

Pictorial index	Search by illustration	
For safety and security	Make sure to read through them (Main topics: Child seat, theft deterrent system)	1
Vehicle status information and indicators	Reading driving-related information (Main topics: Meters, multi-information display)	2
Before driving	Opening and closing the doors and windows, adjustment before driving (Main topics: Keys, doors, seats)	3
Driving	Operations and advice which are necessary for driving (Main topics: Starting engine, refueling)	4
Interior features	Usage of the interior features (Main topics: Air conditioner, storage features)	5
Maintenance and care	Caring for your vehicle and maintenance procedures (Main topics: Interior and exterior, light bulbs)	6
When trouble arises	What to do in case of malfunction and emergency (Main topics: Battery discharge, flat tire)	7
Vehicle specifications	Vehicle specifications, customizable features (Main topics: Fuel, oil, tire inflation pressure)	8
For owners	Reporting safety defects for U.S. owners, and seat belt, SRS airbag and headlight aim instructions for Canadian owners	9
Index	Search by symptom	
	Search alphabetically	

2 TABLE OF CONTENTS

For your information	6
Reading this manual	10
How to search	11
Pictorial index	12

1 For safety and security

1-1. For safe use	
Before driving	24
For safe driving	25
Seat belts	26
SRS airbags	32
Front passenger occupant classification system	41
Exhaust gas precautions	45
1-2. Child safety	
Riding with children	47
Child restraint systems	47
1-3. Lexus Enform	
Lexus Enform Safety Connect ..	60
Lexus Enform Remote	65
Lexus Enform Service Connect ..	66
1-4. Theft deterrent system	
Engine immobilizer system	67
Alarm	69

2 Vehicle status information and indicators

2-1. Instrument cluster	
Warning lights and indicators	72
Gauges and meters	77
Multi-information display	80
Head-up display	86
Fuel consumption information ..	90

3 Before driving

3-1. Key information	
Keys	94
3-2. Opening, closing and locking the doors	
Side doors	98
Back door	102
Smart access system with push-button start	114
3-3. Adjusting the seats	
Front seats	120
Rear seats	121
Driving position memory	126
Head restraints	129
3-4. Adjusting the steering wheel and mirrors	
Steering wheel	131
Inside rear view mirror	132
Outside rear view mirrors	134
3-5. Opening, closing the windows and moon roof	
Power windows	136
Moon roof	138

4 Driving

4-1. Before driving

Driving the vehicle.....	144
Cargo and luggage.....	150
Vehicle load limits.....	152
Trailer towing (vehicles with towing package).....	153
Trailer towing (vehicles without towing package).....	161
Dinghy towing	162

4-2. Driving procedures

Engine (ignition) switch	163
Automatic transmission.....	167
Turn signal lever.....	171
Parking brake	171
Brake Hold.....	174
ASC (Active Sound Control).....	176

4-3. Operating the lights and wipers

Headlight switch.....	177
Automatic High Beam	180
Fog light switch	183
Windshield wipers and washer.....	183
Rear window wiper and washer	188

4-4. Refueling

Opening the fuel tank cap.....	190
--------------------------------	-----

4-5. Using the driving support systems

Lexus Safety System + 2.0.....	192
PCS (Pre-Collision System)	198
LTA (Lane Tracing Assist)	205
LDA (Lane Departure Alert with steering control).....	214
RSA (Road Sign Assist).....	222
Dynamic radar cruise control with full-speed range.....	224
PKSA (Parking Support Alert).....	234
Intuitive parking assist	235
Parking Support Brake function (for static objects).....	240
BSM (Blind Spot Monitor)	249
Driving mode select switch	257
Driving assist systems	259
All-wheel drive lock switch (AWD models).....	264

4-6. Driving tips

Winter driving tips	265
Utility vehicle precautions.....	268

5 Interior features

5-1. Remote Touch

Remote Touch.....	272
-------------------	-----

5-2. Using the air conditioning system and defogger

Automatic air conditioning system	277
Heated steering wheel/seat heaters/seat ventilators.....	285

5-3. Using the interior lights

Interior lights list	288
----------------------------	-----

4 TABLE OF CONTENTS

- 5-4. Using the storage features
 - List of storage features..... 291
 - Luggage compartment features..... 294
- 5-5. Using the other interior features
 - Other interior features 298
 - Garage door opener..... 308
 - Compass..... 314

6 Maintenance and care

- 6-1. Maintenance and care
 - Cleaning and protecting the vehicle exterior 318
 - Cleaning and protecting the vehicle interior 321
- 6-2. Maintenance
 - Maintenance requirements 324
 - General maintenance 325
 - Emission inspection and maintenance (I/M) programs 328
- 6-3. Do-it-yourself maintenance
 - Do-it-yourself service precautions 329
 - Hood..... 331
 - Positioning a floor jack..... 331
 - Engine compartment..... 333
 - Tires 341
 - Tire inflation pressure..... 349
 - Wheels..... 351
 - Air conditioning filter..... 352
 - Electronic key battery 353
 - Checking and replacing fuses 355
 - Headlight aim..... 357
 - Light bulbs..... 358

7 When trouble arises

- 7-1. Essential information
 - Emergency flashers 364
 - If your vehicle has to be stopped in an emergency 364
 - If the vehicle is trapped in rising water 365
- 7-2. Steps to take in an emergency
 - If your vehicle needs to be towed 367
 - If you think something is wrong 371
 - Fuel pump shut off system..... 372
 - If a warning light turns on or a warning buzzer sounds..... 373
 - If a warning message is displayed 382
 - If you have a flat tire 385
 - If the engine will not start 393
 - If you lose your keys..... 394
 - If the fuel filler door cannot be opened 395
 - If the electronic key does not operate properly 395
 - If the vehicle battery is discharged 398
 - If your vehicle overheats..... 401
 - If the vehicle becomes stuck ... 404

8 Vehicle specifications

- 8-1. Specifications
 - Maintenance data (fuel, oil level, etc.) 406
 - Fuel information..... 414
 - Tire information 416

8-2. Customization	
Customizable features.....	425
8-3. Initialization	
Items to initialize	436
9 For owners	1
9-1. For owners	
Reporting safety defects for U.S. owners	438
Seat belt instructions for Canadian owners (in French).....	438
SRS airbag instructions for Canadian owners (in French).....	440
Headlight aim instructions for Canadian owners (in French).....	447
Index	
What to do if... (Troubleshooting)	450
Alphabetical Index.....	453
	2
	3
	4
	5
	6
	7
	8
	9

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

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. You should know that Toyota does not warrant these products and is not responsible for their performance,

repair, or replacement, or for any damage they may cause to, or adverse effect they may have on, your Lexus vehicle.

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 a mobile two-way radio system

The installation of a mobile two-way radio system in your vehicle could affect electronic systems such as:

- Multiport fuel injection system/sequential multiport fuel injection system
- Lexus Safety System + 2.0
- Anti-lock brake system
- SRS airbag system
- Seat belt pretensioner system

Be sure to check with your Lexus dealer for precautionary measures or special instructions regarding installation of a mobile two-way radio system.

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 Transmission

Your vehicle may transmit the data recorded in these computers to Lexus without notification to you.

● Data usage

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

- Recorded image information can be erased by your Lexus dealer.

The image recording function can be disabled. However, if the function is disabled, data from when the system operates will not be available.

- To learn more about the vehicle data collected, used and shared by Lexus, please visit www.lexus.com/privacyvts/.

Usage of data collected through Lexus Enform (U.S. mainland only)

If your Lexus has Lexus Enform and if you have subscribed to those services, please refer to the Lexus Enform Telematics Subscription Service Agreement for information on data collected and its usage.

- To learn more about the vehicle data collected, used and shared by Lexus, please visit www.lexus.com/privacyvts/.

Event data recorder

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less.

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

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.

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

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

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

- 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 and seat belt pretensioner devices in your Lexus contain explosive chemicals. If the vehicle is scrapped with the airbags and seat belt pretensioners left as they are, this may cause an accident such as fire. Be sure to have the systems of the SRS airbag and seat belt pretensioner removed and disposed of by a qualified service shop or by your Lexus dealer before you scrap your vehicle.

Perchlorate Material

Special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate.

Your vehicle has components that may contain perchlorate. These components may include airbag, seat belt pretensioners, and wireless remote control batteries.

**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.

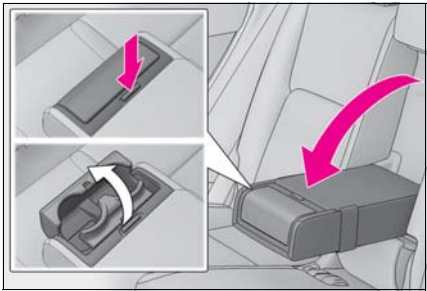
Reading this manual

Explains symbols used in this manual

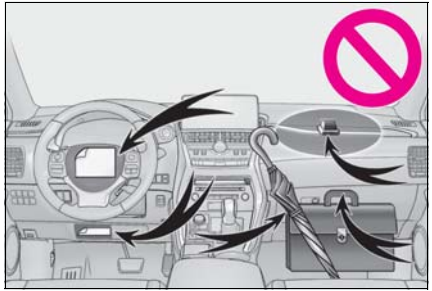
Symbols in this manual

Symbols	Meanings
	WARNING: Explains something that, if not obeyed, could cause death or serious injury to people.
	NOTICE: 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).

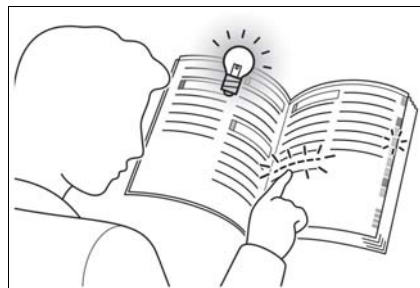
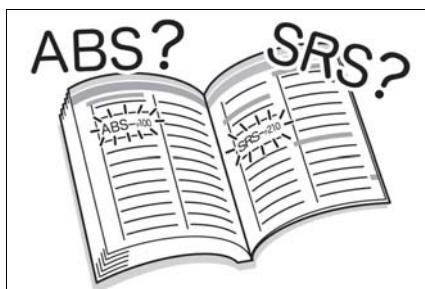


Symbols	Meanings
	Indicates the component or position being explained.
	Means Do not, Do not do this, or Do not let this happen.

How to search

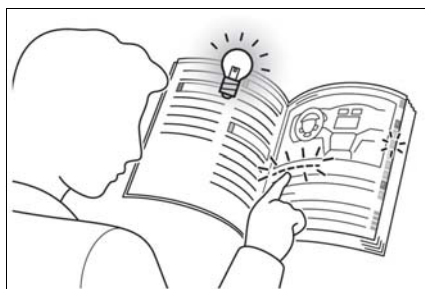
■ Searching by name

- Alphabetical index: →P.453



■ Searching by installation position

- Pictorial index: →P.12



■ Searching by symptom or sound

- What to do if... (Troubleshooting):
→P.450

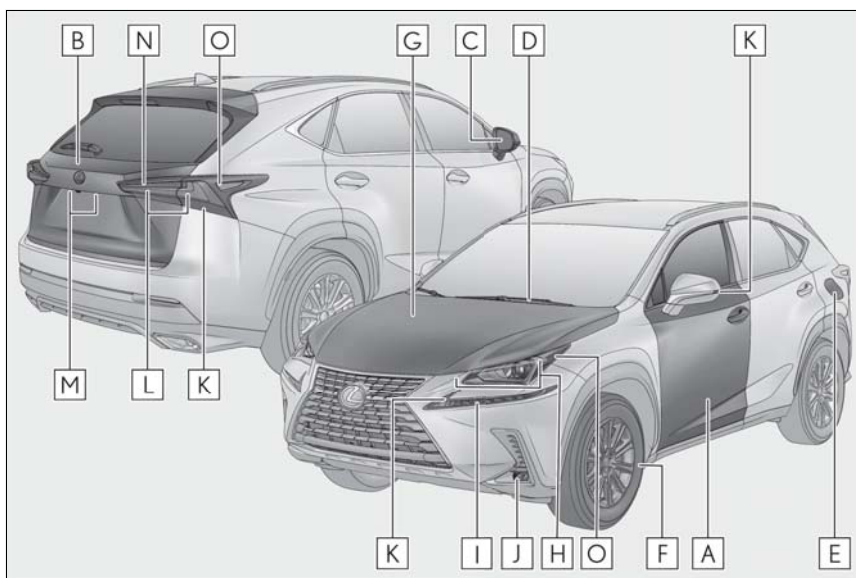


■ Searching by title

- Table of contents: →P.2

Pictorial index

■ Exterior



The shape of the headlights may differ depending on the grade, etc.

A	Side doors	P.98
	Locking/unlocking	P.98
	Opening/closing the side windows	P.136
	Locking/unlocking by using the mechanical key	P.395
	Warning messages	P.382
B	Back door	P.102
	Opening from inside the cabin *	P.105
	Opening from outside	P.103, 105
	Warning messages	P.382
C	Outside rear view mirrors	P.134
	Adjusting the mirror angle	P.134
	Folding the mirrors	P.135
	Driving position memory *	P.126
	Defogging the mirrors	P.278

D	Windshield wipers	P.183, 188
	Precautions against winter season	P.265
	To prevent freezing (windshield wiper de-icer) *	P.282
	Precautions against car wash	P.319
E	Fuel filler door	P.190
	Refueling method	P.190
	Fuel type/fuel tank capacity	P.407
F	Tires	P.341
	Tire size/inflation pressure	P.411
	Winter tires/tire chain	P.265
	Checking/rotation/tire pressure warning system	P.341
	Coping with flat tires	P.385
G	Hood	P.331
	Opening	P.331
	Engine compartment cover	P.334
	Engine oil	P.408
	Coping with overheat	P.401
	Warning messages	P.382

Light bulbs of the exterior lights for driving
(Replacing method: P.358, Watts: P.413)

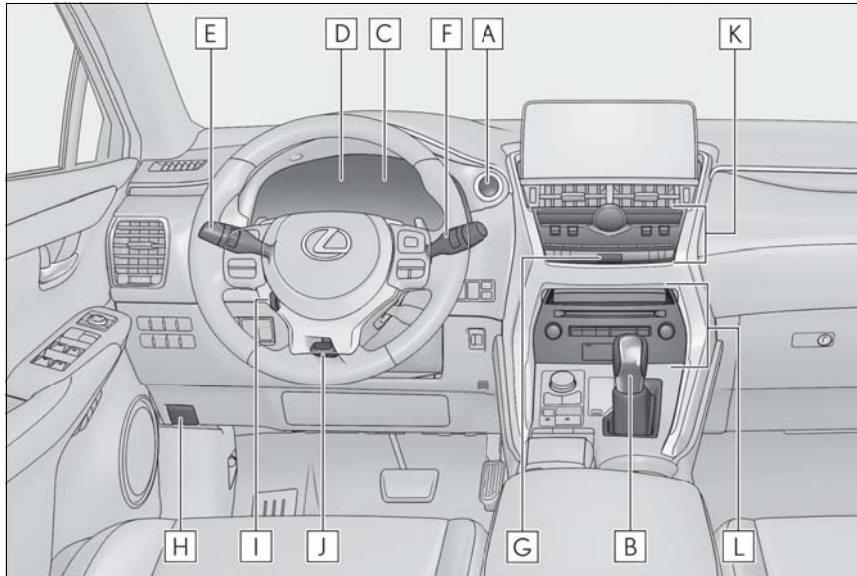
H	Headlights	P.177
I	Parking lights/daytime running lights	P.177
J	Fog lights	P.183
	Cornering lights *	P.179
K	Turn signal lights	P.171
L	Tail lights	P.177
M	License plate lights	P.177
N	Back-up light	
	Shifting the shift lever to R	P.167

14 Pictorial index

0	Side marker lights	P.177
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* : If equipped

■ Instrument panel



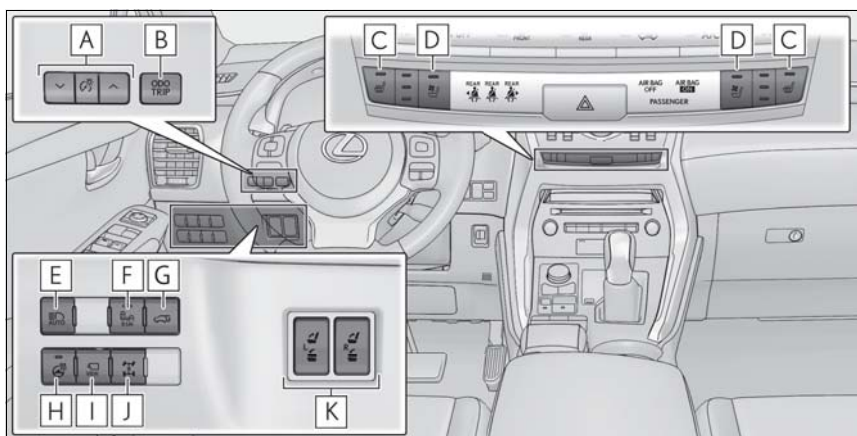
- A Engine switch** P.163
 Starting the engine/changing the modes P.163, 165
 Emergency stop of the engine P.364
 When the engine will not start..... P.393
 Warning messages P.382
- B Shift lever**..... P.168
 Changing the shift position P.168
 Precautions against towing..... P.367
 When the shift lever does not move P.168
- C Meters**..... P.77
 Reading the meters/adjusting the instrument panel light..... P.77, 79
 Warning lights/indicator lights P.72
 When the warning lights come on..... P.373
- D Multi-information display** P.80
 Display..... P.81
 When the warning messages are displayed..... P.382

E	Turn signal lever	P.171
	Headlight switch.....	P.177
	Headlights/parking lights/tail lights/license plate lights/ daytime running lights.....	P.177
	Fog lights	P.183
F	Windshield wiper and washer switch.....	P.183, 188
	Usage.....	P.183, 188
	Adding washer fluid.....	P.340
	Warning messages	P.382
G	Emergency flasher switch	P.364
H	Hood lock release lever.....	P.331
I	Tilt and telescopic steering control switch ^{*1}	P.131
	Adjustment	P.131
	Driving position memory ^{*1}	P.126
J	Tilt and telescopic steering lock release lever ^{*1}	P.131
	Adjustment	P.131
K	Air conditioning system	P.277
	Usage.....	P.277
	Rear window defogger.....	P.278
L	Audio system ^{*2}	

^{*1}: If equipped

^{*2}: Refer to "NAVIGATION AND MULTIMEDIA SYSTEM OWNER'S MANUAL".

