output to protect itself while driving with a heavy load. To avoid this, refill the tank with premium unleaded gasoline as soon as possible.

### ■ Use of ethanol blended gasoline in a gasoline engine (except for Korea)

Lexus allows the use of ethanol blended gasoline where the ethanol content is up to 10%. Make sure that the ethanol blended gasoline to be used has a Research Octane Number that follows the above.

### ■ Use of ethanol blended gasoline in a gasoline engine (for Korea)

- Use only gasoline containing up to 15% ethanol.  
DO NOT use any flex-fuel or gasoline that could contain more than 15% ethanol, including from any pump labeled E30 (30% ethanol **[A]**), E50 (50% ethanol **[B]**), E85 (85% ethanol **[C]**) (which are only some examples of fuel containing more than 15% ethanol).



- Make sure that the ethanol blended gasoline to be used has a suitable Research Octane Number.
- **If your engine knocks**
- Consult your Lexus dealer.
- You may occasionally notice light knocking for a short time while accelerating or driving uphill. This is normal and there is no need for concern.

### ⚠ NOTICE

#### ■ Notice on fuel quality

- Do not use improper fuels. If improper fuels are used, the engine will be damaged.
- Do not use gasoline with metallic additives, for example manganese, iron or lead, otherwise it may cause damage on your engine or emission control system.
- Do not add aftermarket fuel additives which contain metallic additives.
- Do not use the methanol blended gasoline such as M15, M85, M100.  
The use of gasoline containing methanol may cause engine damage or failure.

## Customizable features

Your vehicle includes a variety of electronic features that can be personalized to your preferences. The settings of these features can be changed by using the meter control switches, the Remote Touch, Rear Multi Operation Panel or at your Lexus dealer.

## Customizing vehicle features

### ■ Changing by using the meter control switches

- 1 Press  or  to select .
- 2 Operate the meter control switches to select the desired item to be customized.
- 3 According to the display, select the desired setting and then press .

To go back to the previous screen or exit the customize mode, press .

### ■ Changing by using the Remote Touch

- 1 Press the "MENU" button on the Remote Touch.
- 2 Select "Setup" on the menu screen and select "Vehicle".
- 3 Select "Vehicle Customization" or "Drive Mode Customization".

Various setting can be changed. Refer to the list of settings that can be changed for details.

For details on the Remote Touch, refer to the "Navigation and Multimedia Sys-

tem Owner's Manual" or "Multimedia Owner's Manual".

### ■ Changing by using the Rear Multi Operation Panel (if equipped)

- 1 Display the home screen on the Rear Multi Operation Panel and then touch "Seat".
- 2 Touch "Left" or "Right".
- 3 Touch .
- 4 Touch a button to change the setting.

### ■ When customizing using the Remote Touch

Stop the vehicle in a safe place, apply the parking brake, and shift the shift position to P. Also, to prevent battery discharge, leave the engine running while customizing the features.

### WARNING

#### ■ During customization

As the engine needs to be running during customization, ensure that the vehicle is parked in a place with adequate ventilation. In a closed area such as a garage, exhaust gases including harmful carbon monoxide (CO) may collect and enter the vehicle. This may lead to death or a serious health hazard.

### NOTICE

#### ■ During customization

To prevent battery discharge, ensure that the engine is running while customizing features.

### Customizable features

Some function settings are changed simultaneously with other functions being customized. Contact your Lexus dealer for further details.

- A** Settings that can be changed using the Remote Touch
- B** Settings that can be changed using the meter control switches
- C** Settings that can be changed using the Rear Multi Operation Panel (if equipped)
- D** Settings that can be changed by your Lexus dealer

Definition of symbols: ○ = Available, – = Not available

#### ■ Seat belts (→P.34)

Function	Default setting	Customized setting				
			A	B	C	D
Easy Access Buckle * <sup>1</sup>	On	Off	–	–	–	○
Retraction of front seat belts when vehicle speed reaches approximately 20 km/h (12 mph)* <sup>2</sup>	On	Off	–	–	–	○
Retraction of front seat belt when corresponding front door is opened or seat belt is released * <sup>2</sup>	On	Off	–	–	–	○

\*<sup>1</sup>: If equipped

\*<sup>2</sup>: Vehicles with pre-collision seat belts with comfort function

#### ■ Gauges, meters and multi-information display (→P.106, 111, 114, 118)

Function * <sup>1</sup>	Default setting	Customized setting				
			A	B	C	D
Language * <sup>2</sup>	English	French	–	○	–	–
		Spanish				
		Traditional Chinese				
		Turkish				
		Arabic				

Function *1	Default setting	Customized setting	A	B	C	D
			<input type="radio"/>	<input type="radio"/>	-	-
Units *2	L/100 km	km/L	<input type="radio"/>	<input type="radio"/>	-	-
Drive information 1	Current fuel consumption	Customizable items: →P.121	-	<input type="radio"/>	-	-
	Average fuel economy (after reset)					
Drive information 2	Distance (driving range)					
	Average vehicle speed (after reset)					
Clock	12-hour display	24-hour display	-	<input type="radio"/>	-	-
Pop-up display	On	Off	-	<input type="radio"/>	-	-
Accent color	Color 1	Color 2	<input type="radio"/>	<input type="radio"/>	-	-
Rev indicator *3	5000 r/min.	2000 - 6400 r/min.*4	-	<input type="radio"/>	-	-
		2000 - 6800 r/min.*5				
		Off				
Rev peak *3	On	Off	-	<input type="radio"/>	-	-
Eco Driving Indicator Light	On	Off	-	<input type="radio"/>	-	-
Suggestion function	On	On (when the vehicle is stopped)	<input type="radio"/>	-	-	<input type="radio"/>
		Off				

\*1: For details about each function: →P.124

\*2: The default setting varies according to country.

\*3: F SPORT models

\*4: LS500

\*5: LS350

### ■ Head-up Display\* (→P.126)

Function	Default setting	Customized setting	A	B	C	D
Gauge information	Tachometer	Eco Driving Indicator	-	○	-	-
		No content				
Route guidance to destination/street name*	On	Off	-	○	-	-
Driving support system display	On	Off	-	○	-	-
Compass*	On	Off	-	○	-	-
Audio system operation status	On	Off	-	○	-	-

\* : If equipped

### ■ Door lock (→P.138, 143, 538)

Function	Default setting	Customized setting	A	B	C	D
Unlocking using a mechanical key*	All doors unlocked in one step	Driver's door unlocked in one step, all doors unlocked in two step	-	-	-	○
Speed linked door locking function	On	Off	○	-	-	○
Shift position linked door locking function	Off	On	○	-	-	○
Shift position linked door unlocking function*	Off	On	○	-	-	○
Driver's door linked door unlocking function*	On	Off	○	-	-	○
Locking/unlocking of the trunk when all doors are locked/unlocked	On	Off	-	-	-	○

\* : The default setting varies according to country.

■ Smart entry & start system and wireless remote control (→P.138, 150)

Function	Default setting	Customized setting	A	B	C	D
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operating signal (Buzzers)*	5	Off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1 to 7				
Operation signal (Emergency flashers)	On	Off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time elapsed before automatic door lock function is activated if door is not opened after being unlocked	30 seconds	60 seconds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		120 seconds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open door warning buzzer	On	Off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\* : If equipped

■ Smart entry & start system (→P.138, 150)

Function	Default setting	Customized setting	A	B	C	D
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smart entry & start system	On	Off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smart door unlocking*	All the doors	Driver's door	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time elapsed before unlocking all the door when gripping and holding the driver's door handle	2 seconds	Off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1.5 seconds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		2.5 seconds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of consecutive door lock operations*	2 times	As many as desired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\* : The default setting varies according to countries.

### ■ Wireless remote control (→P.136, 138, 143)

Function	Default setting	Customized setting	A	B	C	D
Wireless remote control	On	Off	-	-	-	○
Unlocking operation <sup>*1</sup>	All doors unlocked in one step	Driver's door unlocked in one step, all doors unlocked in two step	○	-	-	○
Trunk unlocking operation	Press and hold (short)	One short press	-	-	-	○
		Push twice				
		Press and hold (long)				
		Off				
Theft deterrent panic mode <sup>*2</sup>	On	Off	-	-	-	○

<sup>\*1</sup>: The default setting varies according to countries.