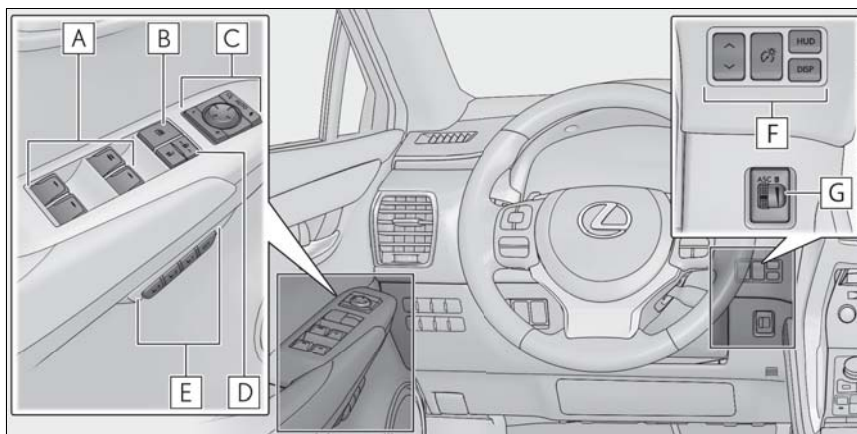
■ Switches



- A** Instrument panel light control switches P.79
- B** Odometer/trip meter and trip meter reset button P.79
- C** Front seat heater switches ^{*1} P.286
- D** Seat ventilator switches ^{*1} P.287
- E** Automatic High Beam switch P.180
- F** BSM (Blind Spot Monitor) main switch ^{*1} P.249
- G** Power back door switch ^{*1} P.105
- H** Heated steering wheel switch ^{*1} P.286
- I** Camera switch ^{*1, 2}
- J** All-wheel drive lock switch ^{*1} P.264
- K** Rear seat operation switches ^{*1} P.122

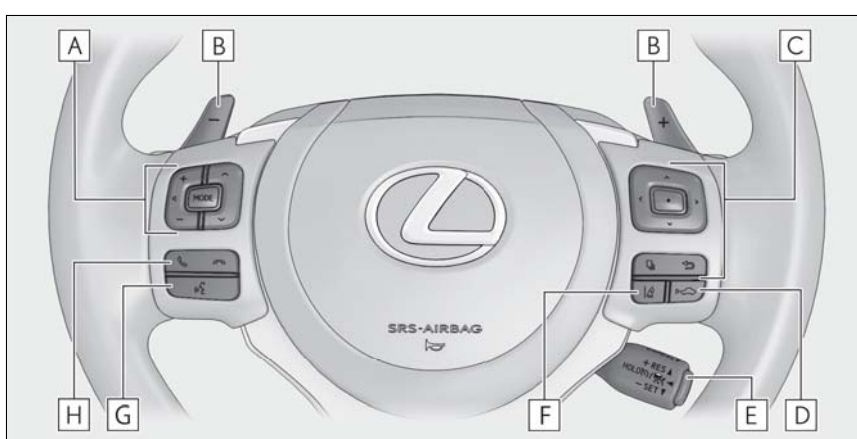
^{*1}: If equipped

^{*2}: Refer to "NAVIGATION AND MULTIMEDIA SYSTEM OWNER'S MANUAL".



- A** Power window switchesP.136
- B** Window lock switchP.137
- C** Outside rear view mirror switchesP.134
- D** Door lock switch.....P.100
- E** Driving position memory switches *P.126
- F** HUD (Head-up display) switches *P.86
- G** ASC (Active Sound Control) dial*P.176

*: If equipped

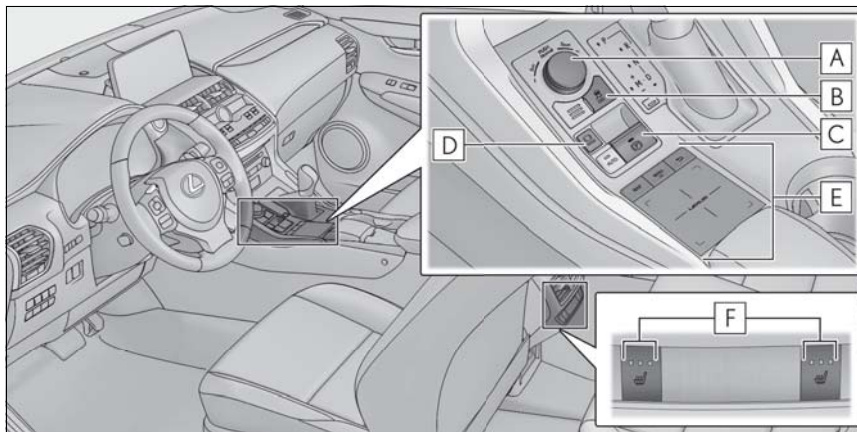


- A** Audio remote control switches^{*1}

B	Paddle shift switches	P.169
C	Meter control switches	P.80
D	Vehicle-to-vehicle distance switch	P.229
E	Cruise control switch	
	Dynamic radar cruise control with full-speed range	P.224
F	LDA (Lane Departure Alert with steering control) switch ^{*2}	P.218
	LTA (Lane Tracing Assist) switch ^{*2}	P.210
G	Talk switch ^{*1}	
H	Telephone switches ^{*1}	

^{*1}: Refer to "NAVIGATION AND MULTIMEDIA SYSTEM OWNER'S MANUAL".

^{*2}: If equipped



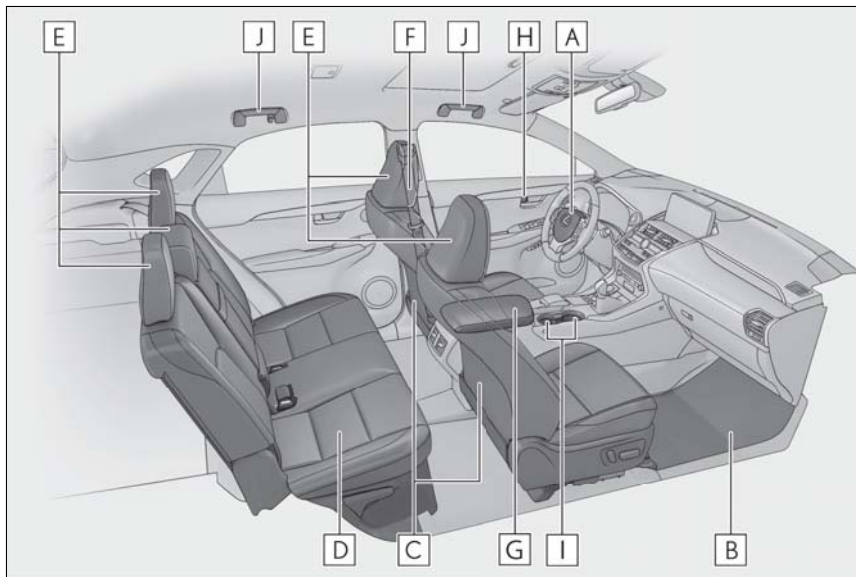
A	Driving mode select switch	P.257
B	VSC off switch	P.261
C	Parking brake switches	P.171
	Applying/releasing	P.171
	Precautions against winter season	P.266
	Warning buzzer/message	P.173, 382
D	Brake hold switch	P.174

E Remote Touch.....P.272

F Rear seat heater switches *P.286

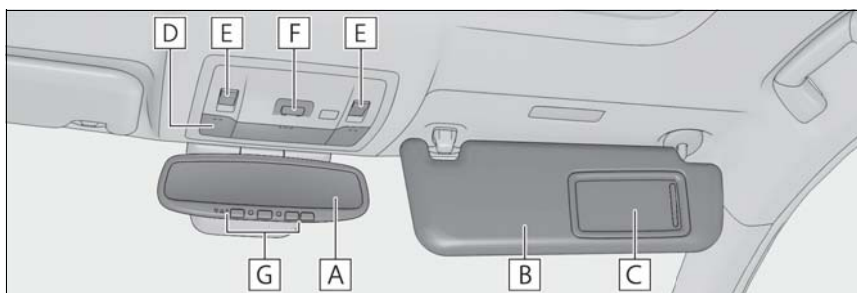
* : If equipped

■ Interior



A SRS airbags.....	P.32
B Floor mats.....	P.24
C Front seats.....	P.120
D Rear seats.....	P.121
E Head restraints.....	P.129
F Seat belts.....	P.26
G Console box.....	P.292
H Inside lock buttons.....	P.101
I Cup holders.....	P.292
J Assist grips.....	P.307

■ Ceiling



A	Inside rear view mirror	P.132
B	Sun visors.....	P.298
C	Vanity mirrors	P.298
D	Interior light ^{*2}	P.289
	Personal lights.....	P.290
E	Moon roof switches ^{*1}	P.138
F	"SOS" button ^{*1}	P.60
G	Garage door opener switches ^{*1}	P.308

^{*1}: If equipped

^{*2}: The illustration shows the front, but they are also equipped in the rear.

For safety and security

1-1. For safe use

Before driving24

For safe driving.....25

Seat belts26

SRS airbags32

Front passenger occupant classification system41

Exhaust gas precautions45

1-2. Child safety

Riding with children.....47

Child restraint systems47

1-3. Lexus Enform

Lexus Enform Safety Connect60

Lexus Enform Remote65

Lexus Enform Service Connect66

1-4. Theft deterrent system

Engine immobilizer system67

Alarm.....69

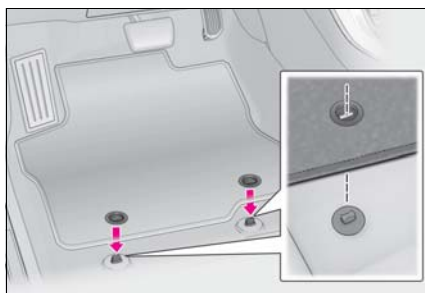
Before driving

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

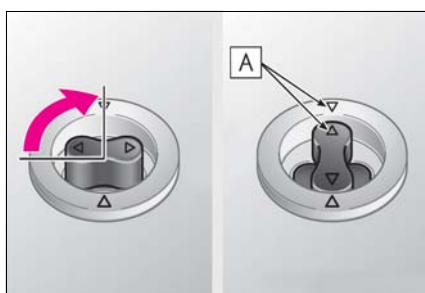
Installing floor mats

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.



A Always align  the marks.

The shape of the retaining hooks (clips) may differ from that shown in the illustration.

⚠ WARNING

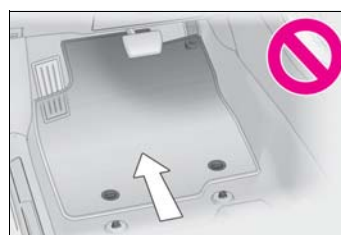
Observe the following precautions. Failure to do so may cause the driver's floor mat to slip, possibly interfering with the pedals while driving. An unexpectedly high speed may result or it may become difficult to stop the vehicle. This could lead to an accident, resulting in death or serious injury.

■ 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.

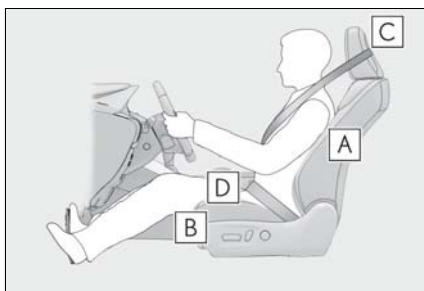


- With the engine stopped and the shift lever in P, fully depress each pedal to the floor to make sure it does not interfere with the floor mat.

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.120)
- 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.120, 131)
- C** Lock the head restraint in place with the center of the head restraint closest to the top of your ears. (→P.129)
- D** Wear the seat belt correctly. (→P.27)

WARNING

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.27)

Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belt. (→P.47)

Adjusting the mirrors

Make sure that you can see the rear of the vehicle clearly, by adjusting the inside and outside rear view mirrors properly. (→P.132, 134)

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

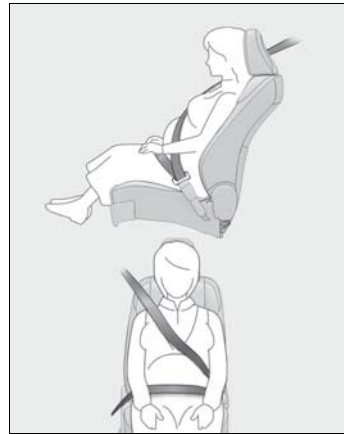
- Ensure that all passengers wear a seat belt.
- Always wear a seat belt properly.
- Each seat belt should be used by one person only. Do not use a seat belt for more than one person at once, including children.
- Lexus recommends that children be seated in the rear seat and always use a seat belt and/or 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.

■ Pregnant women

Obtain medical advice and wear the seat belt in the proper way. (→P.27)

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.27)

■ When children are in the vehicle

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.

■ Seat belt damage and wear

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

⚠ WARNING

- 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's 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.

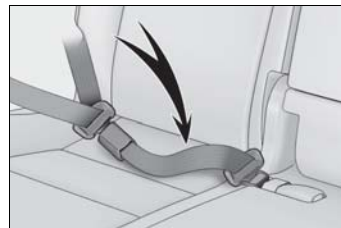
■ Child seat belt usage

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.47)
- When the child becomes large enough to properly wear the vehicle's seat belt, follow the instructions regarding seat belt usage. (→P.26)

■ Seat belt extender

If your seat belts cannot be fastened securely because they are not long enough, a personalized seat belt extender is available from your Lexus dealer free of charge.

**⚠ WARNING****■ Using a seat belt extender**

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.

- Do not wear the seat belt extender if you can fasten the seat belt without the extender.
- Do not use the seat belt extender when installing a child restraint system because the belt will not securely hold the child restraint system, increasing the risk of death or serious injury in the event of an accident.

**WARNING**

- The personalized extender may not be safe on another vehicle, when used by another person, or at a different seating position other than the one originally intended.

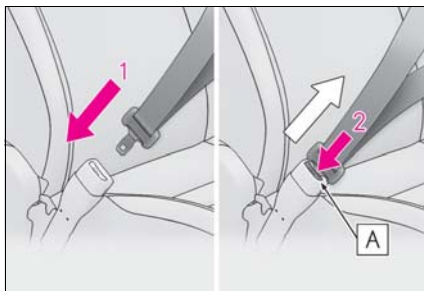
**NOTICE**

■ **When releasing a seat belt extender**

Press on the buckle release button on the extender, not on the seat belt, then, release the extender from the seat belt buckle.

This helps prevent damage to the vehicle interior and the extender itself.

Fastening and releasing the seat belt (except for the rear center seat)



- 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**.

■ **Emergency locking retractor (ELR)**

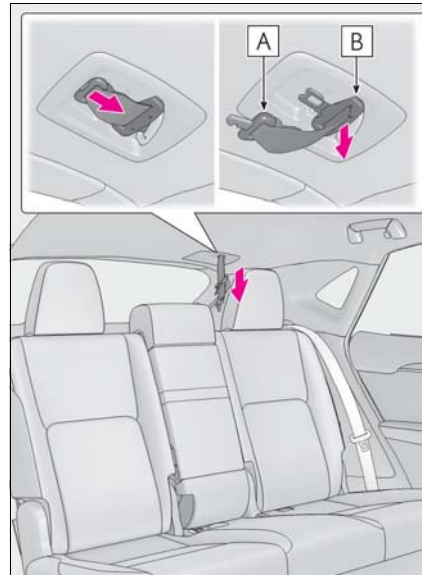
The retractor will lock the belt during a sudden stop or on impact. It may also lock if you lean forward too quickly. A slow, easy motion will allow the belt to extend so that you can move around fully.

■ **Automatic locking retractor (ALR)**

When a passenger's shoulder belt is completely extended and then retracted even slightly, the belt is locked in that position and cannot be extended. This feature is used to hold the child restraint system (CRS) firmly. To free the belt again, fully retract the belt and then pull the belt out once more.

Fastening the seat belt (for the rear center seat)

- 1 Take out the plate.

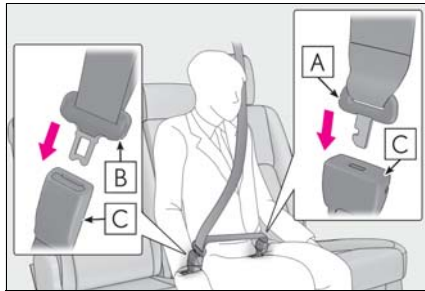


A Plate A

B Plate B

- 2 When fixing the belt, in the order of plate A and then plate B, insert the

plate into the buckle until a clicking sound is heard.



A Plate A

B Plate B

C Buckle

WARNING

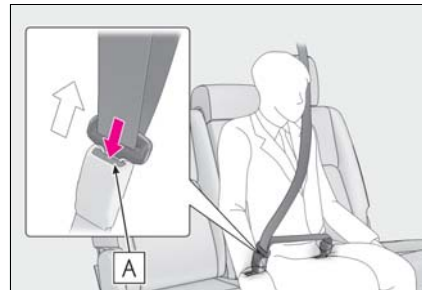
When using the rear center seat belt

Do not use the rear center seat belt with either buckle released. Fastening only one of the buckles may result in death or serious injury in case of sudden braking or a collision.



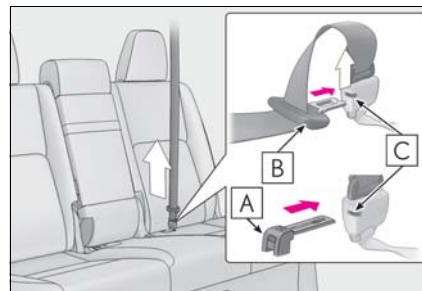
Releasing and stowing the seat belt (for the rear center seat)

- 1 To release the hooked buckle, push the buckle release button **A**.



- 2 Insert the mechanical key (→P.94) or plate B into the notch of buckle and remove the belt.

Retract the belt slowly when releasing and stowing the seat belt.



A Mechanical key

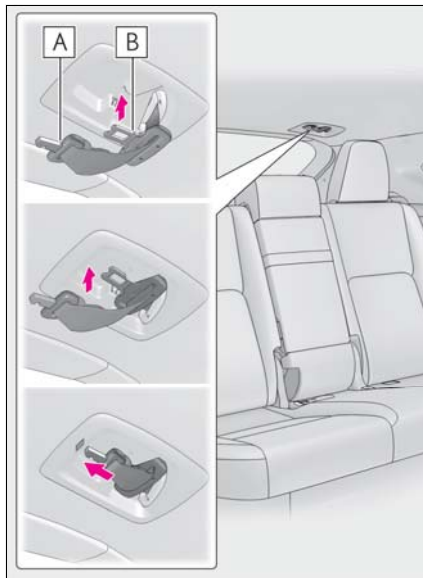
B Plate B

C Buckle

- 3 Stow in the cover in the order of plate B and then plate A.

In order to securely fix it, firmly insert it to

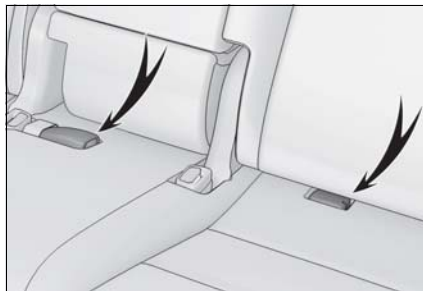
the back.