<sup>\*2</sup>: If equipped

### ■ Trunk (→P.143)

Function	Default setting	Customized setting	A	B	C	D
Hands Free Power Trunk Lid (kick sensor) <sup>*</sup>	On	Off	-	○	-	-

<sup>\*</sup>: If equipped

### ■ Front seats (→P.163)

Function	Default setting	Customized setting	A	B	C	D
Driver's seat position linked head restraint height operation <sup>*</sup>	Off	On	-	-	-	○

<sup>\*</sup>: If equipped

■ Power rear seats\* (→P.170)

Function	Default setting	Customized setting	A	B	C	D
Automatic rear seat operation (door-linked rear seat return function and shift-linked rear seat reclining function)	On	Off	-	-	○	-
Door linked rear seat with ottoman seatback position for exiting*	More upright than upright position	Upright position	-	-	○	-
Shift-linked rear seat reclining function	On	Off	-	-	-	○

\*: If equipped

■ Driving position memory (→P.175)

Function	Default setting	Customized setting	A	B	C	D
Selecting doors linked to the memory recall function	Driver's door	All doors	-	-	-	○
Driver's seat slide movement when exiting the vehicle	Full	Off	○	-	-	○
		Partial				
Driver's seat height movement when exiting the vehicle	Off	Full	○	-	-	○
		Partial				
Steering wheel movement	Tilt only	Off				
		Telescopic only	○	-	-	○
		Tilt and telescopic				

■ Outside rear view mirrors (→P.186)

Function	Default setting	Customized setting	A	B	C	D
Automatic mirror folding and extending operation	Linked to the locking/ unlocking of the doors	Off				
		Linked to operation of the engine switch	-	-	-	○

■ Power windows, and moon roof<sup>\*1</sup> or panoramic moon roof<sup>\*1</sup> (→P.189, 192, 194)

Function	Default setting	Customized setting	A	B	C	D
Mechanical key linked operation	Off	On	-	-	-	○
Wireless remote control linked operation <sup>*2</sup>	Off	On	-	-	-	○
Wireless remote control linked operation signal (buzzer) <sup>*2</sup>	On	Off	-	-	-	○

\*1: If equipped

\*2: Except for Korea

■ Reverse warning buzzer (→P.216)

Function	Default setting	Customized setting	A	B	C	D
Signal (buzzer) when the shift position is in R	Single	Intermittent	-	-	-	○

■ Automatic light control system (→P.227)

Function	Default setting	Customized setting	A	B	C	D
Light sensor sensitivity	Standard	-2 to 2	○	-	-	○
Time elapsed before headlights automatically turn on <sup>*</sup>	Standard	Long	-	-	-	○

Function	Default setting	Customized setting	A	B	C	D
Time elapsed before headlights automatically turn off after doors are closed*	30 seconds	Off				
		60 seconds	○	-	-	○
		90 seconds				
Follow me home* (Time elapsed before headlights automatically turn off)	30 seconds	60 seconds				
		90 seconds	-	-	-	○
		120 seconds				

\* : On some models

■ Lights (→P.227)

Function	Default setting	Customized setting	A	B	C	D
Daytime running lights	On	Off*	○	-	-	○
Welcome lighting	On	Off	-	-	-	○

\* : On some models

■ AHS (Adaptive High-beam System)\*<sup>1</sup>(→P.230)

Function	Default setting	Customized setting	A	B	C	D
Adaptive High-beam System	On	Off* <sup>2</sup>	-	-	-	○
Clearance between a vehicle ahead and the shaded high beams	Wide	Narrow				
		Standard	-	-	-	○
Brightness and illuminated area adjustment of the high beams according to the vehicle speed	Operates at approximately 15 km/h (10 mph) or more	Operates at approximately 30 km/h (19 mph) or more				
		Operates at approximately 80 km/h (50 mph) or more	-	-	-	○

Function	Default setting	Customized setting	A	B	C	D
Intensity adjustment of the high beams when driving around a curve (illuminates the area in the direction vehicle is turning more brightly)	On	Off	-	-	-	○
Projection distance adjustment of the low beams according to the distance to a preceding vehicle	On	Off	-	-	-	○
Illumination of the cornering lights when starting off	On	Off	-	-	-	○
High beam light distribution control for rain	On	Off	-	-	-	○
Upper level high beam light distribution control	On	Off	-	-	-	○
Light distribution control for urban areas	On	Off	-	-	-	○

\*1: If equipped

\*2: The headlights will operate under Automatic High Beam control. (→P.234)

■ **Multi Weather Lights\*** (→P.236)

Function	Default setting	Customized setting	A	B	C	D
Multi Weather Lights	On	Off	-	-	-	○

\*: If equipped

■ **PCS(Pre-Collision System)\* and FCTA(Front Cross Traffic Alert)\*** (→P.260, 271, 280)

Function	Default setting	Customized setting	A	B	C	D
PCS (Pre-Collision System) and FCTA function	On	Off	-	○	-	-

Function	Default setting	Customized setting	A	B	C	D
Adjust alert timing	Middle	Early	-	<input type="radio"/>	-	-
		Late	-	<input type="radio"/>	-	-
Pedestrian alert* and FCTA function	On	Off	-	<input type="radio"/>	-	-

\*: If equipped

■ LTA (Lane Tracing Assist)\* (→P.283)

Function	Default setting	Customized setting	A	B	C	D
Lane centering function	On	Off	-	<input type="radio"/>	-	-
Steering assist function	On	Off	-	<input type="radio"/>	-	-
Alert type	Steering wheel vibration	Buzzer	-	<input type="radio"/>	-	-
Alert sensitivity	High	Standard	-	<input type="radio"/>	-	-
Vehicle sway warning function	On	Off	-	<input type="radio"/>	-	-
Vehicle sway warning sensitivity	Standard	High	-	<input type="radio"/>	-	-
		Low	-	<input type="radio"/>	-	-

\*: If equipped

■ LDA (Lane Departure Alert with steering control)\* (→P.293)

Function	Default setting	Customized setting	A	B	C	D
Steering assist function	On	Off	-	<input type="radio"/>	-	-
Alert type	Steering wheel vibration	Buzzer	-	<input type="radio"/>	-	-
Alert sensitivity	High	Standard	-	<input type="radio"/>	-	-
Vehicle sway warning function	On	Off	-	<input type="radio"/>	-	-
Vehicle sway warning sensitivity	Standard	High	-	<input type="radio"/>	-	-
		Low	-	<input type="radio"/>	-	-

\*: If equipped

■ **Dynamic radar cruise control with full-speed range** \*<sup>1</sup>(→P.301)

Function	Default setting	Customized setting	A	B	C	D
Curve speed reduction function strength * <sup>2</sup>	High	Low	-	○	-	-
		Off	-	○	-	-

\*<sup>1</sup>: If equipped

\*<sup>2</sup>: Vehicles with Lexus Safety System + A

■ **Stop & Start system** \* (→P.323)

Function	Default setting	Customized setting	A	B	C	D
Change the Stop & Start system duration when the A/C is on	Standard	Extended	-	○	-	-

\*: If equipped

■ **BSM (Blind Spot Monitor)** \* (→P.330)

Function	Default setting	Customized setting	A	B	C	D
BSM (Blind Spot Monitor)	On	Off	-	○	-	-
Outside rear view mirror indicator brightness	Bright	Dim	-	○	-	-
Alert timing for presence of approaching vehicle (sensitivity)	Intermediate	Early	-	○	-	-
		Late				
		Only when vehicle detected in blind spot				

\*: If equipped

■ PKSA (Parking Support Alert) (→P.338)

Function	Default setting	Customized setting	A	B	C	D
Buzzer volume	Level2	Level1	-	○	-	-
		Level3	-	○	-	-

■ Lexus parking assist-sensor (→P.340)

Function	Default setting	Customized setting	A	B	C	D
Lexus parking assist-sensor	On	Off	-	○	-	-

■ RCTA (Rear cross traffic alert) function\* (→P.346)