A Plate A

B Plate B

- 4** Stow the seat belt buckle in the pockets.



■ Emergency locking retractor (ELR)

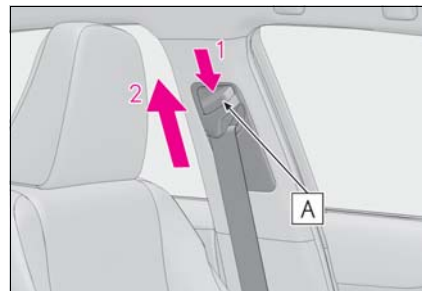
The retractor will lock the belt during a sudden stop or on impact. It may also lock if you lean forward too quickly. A slow, easy motion will allow the belt to extend so that you can move around fully.

■ Automatic locking retractor (ALR)

When a passenger's shoulder belt is completely extended and then retracted even slightly, the belt is locked in that position and

cannot be extended. This feature is used to hold the child restraint system (CRS) firmly. To free the belt again, fully retract the belt and then pull the belt out once more.

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

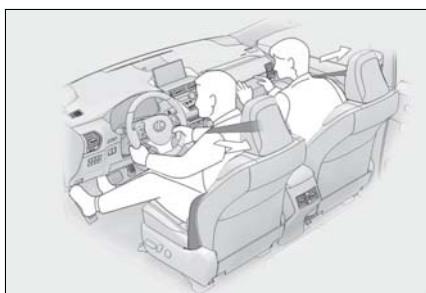
Always make sure the shoulder belt is positioned across the center of your shoulder. The belt should be kept away from your neck, but not falling off your shoulder. Failure to do so could reduce the amount of protection in an accident and cause death or serious injuries in the event of a sudden stop,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

Seat belt pretensioners (front seats)

The pretensioners help the seat belts to quickly restrain the occupants by retracting the seat belts when the vehi-

cle 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

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.

■ Seat belt pretensioners

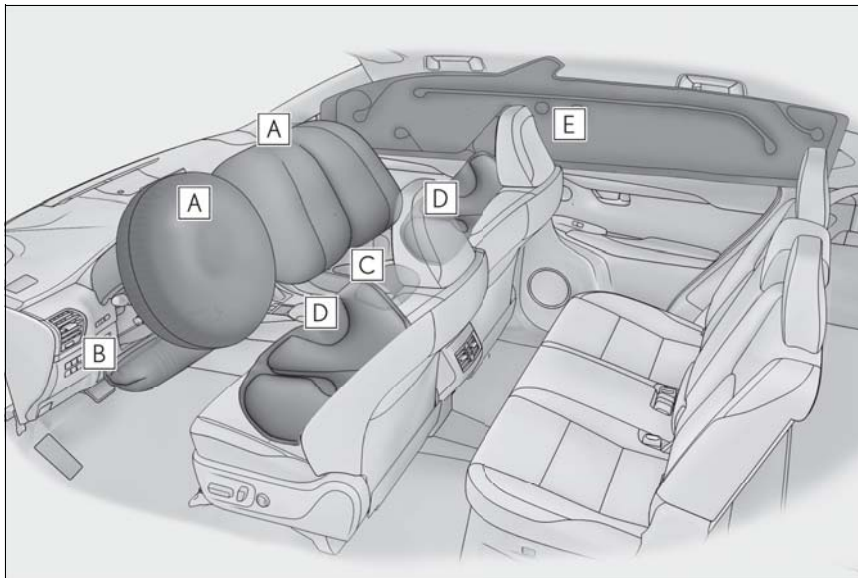
- Do not place anything, such as a cushion, on the front passenger's seat. Doing so will disperse the passenger's weight, which prevents the sensor from detecting the passenger's weight properly. As a result, the seat belt pretensioner for the front passenger's seat may not activate in the event of a 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.

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 airbag

Can help provide driver protection

C SRS seat cushion airbag

Can help restrain the front passenger

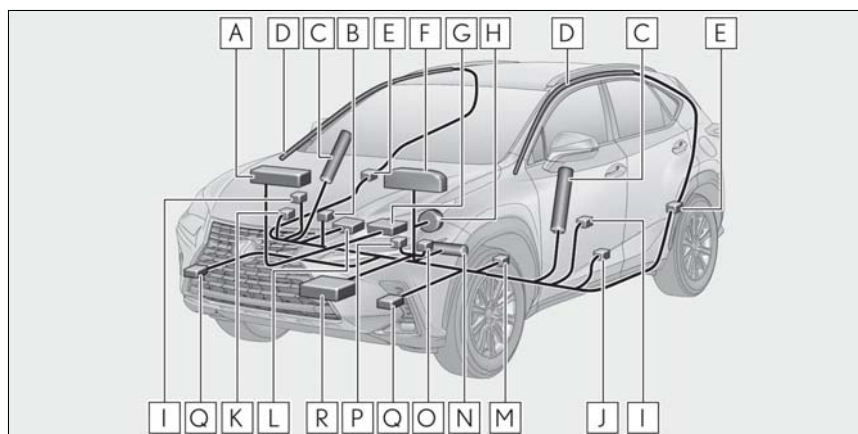
► SRS side and curtain shield airbags

D SRS side airbags

Can help protect the torso of the front seat occupants

E SRS curtain shield airbags

- Can help protect primarily the head of occupants in the outer seats
- Can help prevent the occupants from being thrown from the vehicle in the event of vehicle rollover

■ SRS airbag system components**A** Front passenger airbag**B** “AIR BAG ON” and “AIR BAG OFF” indicator lights**C** Side airbags**D** Curtain shield airbags**E** Side impact sensors (rear)**F** SRS warning light**G** Front passenger occupant classification system (ECU and sensors)**H** Driver airbag**I** Side impact sensors (front door)**J** Driver's seat belt pretensioner**K** Front passenger's seat belt pretensioner and force limiter**L** Seat cushion airbag**M** Driver's seat position sensor**N** Knee airbag**O** Driver's seat belt buckle switch

P Front passenger's seat belt buckle switch

Q Front impact sensors

R Airbag sensor assembly

Your vehicle is equipped with ADVANCED AIRBAGS designed based on the US motor vehicle safety standards (FMVSS208). The airbag sensor assembly (ECU) controls airbag deployment based on information obtained from the sensors etc. shown in the system components diagram above. This information includes crash severity and occupant information. 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 front 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.99)
- Fuel supply to the engine will be stopped. (→P.372)
- For Lexus Enform Safety Connect subscribers, if any of the following situations occur, the system is designed to send an emergency call to the response center, notifying them of the vehicle's location (without needing to push the "SOS" button) and an agent will attempt to speak with the occupants to ascertain the level of emergency and assistance required. If the occupants are unable to communicate, the agent automatically treats the call as an emergency and helps to dispatch the necessary emergency services. (→P.60)
 - An SRS airbag is deployed.
 - A seat belt pretensioner is activated.

- The vehicle is involved in a severe rear-end collision.

■ SRS airbag deployment conditions (SRS front airbags)

- The SRS front airbags will deploy in the event of an impact that exceeds the set threshold level (the level of force corresponding to an approximately 12-18 mph [20-30 km/h] 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.
 - 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 airbag on the front passenger 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

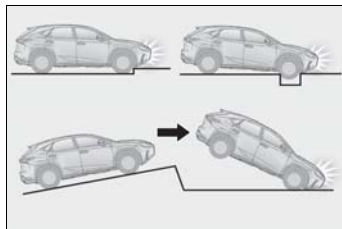
will deploy in the event of an impact that exceeds the set threshold level (the level of force corresponding to the impact force produced by an approximately 3300 lb. [1500 kg] vehicle colliding with the vehicle cabin from a direction perpendicular to the vehicle orientation at an approximate speed of 12 -18 mph [20 - 30 km/h]).

- Both SRS curtain shield airbags will deploy in the event of vehicle rollover.
- All SRS side and curtain shield airbags will deploy in the event of a severe frontal collision.

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

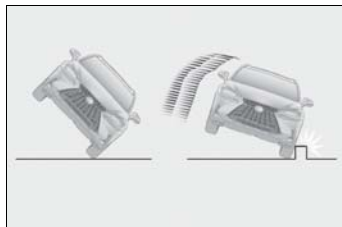
The SRS front airbags, SRS side and curtain shield airbags may also deploy if a serious impact occurs to the underside of your vehicle. Some examples are shown in the illustration.

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



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

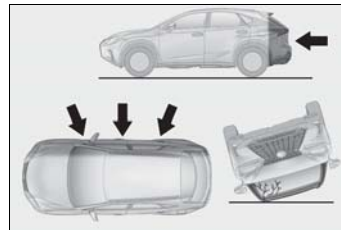
- The angle of vehicle tip-up is marginal.
- The vehicle skids and hits a curb stone.



■ **Types of collisions that may not deploy the SRS airbags (SRS front airbags)**

The SRS front 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 may occur.

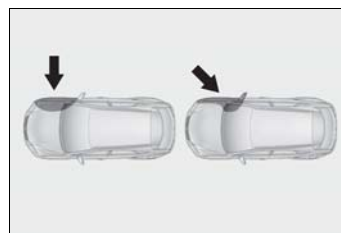
- Collision from the side
- Collision from the rear
- Vehicle rollover



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

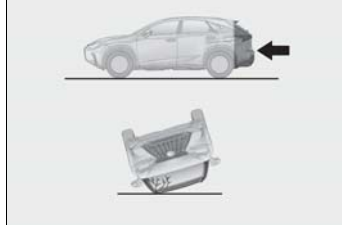
The SRS side and curtain shield airbags may not activate if the vehicle is subjected to a collision from the side at certain angles, or a collision to the side of the vehicle body other than the passenger compartment.

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



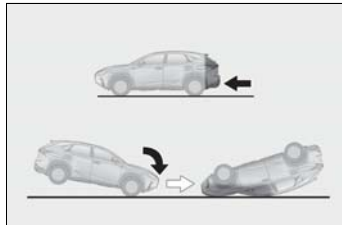
The SRS side airbags do not generally inflate if the vehicle is involved in a rear collision, if it rolls over, or if it is involved in a low-speed side or low-speed frontal collision.

- Collision from the rear
- Vehicle rollover



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.

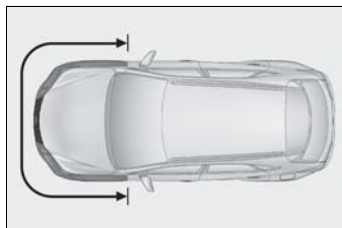
- Collision from the rear
- Pitching end over end



■ 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.

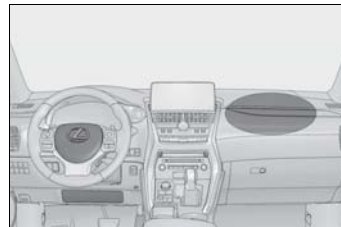
- Any of the SRS airbags have been inflated.
- The front of the vehicle is damaged or deformed, or was involved in an accident that was not severe enough to cause the SRS front airbags to inflate.



- A portion of a door or its surrounding area is damaged or deformed, or the vehicle was involved in an accident that was not severe enough to cause the SRS side and curtain shield airbags to inflate.



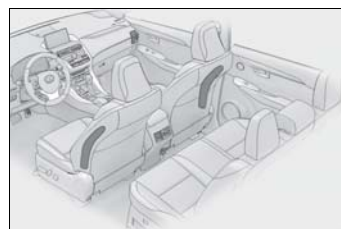
- The pad section of the steering wheel, dashboard near the front passenger airbag or lower portion of the instrument panel is scratched, cracked, or otherwise damaged.



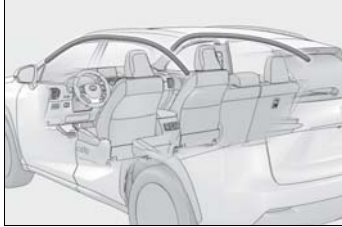
- The front passenger's seat cushion surface is scratched, cracked, or otherwise damaged.



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



- The portion of the front pillars, rear pillars or roof side rail garnishes (padding) containing the SRS 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. The National Highway Traffic Safety Administration (NHTSA) advises: Since the risk zone for the driver's airbag is the first 2 - 3 in. (50 - 75 mm) of inflation, placing yourself 10 in. (250 mm) 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 10 in. (250 mm) 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.
- Slightly recline the back of the seat. Although vehicle designs vary, many drivers can achieve the 10 in. (250 mm) 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 by NHTSA above, while still maintaining control of the foot pedals, steering wheel, and your view of the instrument panel controls.

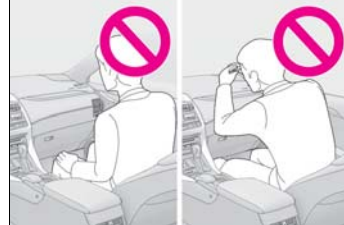
⚠ WARNING

- If the seat belt extender has been connected to the front seat belt buckles but the seat belt extender has not also been fastened to the latch plate of the seat belt, the SRS front airbags will judge that the driver and front passenger are wearing the seat belt even though the seat belt has not been connected. In this case, the SRS front airbags may not activate correctly in a collision, resulting in death or serious injury in the event of a collision. Be sure to wear the seat belt with the seat belt extender.

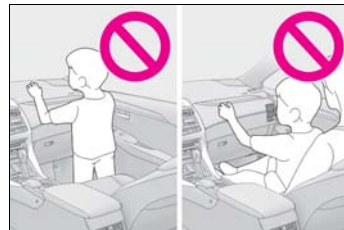


- The SRS front passenger airbag also deploys with considerable force, and can cause death or serious injury especially if the front passenger is very close to the airbag. The front passenger seat should be as far from the airbag as possible with the seatback adjusted, so the front passenger sits upright.
- 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.47)

- 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.

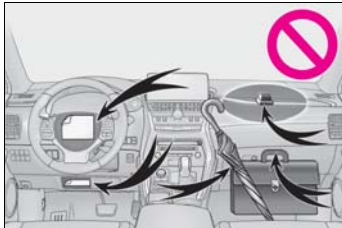


- Do not allow anyone to kneel on the passenger seat toward the door or put their head or hands outside the vehicle.

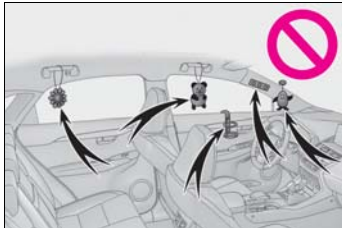


WARNING

- 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 door glass, front or rear pillar, roof side rail and assist grip.



- Do not hang coat hangers or other 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 and SRS seat cushion airbag inflate as they may interfere with inflation of the SRS airbags. Such accessories may prevent the side airbags and seat cushion airbag from activating correctly, disable the system or cause the side airbags and seat cushion airbag 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. 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.

- 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.

**WARNING****■ Modification and disposal of SRS air-bag system components**

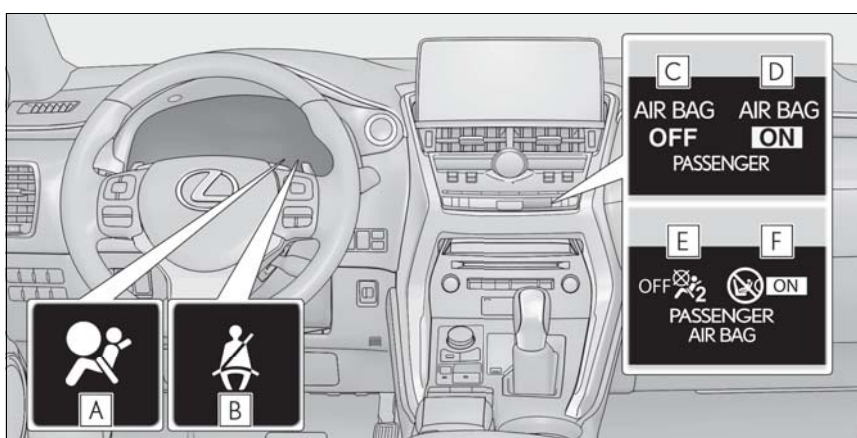
Do not dispose of your vehicle or perform any of the following modifications without consulting your Lexus dealer. The SRS airbags may malfunction or deploy (inflate) accidentally, causing death or serious injury.

- 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 or roof side rails
- Repairs or modifications of the front fender, front bumper, or side of the occupant compartment
- 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 and CD players
- Modifications to your vehicle for a person with a physical disability

Front passenger occupant classification system

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 seat cushion airbag in the front passenger side.

System components



- A** SRS warning light
- B** Front passenger's seat belt reminder light
 - For the U.S.A.
- C** "AIR BAG OFF" indicator light
- D** "AIR BAG ON" indicator light
 - For Canada
- E** "AIR BAG OFF" indicator light
- F** "AIR BAG ON" indicator light

Condition and operation in the front passenger occupant classification system

■ Adult^{*1}

Indicator/warning light	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG ON"
	SRS warning light	Off
	Front passenger's seat belt reminder light	Off ^{*2} or flashing ^{*3}
Devices	Front passenger airbag	Activated
	Seat cushion airbag in the front passenger side	Activated ^{*2} or deactivated ^{*3}

■ Child^{*4}

Indicator/warning light	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG OFF" or "AIR BAG ON" ^{*4}
	SRS warning light	Off
	Front passenger's seat belt reminder light	Off ^{*2} or flashing ^{*3}
Devices	Front passenger airbag	Deactivated or activated ^{*4}
	Seat cushion airbag in the front passenger side	Deactivated or activated ^{*2, 4}

■ Child restraint system with infant^{*5}

Indicator/warning light	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG OFF" ^{*6}
	SRS warning light	Off
	Front passenger's seat belt reminder light	Off ^{*2} or flashing ^{*3}
Devices	Front passenger airbag	Deactivated
	Seat cushion airbag in the front passenger side	

■ Unoccupied

Indicator/warning light	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG OFF"
	SRS warning light	Off
	Front passenger's seat belt reminder light	
Devices	Front passenger airbag	Deactivated
	Seat cushion airbag in the front passenger side	

■ 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
	Front passenger's seat belt reminder light	
Devices	Front passenger airbag	Deactivated
	Seat cushion airbag in the front passenger side	

*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.50)

*6: In case the indicator light is not illuminated, consult this manual on how to install the child restraint system properly. (→P.47)

**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.
- Make sure the "AIR BAG OFF" indicator light is not illuminated when using the seat belt extender for the front passenger seat. If the "AIR BAG OFF" indicator light is illuminated, disconnect the extender tongue from the seat belt buckle, and reconnect the seat belt. Reconnect the seat belt extender after making sure the "AIR BAG ON" indicator light is illuminated. If you use the seat belt extender while the "AIR BAG OFF" indicator light is illuminated, the SRS airbags for the front passenger will not activate, which could cause death or serious injury in the event of a collision.
- 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.
- 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.50)
- 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.

**WARNING**

- Do not modify or replace the upholstery of the front seat.