Function	Default setting	Customized setting	A	B	C	D
RCTA (Rear cross traffic alert) function	On	Off	-	○	-	-

\*: If equipped

■ RCD (Rear camera detection) function\* (→P.351)

Function	Default setting	Customized setting	A	B	C	D
RCD (Rear camera detection) function	On	Off	-	○	-	-

\*: If equipped

■ PKSB (Parking Support Brake)\* (→P.354)

Function	Default setting	Customized setting	A	B	C	D
PKSB (Parking Support Brake) function	On	Off	-	○	-	-

\*: If equipped

### ■ Driving mode select switch (→P.374)

Function	Default setting	Customized setting	A	B	C	D
Powertrain control in custom mode*	Normal	Power	○	-	-	-
		Eco				
Chassis control in custom mode*	Normal	Sport	○	-	-	-
		Comfort				
Air conditioning operation in custom mode*	Normal	Eco	○	-	-	-

\*: If equipped

### ■ Electronically modulated air suspension\* (→P.376)

Function	Default setting	Customized setting	A	B	C	D
Vehicle height control	On	Off	-	○	-	-
Ingress/egress height control function	On	Off	-	○	-	-
Vehicle height when parked	Normal	High	-	○	-	-

\*: If equipped

### ■ Automatic air conditioning system (→P.401)

Function	Default setting	Customized setting	A	B	C	D
Switching between outside air and recirculated air mode linked to "AUTO" switch operation	On	Off	○	-	-	○
A/C auto switch operation	On	Off	○	-	-	○
Exhaust gas sensor sensitivity*	Standard	-3 to 3	○	-	-	○

\*: If equipped

■ Seat heater/seat ventilators <sup>\*1</sup>(→P.415)

Function	Default setting	Customized setting	A	B	C	D
Driver's seat temperature preference in automatic mode	Standard	-2 (cooler) to 2 (warmer)	○	-	-	○
Passenger's seat temperature preference in automatic mode	Standard	-2 (cooler) to 2 (warmer)	○	-	-	○
Left-hand rear seat temperature preference in automatic mode <sup>*1</sup>	Standard	-2 (cooler) to 2 (warmer)	○	-	-	○
Right-hand rear seat temperature preference in automatic mode <sup>*1</sup>	Standard	-2 (cooler) to 2 (warmer)	○	-	-	○
Engine switch linked automatic activation of the left-hand rear seat heater/ventilator <sup>*2</sup>	Off	On	○	-	-	○
Engine switch linked automatic activation of the right-hand rear seat heater/ventilator <sup>*2</sup>	Off	On	○	-	-	○

<sup>\*1</sup>: If equipped

<sup>\*2</sup>: Vehicles without power rear seat

■ Heated steering wheel <sup>\*</sup>(→P.415)

Function	Default setting	Customized setting	A	B	C	D
Steering wheel heating preference in automatic mode	Standard	-2 (low) to 2 (high)	○	-	-	○

<sup>\*</sup>: If equipped

■ Illumination (→P.419)

Function	Default setting	Customized setting	A	B	C	D
Time elapsed before the interior lights turn off	15 seconds	Off				
		7.5 seconds	○	-	-	○
		30 seconds				
Operation after the engine switch is turned off	On	Off	-	-	-	○
Operation when the doors are unlocked	On	Off	-	-	-	○
Operation when you approach the vehicle with the electronic key on your person	On	Off	-	-	-	○
Footwell lights	On	Off	-	-	-	○
Instrument panel ornament light and door trim ornament lights	On	Off	-	-	-	○
Time elapsed before the outer foot lights turn off	15 seconds	Off				
		7.5 seconds	○	-	-	○
		30 seconds				
Operation of the outer foot lights when you approach the vehicle with the electronic key on your person	On	Off	-	-	-	○
Operation of the outer foot lights when the doors are unlocked	On	Off	-	-	-	○
Operation of the outer foot lights when a door is opened	On	Off	-	-	-	○
Fading out of the outer foot lights when they turn off	Long	Short	-	-	-	○

■ Vehicle customization

- When the speed linked door locking function and shift position linked door

locking function are both on, the door lock operates as follows.