Exhaust gas precautions

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

**WARNING**

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

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

■ Important points while driving

- Keep the back door closed.
- If you smell exhaust gases in the vehicle even when the back door 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 running 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.

**WARNING****■ 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.

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.101, 137)
- Do not let small children operate equipment which may catch or pinch body parts, such as the power window, hood, back door, 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 (if equipped) 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

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.47

Child restraint system: →P.49

When using a child restraint system: →P.50

Child restraint system installation method

- Fixed with a seat belt: →P.51
- Fixed with a child restraint LATCH anchor: →P.55
- Using an anchor bracket (for top tether strap): →P.57

Points to remember

The laws of all 50 states of the U.S.A. as well as Canada now require the use of child restraint systems.

- Prioritize and observe the warnings, as well as the laws and regula-

tions for child restraint systems.

- 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

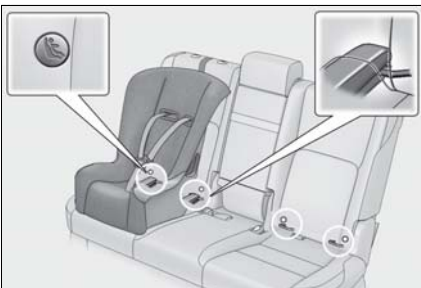
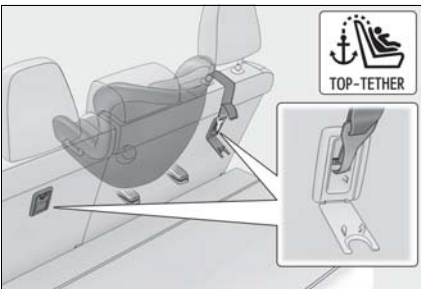
If the child restraint system is not properly fixed in place, the child or other passengers may be seriously injured or even killed in the event of sudden braking, sudden swerving, or an accident.

- 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 luggage compartment.

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.51
Child restraint LATCH anchors attachment		P.55
Anchor brackets (for top tether strap) attachment		P.57

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. If the passenger seat height can be adjusted, move it to the upper most position.
- 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.
- 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.



⚠ WARNING

■ When using a child restraint system

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

- 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 tether strap should not be used in the front passenger seat since there is no top tether strap anchor 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, move the seat as far back as possible, and raise the seat to the upper most position, even if the "AIR BAG OFF" indicator light is illuminated. If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint.



⚠ 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 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**

A child restraint system for a small child or baby must itself be properly restrained on the seat with the lap portion of the lap/shoulder belt.

■ **Installing child restraint system using a seat belt (child restraint lock function belt)**

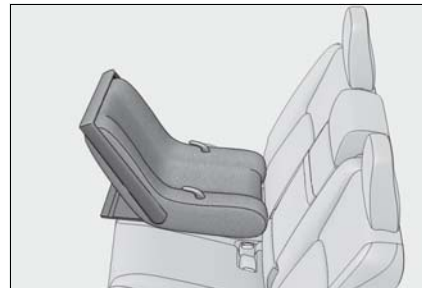
Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

■ **Rear-facing – Infant seat/convertible seat**

1 Adjust the rear seat

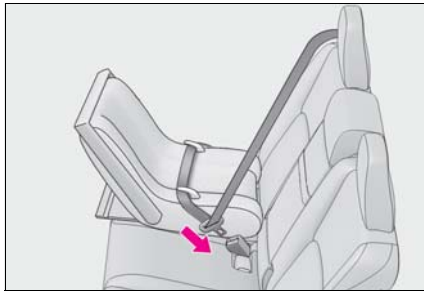
If there is a gap between the child seat and the seatback, adjust the seatback until good contact is achieved.

2 Place the child restraint system on the rear seat facing the rear of the vehicle.



3 Run the seat belt through the child restraint system and insert the plate

into the buckle. Make sure that the belt is not twisted.

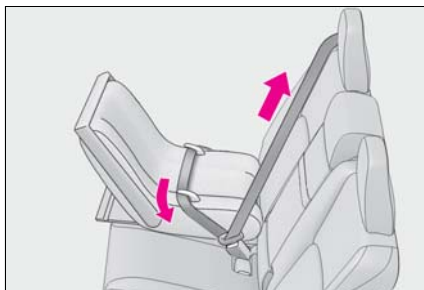


- 4** Fully extend the shoulder belt and allow it to retract to put it in lock mode. In lock mode, the belt cannot be extended.



- 5** While pushing the child restraint system down into the rear seat, allow the shoulder belt to retract until the child restraint system is securely in place.

After the shoulder belt has retracted to a point where there is no slack in the belt, pull the belt to check that it cannot be extended.



- 6** After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.55)

■ Forward-facing – Convertible seat

- 1** Adjust the seat

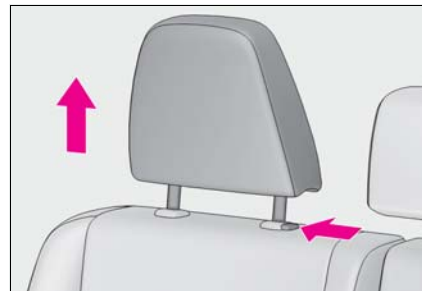
- When using the front passenger seat

If installing the child restraint system to the front passenger seat is unavoidable, refer to P.50 for front passenger seat adjustment.

- When using the rear 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 the child restraint system installation and the head restraint can be removed, remove the head restraint. (→P.130)



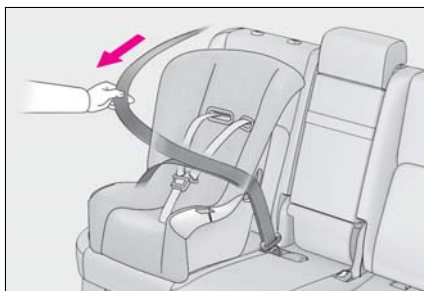
- 3** Place the child restraint system on the seat facing the front of the vehicle.



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



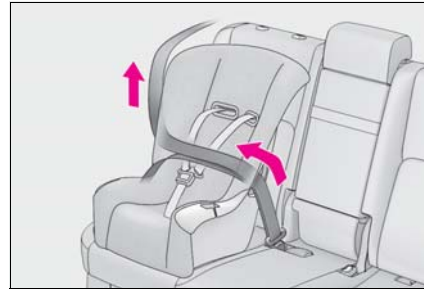
- 5** Fully extend the shoulder belt and allow it to retract to put it in lock mode. In lock mode, the belt cannot be extended.



- 6** While pushing the child restraint system into the rear seat, allow the shoulder belt to retract until the

child restraint system is securely in place.

After the shoulder belt has retracted to a point where there is no slack in the belt, pull the belt to check that it cannot be extended.

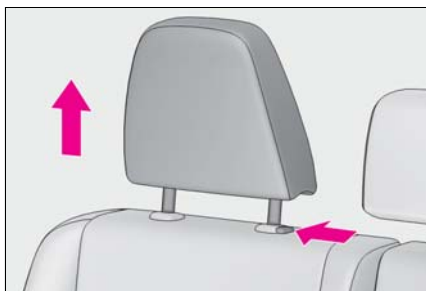


- 7** If the child restraint has a top tether strap, follow the child restraint manufacturer's operation manual regarding the installation, using the top tether strap to latch onto the top tether strap anchor. (→P.57)
- 8** After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.55)

■ Booster seat

- 1** If installing the child restraint system to the front passenger seat is unavoidable, refer to P.50 for front passenger seat adjustment.
- 2** High back type: If the head restraint interferes with your child restraint system, and the head restraint can

be removed, remove the head restraint. (→P.130)



- 3** Place the child restraint system on the seat facing the front of the vehicle.

► Booster type



► High back type



- 4** Sit the child in the child restraint system. Fit the seat belt to the child restraint system according to the manufacturer's instructions and insert the plate into the buckle.

Make sure that the belt is not twisted.

Check that the shoulder belt is correctly positioned over the child's shoulder and that the lap belt is as low as possible. (→P.27)

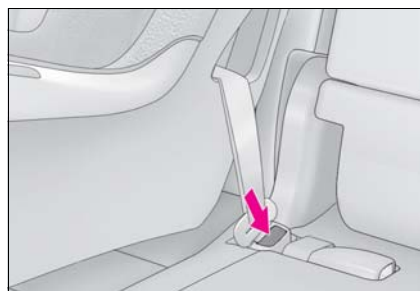


■ Removing a child restraint system installed with a seat belt

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.



⚠ 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 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 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.

■ When installing a booster seat

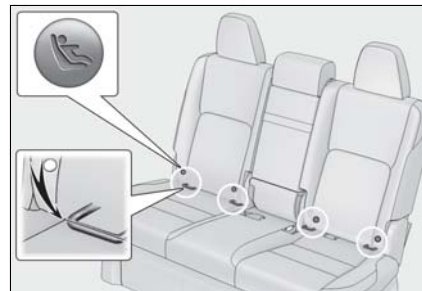
To prevent the belt from going into ALR lock mode, do not fully extend the shoulder belt. ALR mode causes the belt to tighten only. This could cause injury or discomfort to the child. (→P.28)

■ Do not use a seat belt extender

If a seat belt extender is used when installing a child restraint system, the seat belt will not securely hold the child restraint system, which could cause death or serious injury to the child or other passengers in the event of sudden braking, sudden swerving or an accident.

Child restraint system fixed with a child restraint LATCH anchor**■ Child restraint LATCH anchors**

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

**■ When installing in the rear outboard seats**

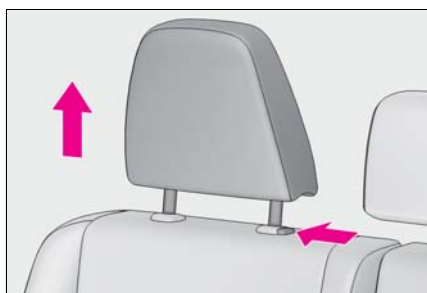
Install the child restraint system in

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

1 Adjust the seat

If there is a gap between the child seat and the seatback, adjust the seatback until good contact is achieved.

- 2** If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint. (→P.130)



- 3** Widen the gap between the seat cushion and seatback slightly.

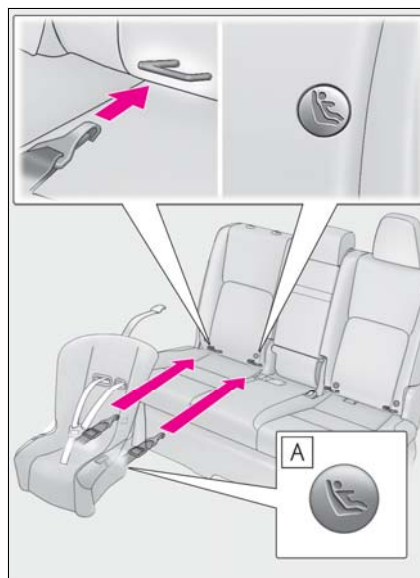
► With flexible lower attachments

- 4** Latch the hooks of the lower attachments onto the LATCH anchors.

For owners in Canada:

The symbol on a child restraint system indicates **A** the presence of a lower connec-

tor system.



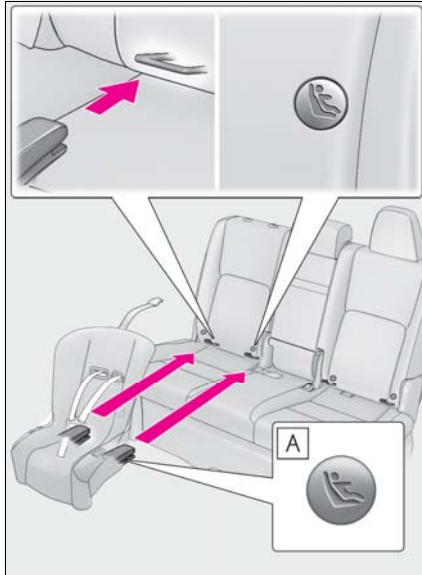
► With rigid lower attachments

- 4** Latch the buckles onto the LATCH anchors.

For owners in Canada:

The symbol on a child restraint system indicates **A** the presence of a lower connec-

tor system.



- 5 If the child restraint has a top tether strap, follow the child restraint manufacturer's operation manual regarding the installation, using the top tether strap to latch onto the top tether strap anchor. (→P.57)
- 6 After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.59)

■ Laws and regulations pertaining to anchors

The LATCH system conforms to FMVSS225 or CMVSS210.2. Child restraint systems conforming to FMVSS213 or CMVSS213 specifications can be used. This vehicle is designed to conform to SAE J1819.

⚠ WARNING

■ When installing a child restraint system

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

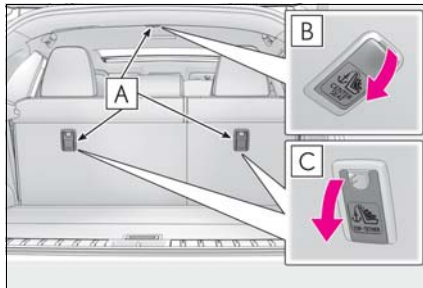
- When using the LATCH anchors, be sure that there are no foreign objects around the anchors and that the seat belt is not caught behind the child restraint system.
- Follow all installation instructions provided by the child restraint system manufacturer.
- When securing some types of child restraint 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.
- If the seat is adjusted, reconfirm the security of the child restraint system.

Using an anchor bracket (for top tether strap)

■ Anchor brackets (for top tether strap)

Anchor brackets are provided for each rear seat.

Use anchor brackets when fixing the top tether strap.



- A** Anchor bracket
- B** Anchor bracket for rear center seat
- C** Anchor bracket for rear outboard seats

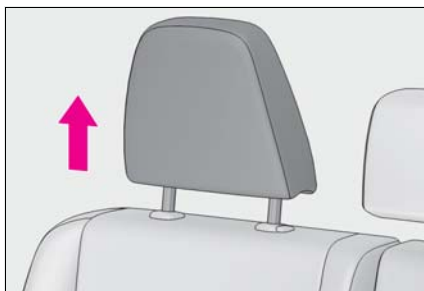
■ Fixing the top tether strap to the anchor bracket

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

► Outboard rear seats

- 1** Adjust the head restraint to the upmost position.

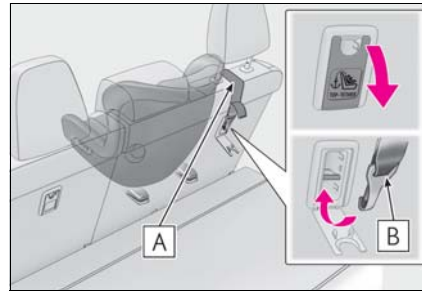
If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint. (→P.130)



- 2** Open the anchor bracket cover, latch the hook onto the anchor bracket and tighten the top tether strap.

Make sure the top tether strap is securely latched. (→P.55)

When installing the child restraint system with the head restraint being raised, be sure to have the top tether strap pass underneath the head restraint.

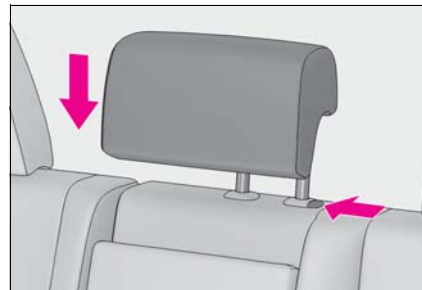


- A** Top tether strap
- B** Hook

► Rear center seat

- 1** Adjust the head restraint to the downmost position.

If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint. (→P.130)

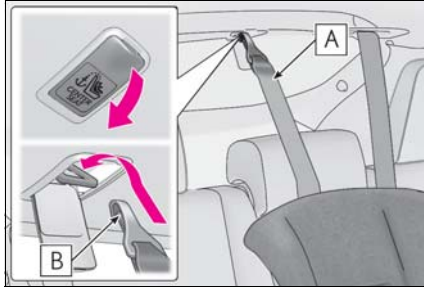


- 2** Open the anchor bracket cover, latch the hook onto the anchor bracket and tighten the top tether strap.

Make sure the top tether strap is securely latched. (→P.55)

When installing the child restraint system with the head restraint being lower, be sure to have the top tether strap pass over the

top of the head restraint.



A Top tether strap

B Hook

■ Laws and regulations pertaining to anchors

The LATCH system conforms to FMVSS225 or CMVSS210.2.

Child restraint systems conforming to FMVSS213 or CMVSS213 specifications can be used.

This vehicle is designed to conform to SAE J1819.

● Outboard rear seats: When installing the child restraint system with the head restraint being raised, after the head restraint has been raised and then the anchor bracket has been fixed, do not lower the head restraint.

● Rear center seat: When installing the child restraint system with the head restraint being lowered, be sure to have the top tether 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.



NOTICE

■ Anchor brackets (for top tether strap)

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

Lexus Enform Safety Connect*

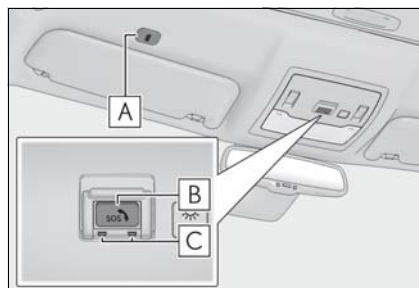
*: If equipped

Safety Connect is a subscription-based telematics service that uses Global Positioning System (GPS) data and embedded cellular technology to provide safety and security features to subscribers. Safety Connect is supported by Lexus' designated response center, which operates 24 hours per day, 7 days per week.

Safety Connect service is available by subscription on select, telematics hardware-equipped vehicles.

By using the Safety Connect service, you are agreeing to be bound by the Telematics Subscription Service Agreement and its Terms and Conditions, as in effect and amended from time to time, a current copy of which is available at Lexus.com. All use of the Safety Connect service is subject to such then-applicable Terms and Conditions.

System components



- A** Microphone
- B** "SOS" button
- C** LED light indicators

■ Certification for Lexus Enform

FCC ID: JOYDA39

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.

Co-location: This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

CAUTION : Radio Frequency Radiation Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

IC: 574B-DA39

NOTE

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The antenna cannot be removed (and changed) by user.

Co-location: This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

CAUTION: Radio Frequency Radiation Exposure

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from person's body.

NOTE

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) L'appareil ne doit pas produire de brouillage;
 - (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
- L'utilisateur n'est pas autorisé à retirer (ou modifier) l'antenne.

Emplacement: Cet émetteur ne doit pas être installé ou utilisé conjointement avec d'autres antennes ou émetteurs.

ATTENTION : exposition aux radiofréquences

Cet équipement est conforme aux limites d'exposition aux rayonnements ISDE établies pour un environnement non contrôlé et satisfait à la norme CNR-102 de la réglementation ISDE sur l'exposition aux radiofréquences (RF). Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et le corps.