- When shifting the shift position to any position other than P, all the doors will be locked.



Vehicle specifications

- If the vehicle is started with all the doors locked, the speed linked door locking function will not operate.
- If the vehicle is started with any door unlocked, the speed linked door locking function will operate.
- When the smart entry & start system is off, the entry unlock function cannot be customized.
- When the doors remain closed after unlocking the doors and the timer activated automatic door lock function activates, signals will be generated in accordance with the operation buzzer volume and operational signal (Emergency flashers) function settings.
- Some settings can be changed using a switch or the audio system screen. If a setting is changed using a switch, the changed setting will not be reflected on the audio system screen until the engine switch is turned off and then to IGNITION ON mode.

■ **Clock settings screen**

If the clock adjustment screen is displayed continuously when attempting to change the clock settings, the system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

## Items to initialize

The following items must be initialized for normal system operation after such cases as the battery being reconnected, or maintenance being performed on the vehicle:

### List of items to initialize

Item	When to initialize	Reference
PKSB (Parking Support Brake)*	<ul style="list-style-type: none"> <li>After reconnecting or changing the battery</li> </ul>	P.359
Lexus parking assist-sensor	<ul style="list-style-type: none"> <li>After reconnecting or changing the battery</li> </ul>	P.342
Oil maintenance	<ul style="list-style-type: none"> <li>After maintenance is performed</li> </ul>	P.477
Tire pressure warning system	<ul style="list-style-type: none"> <li>When the tire inflation pressure is changed, such as when changing traveling speed or load weight.</li> <li>When the tire inflation pressure is changed, such as when the tire size is changed.</li> <li>When rotating the tires.</li> <li>After performing the transmitter ID code registration procedure.</li> </ul>	P.492
Lexus parking assist monitor*	<ul style="list-style-type: none"> <li>Battery has been reinstalled.</li> <li>The steering wheel has been moved while the battery was being reinstalled.</li> <li>Battery power is low.</li> </ul>	Refer to the "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".
Panoramic view monitor*	<ul style="list-style-type: none"> <li>Battery has been reinstalled.</li> <li>The steering wheel has been moved while the battery was being reinstalled.</li> <li>Battery power is low.</li> </ul>	Refer to the "Navigation and Multimedia System Owner's Manual" or "Multimedia Owner's Manual".

\*: If equipped



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## What to do if... (Troubleshooting)

If you have a problem, check the following before contacting your Lexus dealer.

### The doors cannot be locked, unlocked, opened or closed



#### You lose your keys

- If you lose your mechanical keys, new genuine mechanical keys can be made by your Lexus dealer. (→P.537)
- If you lose your electronic keys, the risk of vehicle theft increases significantly. Contact your Lexus dealer immediately. (→P.537)



#### The electronic key does not operate properly

- Is the electronic key battery weak or depleted? (→P.503)



#### The doors cannot be locked or unlocked

- Is the engine switch in IGNITION ON mode?

When locking the doors, turn the engine switch off. (→P.214)

- Is the electronic key left inside the vehicle?

When locking the doors, make sure that you have the electronic key on your per-

son.

- The function may not operate properly due to the condition of the radio wave. (→P.152)



#### The rear door cannot be opened

- Is the child-protector lock set?

The rear door cannot be opened from inside the vehicle when the lock is set. Open the rear door from outside and then unlock the child-protector lock. (→P.142)



#### The trunk lid is closed with the electronic key left inside

- The function to prevent the electronic key from being left inside the trunk will operate and you can open the trunk as usual. Take the key out from the trunk. (→P.148)

### If you think something is wrong



#### The engine does not start

- Did you press the engine switch while firmly depressing the brake pedal? (→P.212)
- Is the electronic key anywhere detectable inside the vehicle? (→P.151)
- Is the steering wheel unlocked? (→P.212)

- Is the electronic key battery weak or depleted?

In this case, the engine can be started in a temporary way. (→P.539)

- Is the battery discharged? (→P.540)



**The steering wheel cannot be turned after the engine is stopped**

- It is locked automatically to prevent theft of the vehicle. (→P.212)



**The windows do not open or close by operating the power window switches**

- Is the window lock switch pressed?

The power window except for the one at the driver's seat cannot be operated if the window lock switch is pressed. (→P.191)



**The engine switch is turned off automatically**

- The auto power off function will be operated if the vehicle is left in ACCESSORY mode for a period of time. (→P.214)



**A warning buzzer sounds during driving**

- The seat belt reminder light is flashing

Are the driver and the front passenger wearing the seat belts? (→P.524)

- The parking brake indicator is on

Is the parking brake released? (→P.223)

Depending on the situation, other types of warning buzzer may also sound. (→P.521, 530)



**An alarm is activated and the horn sounds**

- Did anyone inside the vehicle open a door or anything move inside the vehicle\* during setting the alarm?

The sensor detects them and the alarm sounds. (→P.100)

\*: If the vehicle is equipped with intrusion sensor and tilt sensor.

Do one of the following to deactivate or stop the alarms:

- Except for Malaysia, South Africa and Egypt: Unlock the doors.
- For Malaysia, South Africa and Egypt: Unlock the doors or open the trunk using the entry function or wireless remote control.
- Except for Malaysia, South Africa and Egypt: Turn the engine switch to ACCESSORY or IGNITION ON mode, or start the engine. (The alarm will be deactivated or stopped after a few seconds.)
- For Malaysia, South Africa and Egypt: Starting the engine. (The alarm will be deactivated or stopped after a few seconds.)



**A warning buzzer sounds when leaving the vehicle**

- Is the message displayed on the multi-information display?

Check the message on the multi-information display. (→P.530)



**A warning light turns on or a warning message is displayed**

- When a warning light turns on or a warning message is displayed, refer to P.521, 530.

**When a problem has occurred**



**If you have a flat tire**

- Slow down the vehicle, drive with extra caution, and take your vehicle to the nearest Lexus dealer or authorized tire dealer as soon as possible to have the tire replaced. (→P.534)



**The vehicle becomes stuck**

- Try the procedure for when the vehicle becomes stuck in mud, dirt, or snow. (→P.551)

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**For information regarding the equipment listed below, refer to the “Navigation and Multimedia System Owner’s Manual” or “Multimedia Owner’s Manual”.**

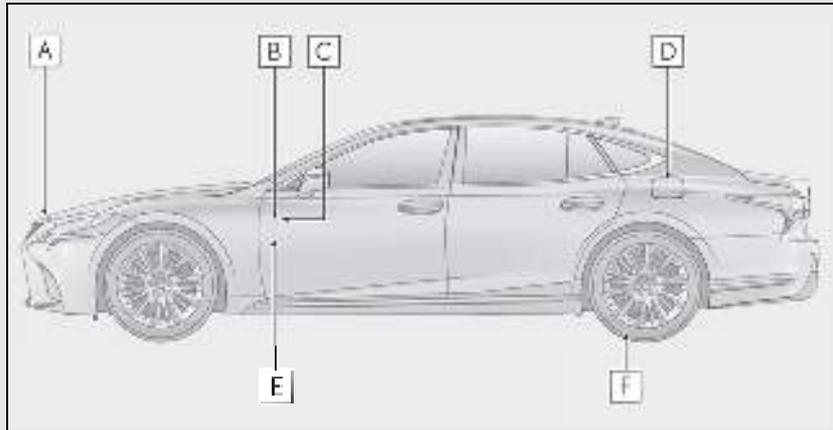
- Navigation system
- Audio/visual system
- Rear seat entertainment system
- Lexus parking assist monitor







## GAS STATION INFORMATION



- A** Auxiliary catch lever (→P.468)
- B** Trunk opener (→P.145)
- C** Fuel filler door opener (→P.244)
- D** Fuel filler door (→P.244)
- E** Hood lock release lever (→P.468)
- F** Tire inflation pressure (→P.563, 565)

Fuel tank capacity (Reference)	82.0 L (21.7 gal., 18.0 Imp. gal.)	
Fuel type	Unleaded gasoline only	P.557 P.567
Cold tire inflation pressure		P.563 P.565
Engine oil capacity (Drain and refill — reference)		P.557 P.558
Engine oil type		P.557 P.558