Services

Subscribers have the following Safety Connect services available:

- Automatic Collision Notification *

Helps drivers receive necessary response from emergency service providers.
(→P.63)

* : U.S. Patent No. 7,508,298 B2

- Stolen Vehicle Location

Helps drivers in the event of vehicle theft.
(→P.63)

- Emergency Assistance Button ("SOS")

Connects drivers to response-center support. (→P.63)

- Enhanced Roadside Assistance

Provides drivers various on-road assistance. (→P.63)

Subscription

After you have signed the Telematics Subscription Service Agreement and are enrolled, you can begin receiving services.

A variety of subscription terms is available for purchase. Contact your Lexus dealer, call the following or push the "SOS" button in your vehicle for further subscription details.

- The United States

1-800-25-LEXUS (1-800-255-3987)

- Canada

1-800-26-LEXUS (1-800-265-3987)

- Puerto Rico

1-877-539-8777

■ Safety Connect Services Information

- Phone calls using the vehicles Bluetooth® technology will not be possible during Safety Connect.

- Safety Connect is available beginning Fall 2009 on select Lexus models (in the contiguous United States only). Contact with the Safety Connect response center is dependent upon the telematics device being in operative condition, cellular connection availability, and GPS satellite signal reception, which can limit the ability to reach the response center or receive emergency service support. Enrollment and Telematics Subscription Service Agreement required. A variety of subscription terms is available; charges vary by subscription term selected and location.
- Automatic Collision Notification, Emergency Assistance and Stolen Vehicle Location will function in the United States, including Hawaii and Alaska, Puerto Rico and in Canada, and Enhanced Roadside Assistance will function in the United States, Puerto Rico and in Canada.
- Automatic Collision Notification, Emergency Assistance, Stolen Vehicle and Enhanced Road Assistance will not function in the United States Virgin Islands. For vehicles first sold in the USVI, no Safety Connect services will function in and outside the United States Virgin Islands.
- Safety Connect services are not subject to section 255 of the Telecommunications Act and the device is not TTY compatible.

■ Languages

The Safety Connect response center will offer support in multiple languages. The Safety Connect system will offer voice prompts in English, Spanish, and French. Please indicate your language of choice when enrolling.

■ When contacting the response center

You may be unable to contact the response center if the network is busy.

Safety Connect LED light Indicators

When the engine switch is turned to IGNITION ON mode, the red indicator light comes on for 2 seconds then turns off. Afterward, the green indicator light comes on, indicating that the service is active.

The following indicator light patterns indicate specific system usage conditions:

- Green indicator light on = Active service
- Green indicator light flashing = Safety Connect call in process
- Red indicator light (except at vehicle start-up) = System malfunction (contact your Lexus dealer)
- No indicator light (off) = Safety Connect service not active

Safety Connect services

■ Automatic Collision Notification

In case of either airbag deployment or severe rear-end collision, the system is designed to automatically call the response center. The responding agent receives the vehicle's location and attempts to speak with the vehicle occupants to assess the level of emergency. If the occupants are unable to communicate, the agent automatically treats the call as an emergency, contacts the nearest emergency services provider to describe the situation, and requests that assistance be sent to the location.

■ Stolen Vehicle Location

If your vehicle is stolen, Safety Connect can work with local authorities to assist them in locating and recovering the vehicle. After filing a police report, call the Safety Connect response center at 1-800-25-LEXUS (1-800-255-3987) in the United States, 1-877-539-8777 in Puerto Rico or 1-800-265-3987 in Canada, and follow the prompts for Safety Connect to initiate this service.

In addition to assisting law enforcement with recovery of a stolen vehicle, Safety-Connect-equipped vehicle location data may, under certain circumstances, be shared with third parties to locate your vehicle. Further information is available at Lexus.com.

■ Emergency Assistance Button (“SOS”)

In the event of an emergency on the road, push the “SOS” button to reach the Safety Connect response center. The answering agent will determine your vehicle’s location, assess the emergency, and dispatch the necessary assistance required.

If you accidentally press the “SOS” button, tell the response-center agent that you are not experiencing an emergency.

■ Enhanced Roadside Assistance

Enhanced Roadside Assistance adds GPS data to the already included warranty-based Lexus roadside service. Subscribers can press the “SOS” button to reach a Safety Connect response-center agent, who can help

with a wide range of needs, such as: towing, flat tire, fuel delivery, etc. For a description of the Roadside Assistance services and their limitations, please see the Safety Connect Terms and Conditions, which are available at Lexus.com.

Safety information for Safety Connect

Important! Read this information about exposure to radio frequency signals before using Safety Connect;

The Safety Connect system installed in your vehicle is a low-power radio transmitter and receiver. It receives and also sends out radio frequency (RF) signals.

In August 1996, the Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for mobile wireless phones. Those guidelines are consistent with the safety standards previously set by the following U.S. and international standards bodies.

- ANSI (American National Standards Institute) C95.1 [1992]
- NCRP (National Council on Radiation Protection and Measurement) Report 86 [1986]
- ICNIRP (International Commission on Non-Ionizing Radiation Protection) [1996]

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. Over 120 scientists, engineers, and physi-

cians from universities, and government health agencies and industries reviewed the available body of research to develop the ANSI Standard (C95.1).

The design of Safety Connect complies with the FCC guidelines in addition to those standards.

Lexus Enform Remote^{*}

^{*}: If equipped

Lexus Enform Remote is a smartphone application that lets you view and remotely control certain aspects of your vehicle.

For details about the functions and services of this application, refer to <http://www.lexus.com/enform/>.

Function of the Lexus Enform Remote is achieved by using an embedded cellular device in the vehicle (DCM: Data Communication Module).

Subscription

After you sign the Telematics Subscription Service Agreement, download the Lexus App from your smartphone's app store, and register within the app (or enroll and complete registration at the dealer), you can begin using these services. (→P.60)

A variety of subscription terms are available. Contact your Lexus dealer, or call 1-800-25-LEXUS (1-800-255-3987) for further subscription details.

■ Availability of service

Lexus Enform Remote is not available in some countries or areas.

■ Lexus Enform Remote Information

- Lexus Enform Remote should only be used by authorized users.
- Laws in some communities may require that the vehicle be within view of the user when operating Lexus Enform Remote.

In some states, use of Lexus Enform Remote may violate state or local laws. Before using Lexus Enform Remote, check your state and local laws.

- Any malfunction of the Lexus should be repaired by your Lexus dealer.
- Lexus Enform Remote is designed to work at temperatures above -22°F (-30°C). This specification is related to the Lexus Enform Remote operation, but is dependent on the vehicle's operating temperature range which may be different.
- Content is subject to change without notice.
- Some features of the Lexus Enform Remote may not be available on some models.
- Additional information can be found at www.lexus.com/enform/.
- Availability of functions of the Lexus Enform service is dependent on network reception level.

■ Safety information for Lexus Enform Remote

Refer to the safety information for Safety Connect: →P.64

Lexus Enform Service Connect*

* : If equipped

Lexus Enform Service Connect uses embedded telematics hardware to collect and transmit vehicle data that allows Lexus to provide:

- Vehicle Health Report (VHR) (Safety Recalls, Service Campaigns, Current Vehicle Alerts, Required Maintenance, and Vehicle Condition Status)
- Maintenance Notifications
- Vehicle Alert Notifications

For details about this service and how to register, refer to <http://www.lexus.com/enform/>.

The Lexus Enform Service Connect is achieved by using a Data Communication Module (DCM) built in the vehicle.

■ Availability of service

Lexus Enform Service Connect is not available in some countries or areas.

■ Lexus Enform Service Connect Information

Availability of functions of the Lexus Enform Service Connect is dependent on network reception level.

■ Safety information for Lexus Enform Service Connect

Refer to the safety information for Safety Connect: →P.64

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

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

■ Certification for the engine immobilizer system

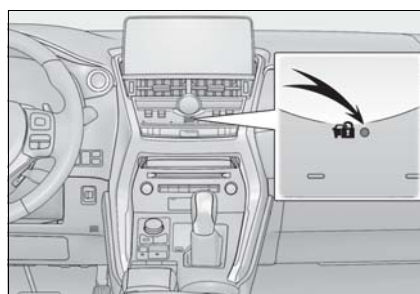
- For vehicles sold in the U.S.A.

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.

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 registered to the security system (key with a built-in transponder chip) of another vehicle

- For vehicles sold in Canada

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : 1) l'appareil ne doit pas produire de brouillage; 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

**WARNING**

■ **Certifications for the engine immobilizer system**

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 Canada: A locked door 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 Canada: A locked door 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.

Setting/canceling/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:

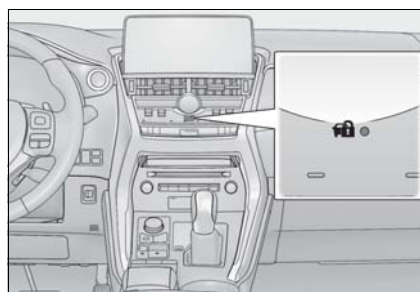
- Nobody is in the vehicle.
- The windows and moon roof (if equipped) are closed before the alarm is set.
- No valuables or other personal items are left in the vehicle.

■ Setting

Close the doors and hood, and lock all the doors using the entry function or wireless remote control. The system will be set automatically after 30 seconds.

Except for Canada, the alarm can also be set using the mechanical key.

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



■ Canceling or stopping

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

- Unlock the doors using the entry function or wireless remote control. (Except for Canada, the mechanical key can also be used.)
- 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.)

■ 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.)

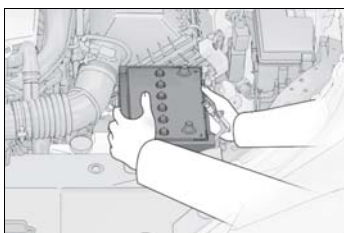
- For Canada: The doors are unlocked using the mechanical key.



- A person inside the vehicle opens a door or hood, or unlocks the vehicle using an inside lock button.



- The battery is recharged or replaced when the vehicle is locked. (→P.400)



■ 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.
- When recharging or replacing the battery.



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.

Vehicle status information and indicators	2	71
2-1. Instrument cluster		
Warning lights and indicators..	72	
Gauges and meters	77	
Multi-information display	80	
Head-up display	86	
Fuel consumption information	90	

Warning lights and indicators

The warning lights and indicators inform the driver of the status of the vehicle's various systems.

Instrument cluster

For the purpose of explanation, the following illustration displays all warning lights and indicators illuminated.



The units used on the meters and some indicators may differ depending on the target region.

Warning lights

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



Brake system warning light^{*1}
(→P.373)



Brake system warning light^{*1}
(→P.373)



Charging system warning light^{*2} (→P.373)



Low engine oil pressure warning light^{*2} (→P.373)



High coolant temperature warning light^{*2} (→P.374)



Brake system warning light^{*1}
(→P.374)



Malfunction indicator lamp^{*1}
(→P.374)



Malfunction indicator lamp^{*1}
(→P.374)



SRS warning light^{*1} (→P.374)



ABS warning light^{*1} (→P.375)



ABS warning light^{*1} (→P.375)



Electric power steering system warning light^{*1} (→P.375)



Electric power steering system warning light^{*1} (→P.375)



PCS warning light^{*1} (→P.375)



LTA indicator^{*2} (if equipped)
(→P.376)



LDA indicator^{*2} (if equipped)
(→P.376)



PKSB OFF indicator^{*1,3} (if equipped) (→P.376)



Slip indicator light^{*1} (→P.376)



Brake hold operated indicator^{*1,3} (→P.377)



Parking brake indicator^{*3}
(→P.377)



Parking brake indicator^{*3}
(→P.377)



Low fuel level warning light
(→P.377)



Driver's and front passenger's seat belt reminder light
(→P.377)



Rear passengers' seat belt reminder light^{*4} (→P.378)



Master warning light^{*1}
(→P.378)



Tire pressure warning light^{*1}
(→P.378)



Brake Override System/Drive-Start Control warning light^{*2} (→P.379)

^{*1}: These lights turn 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

2

Vehicle status information and indicators

the engine is started, or after a few seconds. There may be a malfunction in a system if the lights do not turn on, or turn off. Have the vehicle inspected by your Lexus dealer.

*²: This light illuminates on the multi-information display.

*³: The light flashes to indicate a malfunction.

*⁴: This light illuminates on the center panel.

WARNING

■ If a safety system warning light does not come on

Should a safety system light such as the ABS and SRS airbag 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.171)



(U.S.A.)

Headlight indicator (→P.177)



(Canada)

Tail light indicator (→P.177)



Headlight high beam indicator (→P.179)



Automatic High Beam indicator (→P.180)



Fog light indicator (→P.183)



Eco Driving Indicator Light*¹ (→P.76)



"Eco" indicator*² (→P.257)



"Sport" indicator*² (if equipped) (→P.257)



"Sport S" indicator*² (if equipped) (→P.257)



"Sport S+" indicator*² (if equipped) (→P.257)



"Custom" indicator*² (if equipped) (→P.257)



Dynamic radar cruise control indicator*² (→P.224)



Cruise control "SET" indicator*² (→P.224)



Cruise control indicator*² (→P.224)

	LTA indicator ^{*2} (if equipped) (→P.210)		BSM outside rear view mirror indicators ^{*6,7} (if equipped) (→P.249)
(White)			Security indicator ^{*8} (→P.67, 69)
	LDA indicator ^{*2} (if equipped) (→P.219)		"AIR BAG ON/OFF" indicator ^{*8} (→P.41)
(Green)			"AIR BAG ON/OFF" indicator ^{*8} (→P.41)
	LTA indicator ^{*2,3} (if equipped) (→P.210)		
(Orange)			
	LDA indicator ^{*2,3} (if equipped) (→P.219)		
	Intuitive parking assist indicator (if equipped) (→P.235)		
	PKSB OFF indicator ^{*1,4} (if equipped) (→P.241)		
	Slip indicator light ^{*1,3} (→P.260)		
	VSC off indicator ^{*1,4} (→P.261)		
	PCS warning light ^{*1,4} (→P.200)		
(AWD models only)			
	All-wheel drive lock indicator ^{*1} (→P.264)		
(U.S.A.)			
	Parking brake indicator (→P.171)		
(Canada)			
	Parking brake indicator (→P.171)		
	Brake hold standby indicator ^{*1} (→P.174)		
	Brake hold operated indicator ^{*1} (→P.174)		
	Low outside temperature indicator ^{*2,5} (→P.77)		

^{*1}: These lights turn on when the engine switch is turned to the 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 turn on, or turn off. Have the vehicle inspected by your Lexus dealer.

^{*2}: This light illuminates on the multi-information display.

^{*3}: The light flashes to indicate that the system is operating.

^{*4}: The light comes on when the system is turned off.

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

^{*6}: In order to confirm operation, the BSM outside rear view mirror indicators illuminate in the following situations:
When the engine switch is turned to IGNITION ON mode while the BSM main switch is set to ON.
When the BSM main switch is set to ON while the engine switch is in IGNITION ON mode.

If the system is functioning correctly, the BSM outside rear view mirror indicators will turn off after a few seconds.

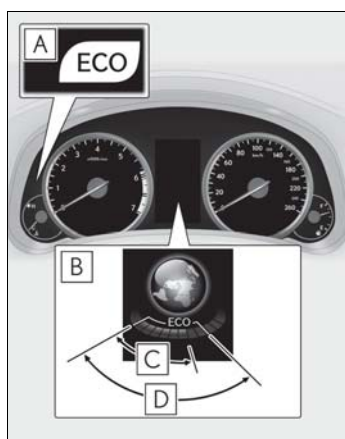
If the BSM outside rear view mirror indicators do not illuminate or do not turn off, there may be a malfunction in the system.

If this occurs, have the vehicle inspected by your Lexus dealer.

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

*8: This light illuminates on the center panel.

■ 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 illu-

minate.

When this happens, the Eco Driving Indicator Light will turn off.

D Zone of Eco driving

Eco Driving Indicator will not operate under the following conditions:

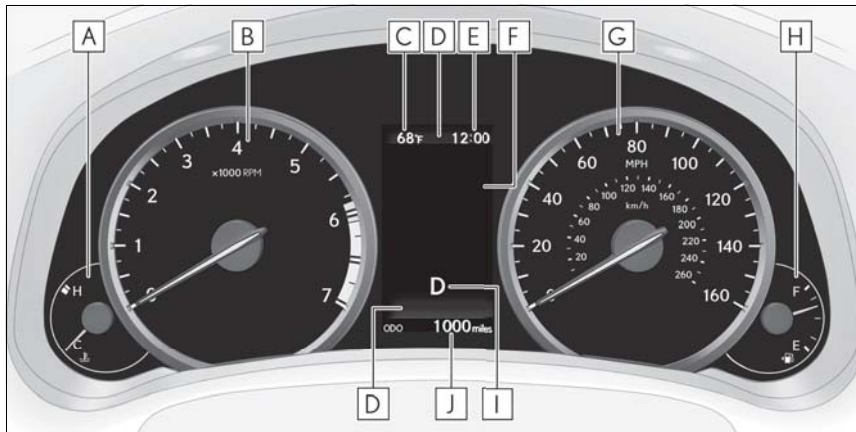
- The shift lever is in any position other than D.
- A paddle shift switch is operated.
- Neither Normal mode nor Eco mode is selected. (→P.257)
- The vehicle speed is approximately 80 mph (130 km/h) or higher.

Settings of the display and non-display of the Eco Driving Indicator Light can be changed. (→P.85)

Gauges and meters

The meters display various drive information.

Meter display



The units used on the meters and some indicators may differ depending on the target region.

A Engine coolant temperature gauge

Displays the engine coolant temperature

B Tachometer

Displays the engine speed in revolution per minute

C Outside temperature

Displays the outside temperature within the range of -40°F (-40°C) to 122°F (50°C). Low outside temperature indicator comes on when the ambient temperature is 37°F (3°C) or lower.

D Background color of driving mode

Background color changes according to the driving mode. (→P.257)

- Sport mode: Red
- Eco mode: Blue

When in Normal mode/Custom mode, the background color is black.

E Clock

Time displayed is linked to the analog clock on the instrument panel. (→P.298)

F Multi-information display

Presents the driver with a variety of vehicle data (→P.80)

Displays warning messages in case of a malfunction (→P.382)

G Speedometer

Displays the vehicle speed

H Fuel gauge

Displays the quantity of fuel remaining in the tank

I Shift position and shift range

Displays the selected shift position or selected shift range (→P.167)

J Odometer, trip meter and maintenance required information display

Odometer:

Displays the total distance the vehicle has been driven

Trip meter:

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.

Maintenance required information:

Displays the remaining distance until the engine oil should be changed.

- Displays the maintenance required information when the engine switch is in IGNITION ON mode.

- It can be reset on  of the multi-information display. (→P.83)

■ **Operating condition**

The engine switch is in IGNITION ON mode.

■ **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 12 mph [20 km/h])
 - 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.

■ **Pop-up display**

In some situations, a pop-up display will be temporarily displayed on the multi-information display or the odometer/trip meter/maintenance required information screen.

The pop-up display function can be set

on/off. (→P.85)

■ **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.

■ **Customization**

The meter display can be customized on the multi-information display.
(Customizable features: →P.425)

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

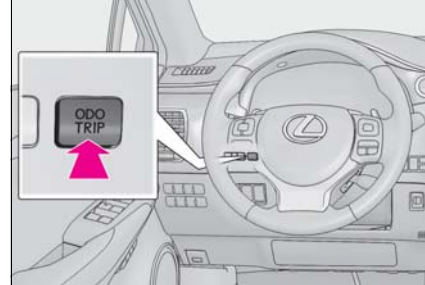
Allow the interior of the vehicle to warm up before using the liquid crystal information display. At extremely low temperatures, the information display monitor may respond slowly, and display changes may be delayed. For example, there is a lag between the driver's shifting and the new gear number appearing on the display. This lag could cause the driver to downshift again, causing rapid and excessive engine braking and possibly an accident resulting in personal death or injury.

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

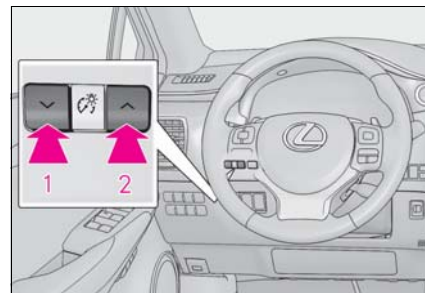
- Do not let the indicator needle of the tachometer enter the red zone, which indicates the maximum engine speed.
- The engine may be overheating if the engine coolant temperature gauge is in the red zone (H); or "Engine Coolant Temp High" is shown on the multi-information display. In this case, immediately stop the vehicle in a safe place, and check the engine after it has cooled completely. (→P.401)

Changing between the odometer, trip meter and maintenance required information

Switches between odometer, trip meter and maintenance required information displays. When the trip meter is displayed, pressing and holding the button will reset the trip meter.

**Changing the Instrument panel light brightness**

The brightness of the instrument panel lights can be adjusted.



- 1** Darker
- 2** Brighter

■ Instrument panel brightness adjustment

The instrument panel brightness levels when the tail lights are on and off can be adjusted individually. However, when the surroundings are bright (daytime, etc.), turning on the tail lights will not change the instrument panel brightness. At this time, any adjustments made to the instrument panel brightness levels will be applied to both settings at once.

2

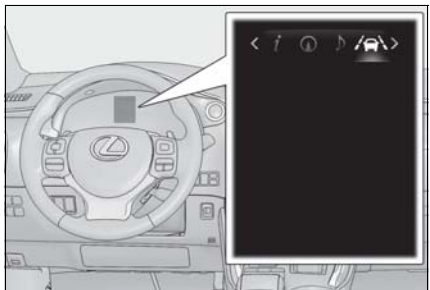
Vehicle status information and indicators

Multi-information display

The multi-information display presents the driver with a variety of vehicle data.

Display and menu icons

■ Display



■ Menu icons

	Drive information (→P.81)
	Navigation system-linked display (if equipped) (→P.82)
	Audio system-linked display (→P.83)
	Driving assist system information (→P.83)
	Warning message display (→P.83)
	Settings display (→P.83)

■ Liquid crystal display
→P.78

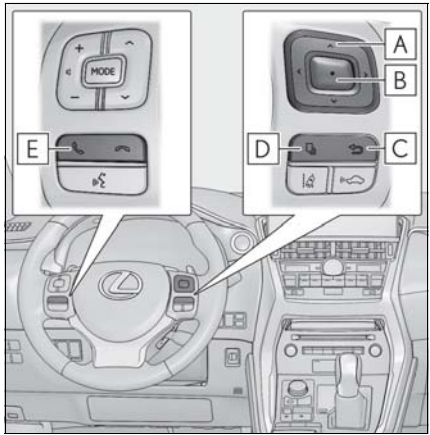
NOTICE

The multi-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.

Changing the meter display

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



- A** Select an item/change pages
- B** Enter/set
- C** Return to the previous screen
- D** Press: Displays the screen registered to the current screen. When no screen has been registered, the drive information screen will be displayed. Press and hold: Registers the currently displayed screen to the current screen.

The registration confirmation screen is displayed. If the selected screen cannot be registered, a registration failure message

will be shown.

E 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".

Drive information

■ Content displayed as drive information

Select to display various drive data.

Items displayed can be switched by pressing  or  of the meter control switches to select  and pressing  or .

● Current fuel consumption^{*1}

Displays the current rate of fuel consumption

● Average fuel consumption (after reset^{*2}/after start/after refuel)^{*1}

Displays the average fuel consumption since the function was reset, the engine was started, and the vehicle was refueled, respectively

Use the displayed average fuel consumption as a reference.

● Average vehicle speed (after reset^{*2}/after start)^{*1}

Displays the average vehicle speed since the function was reset and the engine was started, respectively

● Elapsed time (after reset^{*2}/after start)^{*1}

Displays the elapsed time since the function was reset and the engine was started, respectively

● Distance (driving range/after start)^{*1}

Displays the estimated maximum distance that can be driven with the quantity of fuel remaining and the distance driven after the engine was started respectively.

- 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.

- 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.

^{*1}: Displayed when the item is set in "Drive Info 1", "Drive Info 2" and "Drive Info 3".

^{*2}: The function can be reset by pressing the  of the meter control switches for longer than 1 second when the item to reset is displayed.

If there is more than one item that can be reset, the item selection screen will appear.

■ Eco Driving Indicator Zone Display

→P.76

■ Boost Meter/Oil Temperature Gauge/Oil Pressure Gauge (if equipped)

Boost Meter:

Displays the boost pressure. The display changes colors when the specified pressure is exceeded.

Oil Temperature Gauge:

Displays the temperature of the engine oil. The display flashes when the engine oil exceeds 284°F (140°C).

Oil Pressure Gauge:

Displays the oil pressure for the engine interior. A buzzer sounds and warning message is displayed when the oil pressure gets low. (→P.384)

Depending on the road conditions, temperature, vehicle speed, etc., the actual vehicle condition on the display screen may differ.

Use the display screen as a reference.

■ G monitor (if equipped)

Displays the acceleration forces of the front, back, left and right of the vehicle. Also displays the turning angle of the steering wheel, brake oil pressure, accelerator opening.

- The actual vehicle conditions may differ from those on the display screen, depending on the road conditions, outside temperature, vehicle speed, etc. Use the display screen as a reference.
- If a battery terminal is disconnected and reconnected, the steering amount display may be disabled temporarily. After driving the vehicle for a while, the display will be enabled.

■ Speedometer

Displays the vehicle speed.

■ Tire inflation pressure

Displays inflation pressure of each tire. The inflation pressure of the spare tire will

not be displayed.

■ Vehicle sway warning

Detects the sway of the vehicle within a lane, which is often associated with a decrease in the driver's attention level and alerts the driver.

This display is a part of the LTA (Lane Tracing Assist) system or LDA (Lane Departure Alert with steering control) system. The display is enabled when the operating conditions of the vehicle sway warning are met. (→P.209, 218)

■ Display off

A blank screen is displayed.

■ 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.
- "--" may be displayed if the tire information cannot be determined due to unfavorable radio wave conditions.
- Tire inflation pressure changes with temperature. The displayed values may also be different from the values measured using a tire pressure gauge.

■ When disconnecting and reconnecting battery terminals

The drive information will be reset.

Navigation system-linked display (if equipped)

Select to display the following navigation system-linked information.

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

Audio system-linked display

Select to enable selection of an audio source or track on the display using the meter control switches.

Driving assist system information

Select to display the operational status of the following systems:

- LTA (Lane Tracing Assist) (if equipped) (→P.205)
- LDA (Lane Departure Alert with steering control) (if equipped) (→P.214)
- Dynamic radar cruise control with full-speed range (→P.224)
- RSA (Road Sign Assist) (if equipped) (→P.222)

The displayed icon changes depending on the system used.

Warning message display

Select to display warning messages and measures to be taken if a malfunction is detected. (→P.382)

Settings display

The settings of the following items can be changed using the meter control switches.

For functions that can be enabled or disabled, the function switches between on and off each time  is pressed.

LTA (Lane Tracing Assist) (if equipped) (→P.205)

Select to set up the following items.

- Lane centering

Select to enable/disable the lane centering function.

- Steering Assist

Select to enable/disable steering wheel assistance.

- Alert

Select to change the alert types.

- Alert sensitivity

Select to set the warning sensitivity.

- Sway warning

Select to enable/disable the vehicle sway warning.

- Sway sensitivity

Select to set the vehicle sway warning sensitivity.

LDA (Lane Departure Alert with steering control) (if equipped) (→P.214)

Select to set up the following items.

- Steering Assist

Select to enable/disable steering wheel assistance.

- Alert

Select to change the alert types.

- Alert sensitivity

Select to set the warning sensitivity.

- Sway warning

Select to enable/disable the vehicle sway warning.

- Sway sensitivity

Select to set the vehicle sway warning sensitivity.

- **PCS (Pre-Collision System)**
(→P.198)

Select to set up the following items.

- PCS on/off

Select to enable/disable the pre-collision system.

- PCS sensitivity

Select to change the warning timing.

- **PKSA (Parking Support Alert) (if equipped)** (→P.234)

Select to set up the following items.

- Intuitive parking assist sensor

Select to enable/disable the intuitive parking assist sensor.

- Volume

Select to set the volume of the buzzer which sounds when the parking support alert is operated.

- **PKSB (Parking Support Brake function) (if equipped)**
(→P.240)

- PKSB on/off

Select to enable/disable the parking support brake function (for static objects).

- **RSA (Road Sign Assist) (if equipped)** (→P.222)

Select to set up the following items.

- Road Sign Assist

Select to enable/disable road sign assist.

- Over Speed

Select to set the over speed alert on/off.

- Level of Over Speed

Select to set the over speed alert level.

- Others

Select to set the other road sign assist.

- **Clock**

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

- **Vehicle Settings**

- **PBD (Power Back Door)**^{*1}
(→P.102)

Select to set up the following items.

- System settings

Select to enable/disable the power back door system.

- Volume

Select to set the volume of the buzzer which sounds when the power back door system.

- Kick Sensor^{*2}

Select to enable/disable the kick sensor.

^{*1}: Vehicles with power back door

^{*2}: Vehicles with Hands Free Power Back Door

- **TPMS (Tire Pressure Warning System)** (→P.343)

Select to initialize the tire pressure warning system.

- **Scheduled Maintenance** (→P.324)

Select to initialize the scheduled maintenance.

- **Oil maintenance** (→P.335)

Select to reset the engine oil maintenance information (message indicating maintenance is required and distance until the next oil change) after engine oil maintenance.

nance is performed.

■ Meter settings

● Language

Select to change the language on the display.

● Units

Select to change the unit of measure for fuel consumption.

● Eco Driving Indicator Light (→P.76)

Select to activate/deactivate the Eco Driving Indicator Light.

● Switch settings (→P.80)

Displays a procedure to register a desired screen to .

You can register 1 screen as a shortcut, which can be displayed by pressing .

● Drive information screen (→P.81)

Select to choose between 2 items that will be displayed on each drive information screen ("Drive info 1", "Drive Info 2" and "Drive Info 3") respectively.

● Pop-up display (→P.78)

Select to set the following pop-up displays, which may appear in some situations, on/off.

- Intersection guidance display of the navigation system-linked system
- Incoming call display of the hands-free phone system
- Instrument panel brightness adjustment display

● Accent color

Select to change the accent colors on the

screen, such as the cursor color.

● Initialization

Select to reset the meter display settings.

■ Suspension of the settings display

In the following situations, the settings display using the meter control switches will be suspended.

- When a warning message appears on the multi-information display
- When the vehicle begins to move



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.

Intuitive parking assist (if equipped)

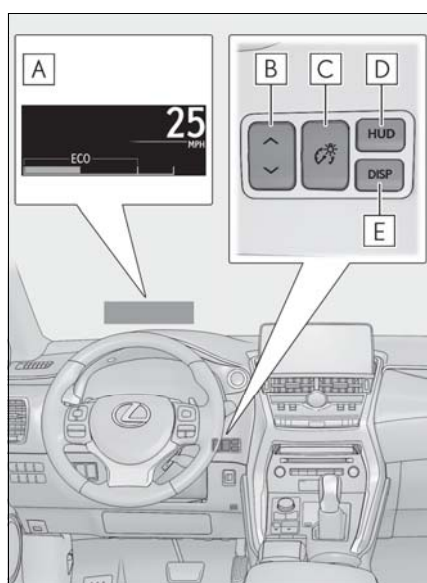
Automatically displayed when the system is used. (→P.235)

Head-up display*

*: If equipped

The head-up display can be used to project vehicle speed and other information onto the windshield.

System components



A Head-up display

Display brightness will change automatically according to the brightness of the surrounding area.

B Display position adjustment switch

C Display brightness adjustment switch

Display brightness can be adjusted to the desired level.

D "HUD" button

E "DISP" button

Head-up display contents

- Vehicle speed
- Eco Driving Indicator (→P.88)
- Tachometer
- Shift position and shift range

Displays the selected shift position or selected shift range (→P.167)

- Audio display

Displays audio information for approximately 3 seconds when the audio system is operated

- Route guidance display (vehicles with navigation system) (→P.89)

When approaching an intersection while the navigation system is giving route guidance, an arrow will automatically be displayed to indicate the direction of travel.

- Lane departure warning display (LTA [Lane Tracing Assist]) (if equipped) (→P.205)
- Lane departure warning display (LDA [Lane Departure Alert with steering control]) (if equipped) (→P.214)
- Approach warning display (Dynamic radar cruise control with full speed range) (→P.230)
- Road signs (RSA [Road Sign Assist]) (if equipped) (→P.222)
- Pre-collision warning message (Pre-Collision System) (→P.198)
- Speed limit display (vehicles with navigation system) (→P.89)
- Parking Support Brake function (for static objects) (if equipped) (→P.240)

- G monitor (if equipped) (→P.82)
- Boost Meter (if equipped) (→P.81)
- Brake Override System (→P.145)
- Drive-Start Control (→P.145)

Switching the head-up display

■ “HUD” button

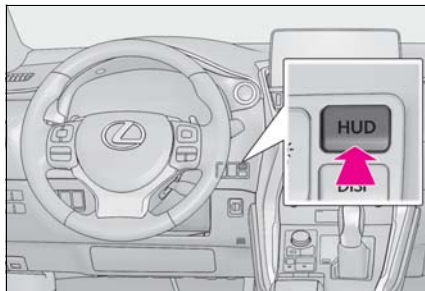
Pressing the button turns the head-up display on/off and changes the vehicle speed display units as follows:

► U.S.A.

OFF → ON (MPH) → ON (km/h) → OFF

► Canada

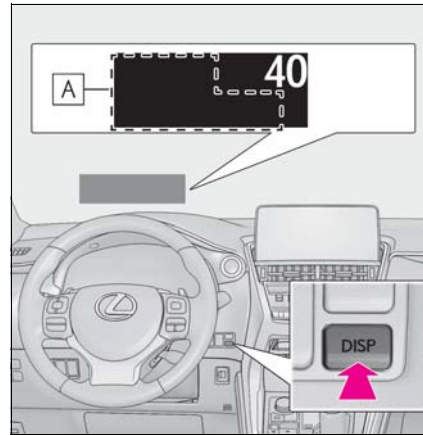
OFF → ON (km/h) → ON (MPH) → OFF



■ “DISP” button

Pressing the button changes the display items **A** (except vehicle speed) as follows:

- Off
- Eco Driving Indicator
- Tachometer
- Tachometer/Boost Meter (if equipped)
- G monitor (if equipped)



■ Head-up display

- The head-up display may seem dark and hard to see when viewed through sunglasses, especially polarized sunglasses. Adjust the brightness of the head-up display or remove your sunglasses.
- When the head-up display is turned off, it will not display anything until it is turned on again.

⚠ WARNING

■ Before 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.

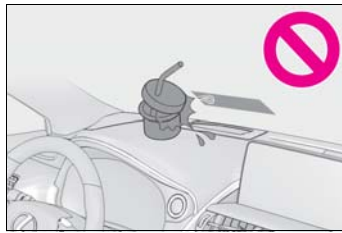
■ Caution for changing settings of the head-up display

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**

■ **To prevent damage to components**

- Do not place any drinks near the head-up display projector. If the projector gets wet, electrical malfunctions may result.



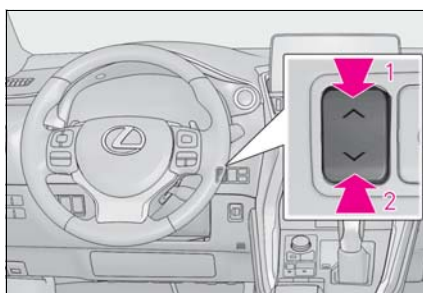
- Do not place anything on or put stickers onto the head-up display projector. Doing so could interrupt head-up display indications.
- Do not touch the inside of the head-up display projector or thrust sharp edges or the like into the projector. Doing so could cause mechanical malfunctions.

■ **When changing the settings of the head-up display**

To prevent battery discharge, ensure that the engine is running while changing the settings of the head-up display.

■ **Making the display easier to see**

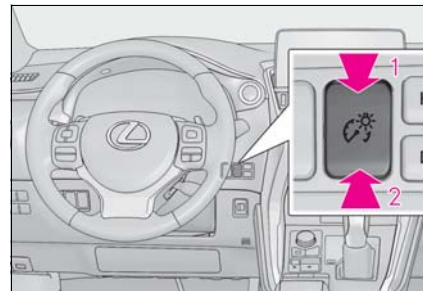
■ **Adjusting the display position**



- 1** Higher
- 2** Lower

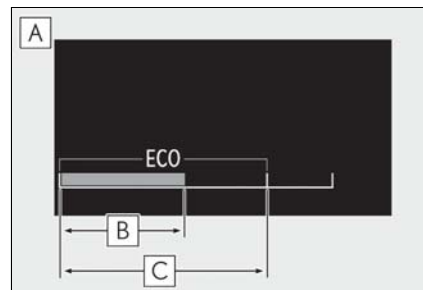
■ **Setting the brightness**

The brightness of the display is automatically adjusted in accordance with the brightness of the surrounding environment. However, the brightness can also be manually adjusted in 9 stages.



- 1** Brighter
- 2** Darker

■ **Eco Driving Indicator**



A Eco Driving Indicator Zone Display

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

B 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.

C Zone of Eco driving

Eco Driving Indicator will not operate under the following conditions:

- The shift lever is in any position other than D.
- A paddle shift switch is operated.
- Neither Normal mode nor Eco mode is selected. (→P.257)
- The vehicle speed is approximately 80 mph (130 km/h) or higher.

Settings of the display and non-display of the Eco Driving Indicator Light can be changed. (→P.85)

Route guidance display (vehicles with navigation system)

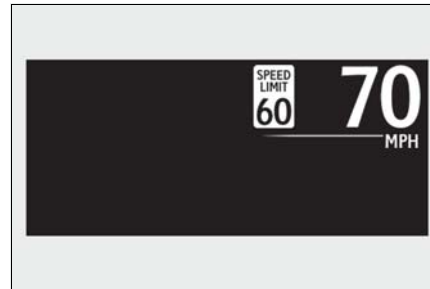
When the vehicle approaches an intersection, the direction the vehicle should go is guided by the arrow. When the vehicle approaches an intersection, the route guidance will start and the distance* to the intersection will also be displayed.

*: The distance indication will disappear when the vehicle passes through the intersection.



Speed limit display (vehicles with navigation system)

Displays the speed limit for the current road.

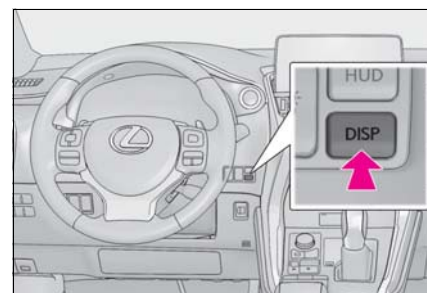


Display customization

Select to display/non-display the following items:

- Route guidance to destination
- Driving assist system information
- Audio system operation status
- Lane display

When customizing vehicle features, ensure that the vehicle is parked in a safe place with the shift lever in P and the parking brake set.



- 1 Until the screen changes, continue pressing the "DISP" button, and it will repeat until the item desired to be changed is displayed.

Customization can be performed when the head-up display is on.

- 2 Press the "DISP" button to switch between on and off.

On and off will be switched between each time the button is pressed.

If the button is left alone without being operated for a short time, setting will be finished automatically.

■ When the battery is disconnected

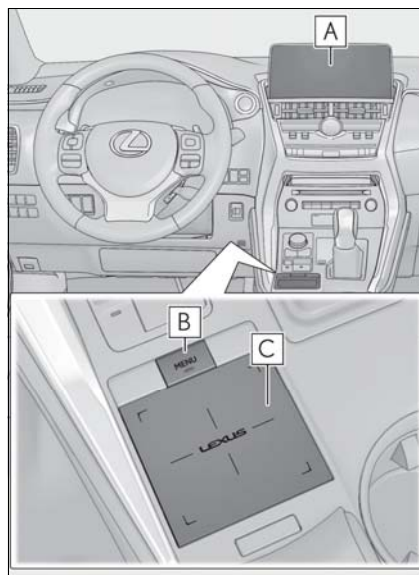
The customize settings of the head-up display will be reset.

Fuel consumption information

Fuel consumption information can be displayed on the navigation/multimedia system display.

The fuel consumption information can be displayed and operated on the side display.

System components



A Navigation/multimedia system display

B "MENU" button

C Touchpad

Fuel consumption

■ Trip information

Press the "MENU" button on the

Remote Touch, then select  on the 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 (→P.91)

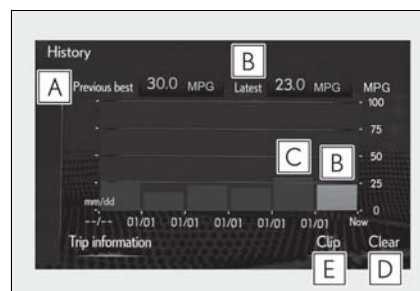
Average fuel consumption for the past 15 minutes is divided by color into past averages and averages attained since the engine switch was last turned to IGNITION ON mode. Use the displayed average fuel consumption as a reference.

The image is an example only, and may vary slightly from actual conditions.

■ History

Press the "MENU" button on the Remote Touch, then select  on the 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

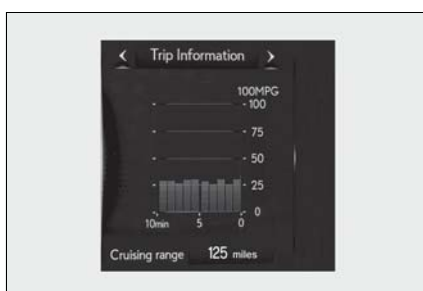
driven may differ from that displayed.

Using the side display (vehicles with navigation system)

Display the vehicle information on the side display (→P.275), and then select **<** or **>** to display the desired screen.

■ Trip information (type A)

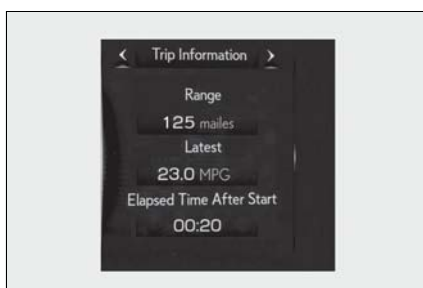
Displays the average fuel consumption for the past 10 minutes in 1 minute intervals, as well as the cruising range.



The image is an example only, and may vary slightly from actual conditions. 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.



The image is an example only, and may vary slightly from actual conditions. Use the displayed average fuel consumption as a reference.

■ History

Displays the average fuel consumption and highest fuel consumption.



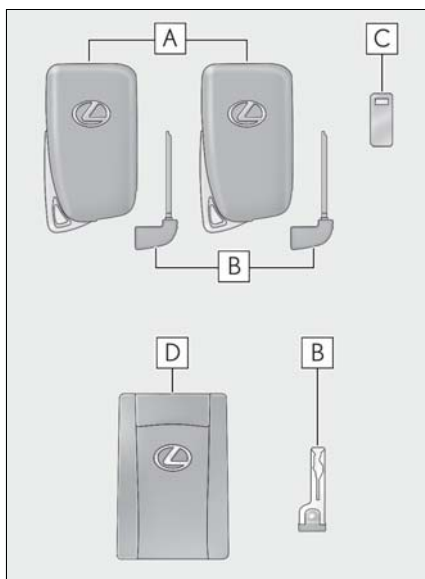
The image is an example only, and may vary slightly from actual conditions. Use the displayed average fuel consumption as a reference.

- 3-1. Key information
 - Keys 94
- 3-2. Opening, closing and locking the doors
 - Side doors 98
 - Back door 102
 - Smart access system with push-button start 114
- 3-3. Adjusting the seats
 - Front seats 120
 - Rear seats 121
 - Driving position memory 126
 - Head restraints 129
- 3-4. Adjusting the steering wheel and mirrors
 - Steering wheel 131
 - Inside rear view mirror 132
 - Outside rear view mirrors 134
- 3-5. Opening, closing the windows and moon roof
 - Power windows 136
 - Moon roof 138

Keys

Key types

The following keys are provided with the vehicle.



A Electronic keys

- Operating the smart access system with push-button start (→P.114)
- Operating the wireless remote control function

B Mechanical keys

C Key number plate

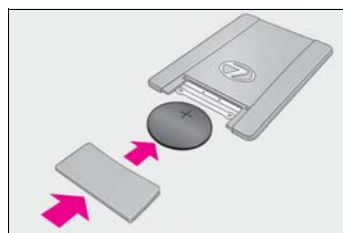
D Card key (electronic key) (if equipped)

Operating the smart access system with push-button start (→P.114)

■ Card key (if equipped)

- 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 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.



- The card key is not waterproof.

■ 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 when the engine stops.
- 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 access system with push-button start 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 3 ft. (1 m) 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
- Induction cookers
- Table lamps

■ Replacing the battery

→P.353

■ Confirmation of the registered key number

The number of keys already registered to the vehicle can be confirmed. Ask your Lexus dealer for details.



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 long periods 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 3.9 in. (10 cm) or more away from electric appliances that are turned on. Radio waves emitted from electric appliances within 3.9 in. (10 cm) of the electronic key may interfere with the key, causing the key to not function properly.

■ In case of a smart access system with push-button start malfunction or other key related problems

→P.395

■ When an electronic key is lost

→P.394

■ Handling 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.

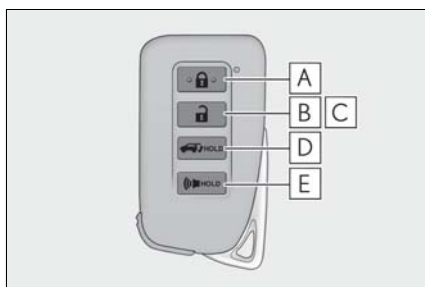
3

Before driving

Wireless remote control

The electronic keys are equipped with

the following wireless remote control:



- A** Locks all the doors (→P.98)
- B** Unlocks all the doors (→P.98)
- C** Opens the windows and moon roof^{*1, 2} (→P.98)
- D** Opens and closes the power back door^{*1} (→P.105)
- E** Sounds the alarm (→P.96)

^{*1}: If equipped

^{*2}: This setting must be customized at your Lexus dealer.

■ Theft deterrent panic mode

When **[[HOLD** is pressed for longer than about 1 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.



■ Back door reserve lock function (vehicles with power back door)

This function is a function which reserves locking of all doors, beforehand, when the back door is open. When the follow is done, all the doors except the back door are locked and then back door will also be locked at the same time it is closed.

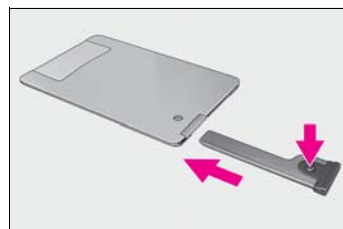
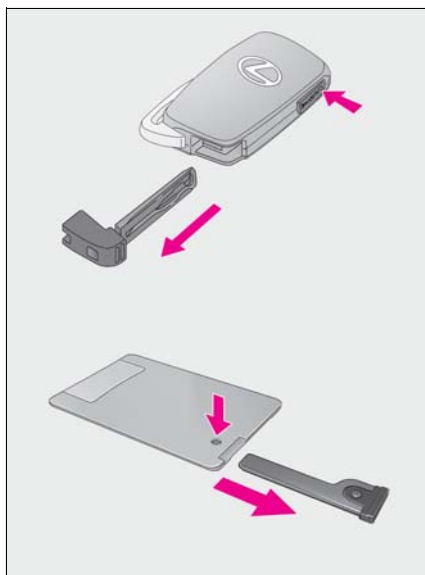
- 1** Close all doors, except the back door.
- 2** Push the wireless lock button during the automatic closing operation of the back door.

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.396)

**NOTICE****■ Handling the card key**

Do not apply excess force when inserting the mechanical key into the card key. Doing so may damage the card key.

■ When required to leave the vehicle's key with a parking attendant

Lock the glove box as circumstances demand. (→P.292)

Remove the mechanical key for your own use and provide the attendant with the electronic key only.

■ If you lose your mechanical keys

→P.394

■ If a wrong key is used

The key cylinder rotates freely to isolate inside mechanism.

■ Card key

- If it is difficult to take out the mechanical key, push down the 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 release button.

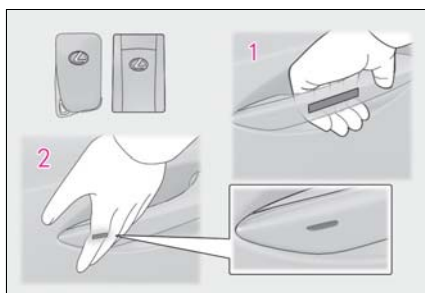
Side doors

The vehicle can be locked and unlocked using the entry function, wireless remote control or door lock switch.

Unlocking and locking the doors from the outside

■ Using the smart access system with push-button start

Carry the electronic key to enable this function.



- 1** Grip the driver's door handle to unlock the door. Grip any passenger door handle to unlock all the doors.*

Make sure to touch the sensor on the back of the handle.

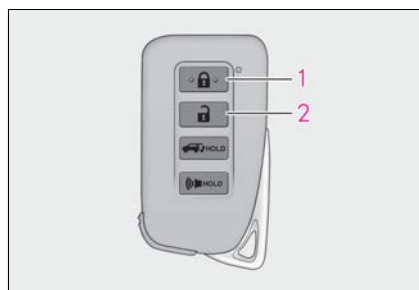
The doors cannot be unlocked for 3 seconds after the doors are locked.

- 2** Touch the lock sensor (the indentation on the surface of the door handle) to lock all the doors.

Check that the door is securely locked.

*: The door unlock settings can be changed.

■ Using the wireless remote control



- 1** Locks all the doors

Check that the door is securely locked.

- 2** Unlocks all the doors

Pressing the button unlocks the driver's door. Pressing the button again within 3 seconds unlocks the other doors. Press and hold to open the windows and moon roof*1, 2

*1: If equipped

*2: This setting 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** When the indicator light on the key surface is not on, press and hold  ,  HOLD or  HOLD 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 2.)

Multi-information display/Beep	Unlocking function
 Exterior: Beeps 3 times Interior: Pings once	Holding the driver's door handle unlocks only the driver's door.
 Exterior: Beeps twice Interior: Pings once	Holding any of the passenger door handles unlocks all the doors. Holding a door handle unlocks all the doors.

For vehicles with alarm: 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 60 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.69)

■ Locking the doors from the outside without a key

- 1

Move the inside lock button to the lock position.
- 2

Close the door.
- 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.

The key may not be detected correctly and the door may be locked.

■ 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

Doors:
A buzzer sounds and the emergency flashers flash to indicate that the doors have been locked/unlocked. (Locked: Once; Unlocked: Twice)
Windows and moon roof:
A buzzer sounds to indicate that all windows and moon roof are opening.

■ Security feature

If a door is not opened within approximately 60 seconds after the vehicle is unlocked, the security feature automatically locks the vehicle again.

■ Open door warning buzzer

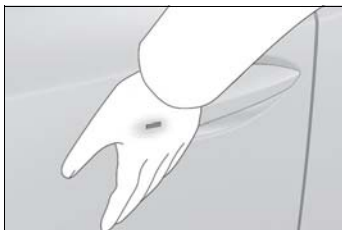
If the vehicle speed reaches 3 mph (5 km/h), the master warning light flashes and a buzzer sounds to indicate that door(s) or the hood is not fully closed.
The open door(s) or hood is displayed on the multi-information display.

■ Welcome light illumination control

The side marker, parking, tail and license plate 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 **AUTO** position.

■ When the door cannot be locked by the lock sensor on the surface of the door handle

When the door cannot be locked even if the lock sensor on the surface of the door handle is touched by a finger, touch the lock sensor with the palm.
When gloves are being worn, remove the gloves.



■ Door lock 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.69)

■ Conditions affecting the operation of the smart access system with push-button start or wireless remote control

→P.116

■ If the smart access system with push-button start or the wireless remote control does not operate properly

- Use the mechanical key to lock and unlock the doors. (→P.396)
- Replace the key battery with a new one if it is depleted.

■ Customization

Settings (e.g. unlocking function using a key) can be changed. (Customizable features: →P.425)

⚠ 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 falling out, 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. Be especially careful for the front doors, as the doors may be opened even if the inside lock buttons are in locked position.

- Set the rear door child-protector locks when children are seated in the rear seats.

■ When opening or closing a door

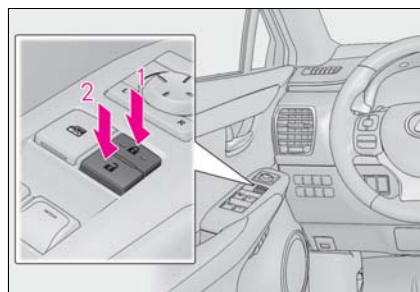
Check the surroundings of the vehicle such as whether the vehicle is on an incline, whether there is enough space for a door to open and whether a strong wind is blowing. When opening or closing the door, hold the door handle tightly to prepare for any unpredictable movement.

■ When using the wireless remote control and operating the power windows or moon roof (if equipped)

Operate the power window or 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 moon roof. Also do not let a child operate window by the mechanical key. It is possible for children and other passengers to get caught in the power window or moon roof.

Unlocking and locking the doors from the inside

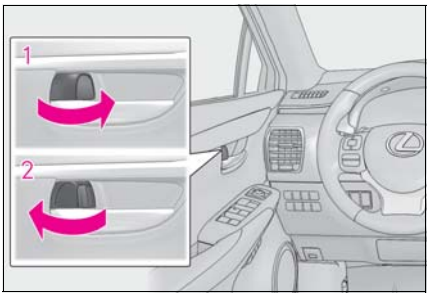
■ Using the door lock switches



- 1 Locks all the doors

2 Unlocks all the doors

■ Using the inside lock button



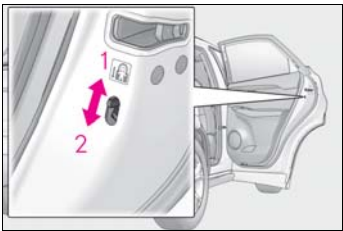
1 Locks the door

2 Unlocks the door

The front doors can be opened by pulling the inside handle even if the lock buttons are in the lock position.

■ 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.425.

Function	Operation
Speed linked door locking function	All doors are automatically locked when vehicle speed is approximately 12 mph (20 km/h) or higher.
Shift position linked door locking function	All doors are automatically locked when shifting the shift lever out of P.
Shift position linked door unlocking function	All doors are automatically unlocked when shifting the shift lever to P.
Driver's door linked door unlocking function	All doors are automatically unlocked when driver's door is opened.

3

Before driving

Back door

The back door can be opened using the back door open switch, smart access system with push-button start or wireless remote control.

⚠ WARNING

■ Caution while driving

- Keep the back door closed while driving.
If the back door is left open, it may hit nearby objects while driving or luggage may be unexpectedly thrown out, causing an accident.
In addition, exhaust gases may enter the vehicle, causing death or a serious health hazard. Make sure to close the back door before driving.
- Before driving the vehicle, make sure that the back door is fully closed. If the back door is not fully closed, it may open unexpectedly while driving, causing an accident.
- Never let anyone sit in the luggage compartment. In the event of sudden braking or a collision, they are susceptible to death or serious injury.

■ When children are in the vehicle

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

- Do not allow children to play in the luggage compartment.
If a child is accidentally locked in the luggage compartment, they could have heat exhaustion or other injuries.
- Do not allow a child to open or close the back door.
Doing so may cause the back door to move unexpectedly, or cause the child's hands, head, or neck to be caught by the closing back door.

■ Operating the back door

Observe the following precautions. Failure to do so may cause parts of the body to be caught, resulting in death or serious injury.

- Remove any heavy loads, such as snow and ice, from the back door before opening it. Failure to do so may cause the back door to suddenly shut again after it is opened.
- When opening or closing the back door, 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 back door is about to open or close.
- Use caution when opening or closing the back door in windy weather as it may move abruptly in strong wind.
- Vehicles without power back door:
The back door may suddenly shut if it is not opened fully. It is more difficult to open or close the back door on an incline than on a level surface, so beware of the back door unexpectedly opening or closing by itself. Make sure that the back door is fully open and secure before using the luggage compartment.



- Vehicles with power back door: The back door may suddenly shut if it is not opened fully, while on a steep incline. Make sure that the back door is secured before using the luggage compartment.

⚠ WARNING

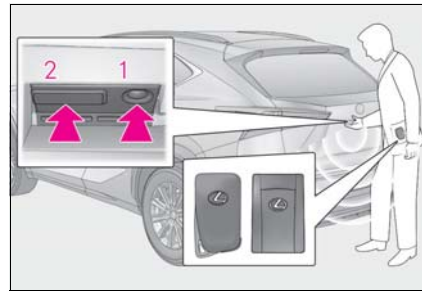
- When closing the back door, take extra care to prevent your fingers, etc., from being caught.



- When closing the back door, make sure to press it lightly on its outer surface. If the back door handle is used to fully close the back door, it may result in hands or arms being caught.
- Do not pull on the back door damper stay (vehicles without power back door) (→P.104) or back door spindle (vehicles with power back door) (→P.111) to close the back door, and do not hang on the back door damper stay (vehicles without power back door) or back door spindle (vehicles with power back door). Doing so may cause hands to be caught or the back door damper stay (vehicles without power back door) or back door spindle (vehicles with power back door) to break, causing an accident.
- If a bicycle carrier or similar heavy object is attached to the back door, it may suddenly shut again after being opened, causing someone's hands, head or neck to be caught and injured. When installing an accessory part to the back door, using a genuine Lexus part is recommended.

Unlocking and locking the back door from the outside**■ Smart access system with push-button start**

Carry the electronic key to enable this function.

**1 Locks all the doors**

Check that the door is securely locked.

2 Unlocks all the doors

The doors cannot be unlocked for 3 seconds after the doors are locked.

■ Wireless remote control

→P.95

Unlocking and locking the back door from the inside**■ Door lock switches**

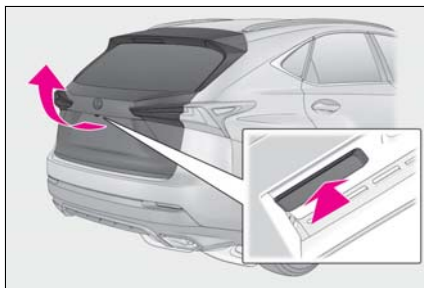
→P.100

Opening/closing the back door (vehicles without power back door)**■ Open**

Raise the back door while pressing up the back door opener switch.

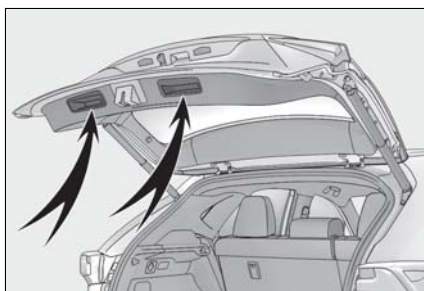
3

Before driving



■ Close

Lower the back door using the back door handle, and make sure to push the back door down from the outside to close it.



■ Luggage compartment light

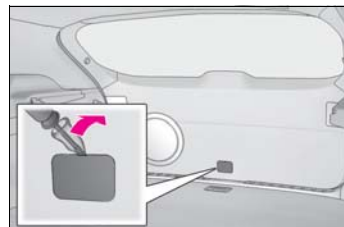
- The luggage compartment light turns on when the back door is opened.
- If the luggage compartment light is left on when the engine switch is turned off, the light will go off automatically after 20 minutes.

■ If the back door opener is inoperative

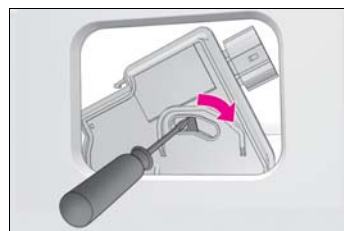
The back door can be unlocked from the inside.

1 Remove the cover.

To protect the cover, place a rag between the flathead screwdriver and the cover as shown in the illustration.



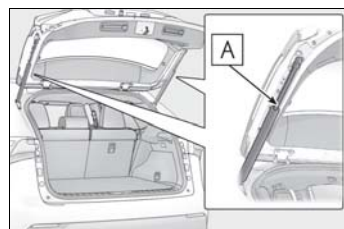
2 Move the lever.



⚠ NOTICE

■ Back door damper stays

The back door is equipped with damper stays **A** that hold the back door in place. Observe the following precautions. Failure to do so may cause damage to the back door damper stay **A**, resulting in malfunction.



- Do not attach any foreign objects, such as stickers, plastic sheets, or adhesives to the damper stay rod.
- Do not touch the damper stay rod with gloves or other fabric items.
- Do not attach any accessories other than genuine Lexus parts to the back door.
- Do not place your hand on the damper stay or apply lateral forces to it.

Opening/closing the back door (vehicles with power back door)

■ Opening/closing the back door using the wireless remote control

Press the HOLD for 1 second.



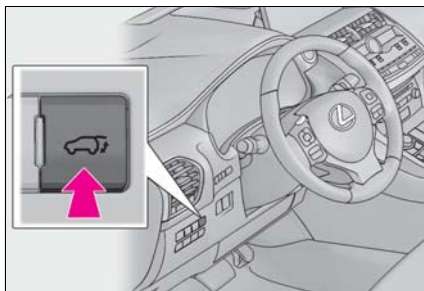
■ Opening/closing the back door from the inside

Press the  for 1 second.

A buzzer sounds and the back door automatically opens and closes.

Pressing the  while the back door is opening/closing stops the operation.

When the  is pressed again for 1 second during the halted operation, the back door will perform the reverse operation.



■ Opening/closing the back door from the outside

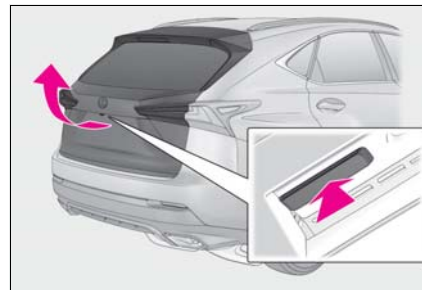
- Open

When the back door is unlocked: Press the back door opener switch.

When the back door is locked: While carrying the electronic key on your person, press the back door opener switch.

A buzzer sounds and the back door automatically opens.

Pressing the switch while the back door is opening stops the operation.



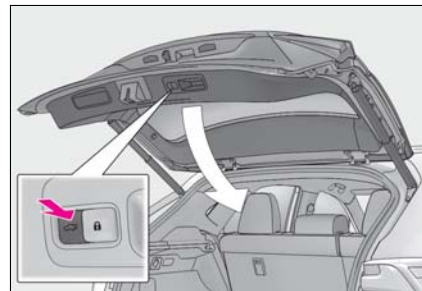
- Close

Pressing the .

A buzzer sounds and the back door automatically closes.

Pressing the  while the back door is closing stops the operation.

Pressing the  again will reverse the operation.



- Close the back door and lock all doors (close & lock function)

Press the .

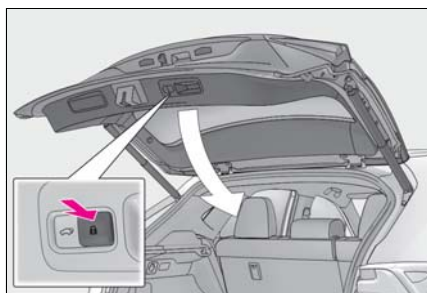
3

Before driving

A different buzzer than the normal one will sound and the power back door will begin closing automatically. When the power back door is closed, all of the doors will lock simultaneously and operation signals will indicate that all of the doors have been locked.

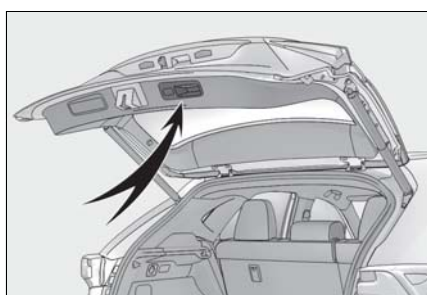
If the  is pressed while the power back door is closing, the operation will stop.

Pressing the  again will close the power back door automatically.



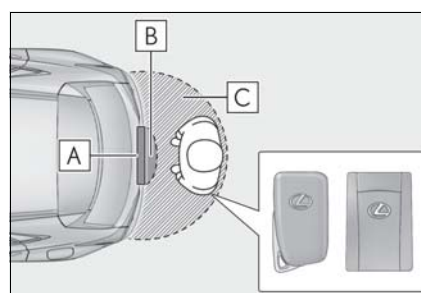
■ Closing the back door using the back door handle

Lower the back door using the back door handle, then a buzzer sounds and the back door automatically closes.



■ Opening/closing the back door using the kick sensor (vehicles with Hands Free Power Back Door)

- 1 While carrying an electronic key, stand within the smart access system with push-button start operation range, approximately 19.7 to 27.6 in. (50 to 70 cm) from the rear bumper.



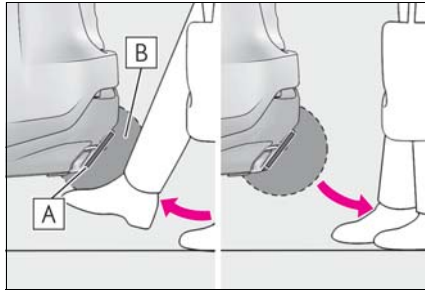
A Kick sensor

B Kick sensor detection area

C Smart access system with push-button start operation detection area (→P.115)

- 2 Perform a kick operation by moving your foot to within approximately 3.9 in. (10 cm) of the rear bumper and then pulling it back.
 - Perform the entire kick operation within 1 second.
 - The back door will not start operating while a foot is detected under the rear bumper.
 - Operate the back door without contacting the rear bumper with your foot.
 - If another electronic key is in the cabin or luggage compartment, it may take slightly longer than normal for the operation to occur.

When all of the doors are locked: If the movement is detected by the kick sensor, all of the doors will be unlocked.



A Kick sensor

B Kick sensor detection area

- 3** When the kick sensor detects that your foot is pulled back, a buzzer will sound and the back door will automatically fully open/close.

If kick operation is performed again in the middle of back door operating, the operation will stop.

■ Luggage compartment light

- The luggage compartment light turns on when the back door is opened.
- If the luggage compartment light is left on when the engine switch is turned off, the light will go off automatically after 20 minutes.

■ Power back door operating conditions

With the power back door operations set to ON, it can automatically open and close for the following conditions:

- When the electronic key is being carried and the power back door switch is pushed*
- When the wireless remote control is used*
- When the engine switch is in IGNITION ON mode, in addition to the above for the opening operations, the back door operates for any of the following conditions:

- Parking brake is engaged
- The brake pedal is depressed
- The shift lever is in P

* : When configured with the customization function so that it can be operated after being unlocked, operate the back door after it has been unlocked.

■ Kick sensor operating conditions (vehicles with Hands Free Power Back Door)

- When the kick sensor operation setting is turned on
- The electronic key is within the operational range. (→P.115)

■ Back door closer

In the event that the back door is left slightly open, the back door closer will automatically close it to the fully closed position. Whatever the state of the engine switch, the back door closer operates.

■ Operation of the power back door

- A buzzer sounds and the emergency flashers flash twice to indicate that the back door is opening/closing.
- When the power back door operations are OFF, the power back door does not operate but it can be opened and closed by hand.
- When the power back door automatically opens, if an abnormality due to people or objects is detected, operation will stop.

■ Close & lock function

When the power back door is open, this function closes the power back door and then locks all of the doors simultaneously.

When the following procedures are performed and there are no electronic keys for the vehicle within the vehicle, all of the doors will lock when the power back door is completely closed.

- 1 Close all of the doors except the power back door.
- 2 While carrying an electronic key, press the  switch on the lower part of the power back door.

A different buzzer than the normal one will

sound and then the power back door will begin closing automatically. When the power back door is closed, all of the doors will lock simultaneously and operation signals will indicate that all of the doors have been locked.

■ **Situations in which the close & lock function may not operate properly (vehicles with Hands Free Power Back Door)**

In the following situations, the close & lock function may not operate properly:

- If the  switch on the lower part of the power back door is pressed by a hand which is holding an electronic key
- If the  switch on the lower part of the power back door is pressed when the electronic key is in a bag, etc. that is placed on the ground
- If the  switch on the lower part of the power back door is pressed with the electronic key not near the vehicle.

■ **Situations in which the kick sensor does not operate properly (vehicles with Hands Free Power Back Door)**

In the following situations, the kick sensor 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 back door again.

- When operated while a person is too close to the rear bumper
- When an external radio wave source interferes with the communication between the vehicle and electronic key (→P.116)
- When the vehicle is parked near an electrical noise source which affects the sensitivity of the kick sensor, 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 kick sensor operation setting off.

■ **Preventing unintentional operation of the kick sensor (vehicles with Hands Free Power Back Door)**

When an electronic key is in the operation range, the kick sensor 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 kick sensor, 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 kick sensor operation setting off.

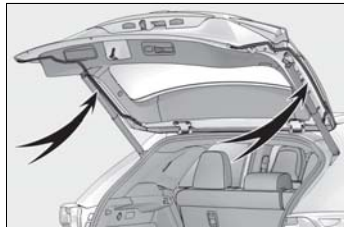
■ When reconnecting the battery

To enable the power back door to operate properly, close the back door manually.

■ Jam protection function

Sensors are installed in the right and left sides of the power back door. When the door is automatically closing and the sensors are pushed due to an object being clamped, etc., the jam protection function operates.

From that position the door automatically moves a little in the opposite direction and then the function stops.

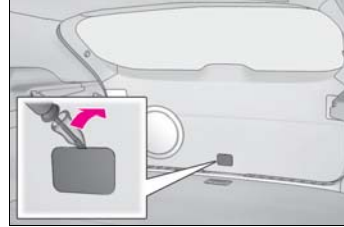


■ If the back door opener is inoperative

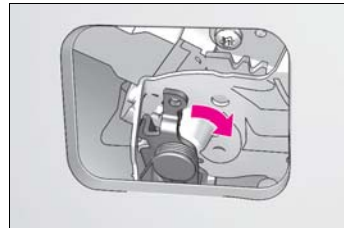
The back door can be unlocked from the inside.

- 1 Remove the cover.

To protect the cover, place a rag between the flathead screwdriver and the cover as shown in the illustration.



- 2 Move the lever.



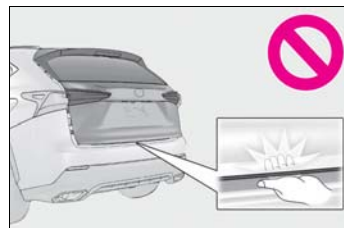
■ Customization

Settings (e.g. back door automatic open and stop position) can be changed. (Customizable features: →P.425)

⚠ WARNING

■ Back door closer

- In the event that the back door is left slightly open, the back door closer will automatically close it to the fully closed position. It takes several seconds before the back door closer begins to operate. Be careful not to catch fingers or anything else in the back door, as this may cause bone fractures or other serious injuries.



- Use caution when using the back door closer as it still operates when the power back door system is canceled.

3

Before driving

**WARNING****■ Power back door**

Observe the following precautions when operating the power back door. Failure to do so may cause death or 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 back door is about to open or close.
- If the power back door system is turned off with the main switch while the back door is operating automatically, the automatic operation is stopped. The back door then has to be operated manually. Take extra care when on an incline, as the back door may open or close unexpectedly.
- If the operating conditions of the power back door are no longer met, a buzzer may sound and the back door may stop opening or closing. The back door then has to be operated manually. Take extra care when on an incline, as the back door may open or close abruptly.
- On an incline, the back door may suddenly shut after it opens. Make sure the back door is fully open and secure.
- In the following situations, the power back door may detect an abnormality and automatic operation may be stopped. In this case, the back door has to be operated manually. Take extra care when on an incline, as the back door may open or close abruptly.
 - When the back door 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

- If a bicycle carrier or similar heavy object is attached to the back door, the power back door may not operate, causing itself to malfunction, or the back door may suddenly shut again after being opened, causing someone's hands, head or neck to be caught and injured. When installing an accessory part to the back door, using a genuine Lexus part is recommended.

■ Jam protection function

Observe the following precautions. Failure to do so may cause death or 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 back door fully closes. Be careful not to catch fingers caught or anything else.
- 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.

■ Kick sensor (vehicles with Hands Free Power Back Door)

Observe the following precautions when operating the power back door. Failure to do so may cause death or serious injury.

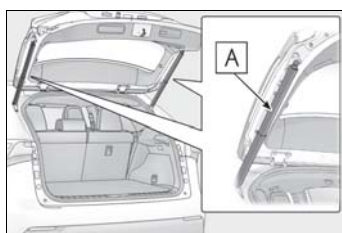
- Check the safety of the surrounding area to make sure there are no obstacles or anything that could cause any of your belongings to get caught.
- When putting your foot near the lower center part of the rear bumper and moving it from the rear bumper, be careful not to touch the exhaust pipes until they have cooled down sufficiently, as touching hot exhaust pipes can cause burns.
- Do not operate the Hands Free Power Back Door if there is little space under the rear bumper.

**NOTICE**

■ **Back door spindles**

The back door is equipped with spindles **A** that hold the back door in place.

Observe the following precautions. Failure to do so may cause damage to the back door spindle **A**, resulting in malfunction.



- Do not attach any foreign objects, such as stickers, plastic sheets, or adhesives to the spindle rod.
- Do not touch the spindle rod with gloves or other fabric items.
- Do not attach heavy accessories to the back door. When attaching, ask your Lexus dealer for details.
- Do not place your hand on the spindle or apply lateral forces to it.

■ **To prevent back door closer malfunction**

Do not apply excessive force to the back door while the back door closer is operating.

■ **To prevent damage to the power back door**

- Make sure that there is no ice between the back door and frame that would prevent movement of the back door. Operating the power back door when excessive load is present on the back door may cause a malfunction.
- Do not apply excessive force to the back door while the power back door is operating.

- Take care not to damage the sensors (installed on the right and left edges of the power back door) with a knife or other sharp object. If the sensor is disconnected, the power back door will not close automatically.

■ **Close & lock function**

When closing the power back door using the close & lock function, a different buzzer than the normal one will sound before the operation begins.

To check that the operation has started correctly, check that a different buzzer than the normal one has sounded.

Additionally, when the power back door is fully closed and locked, operation signals will indicate that all of the doors have been locked.

Before leaving the vehicle, make sure that the operational signals have operated and that all of the doors are locked.

■ **Kick sensor precautions (vehicles with Hands Free Power Back Door)**

The kick sensor is located behind lower center part of the rear bumper. Observe the following to ensure that the power back door function operates properly:

- Keep the lower center part of the rear bumper clean at all times.
If the lower center part of the rear bumper is dirty or covered with snow, the kick sensor may not operate. In this situation, clean off the dirt or snow, move the vehicle from the current position and then check if the kick sensor operates.
If it does not operate, have the vehicle inspected by your Lexus dealer.
- Do not apply coatings that have a rain clearing (hydrophilic) effect, or other coatings, to the lower center part of the rear bumper.



NOTICE

- Do not park the vehicle near objects that may move and contact the lower center part of the rear bumper, such as grass or trees.
If the vehicle has been parked for a while near objects that may move and contact the lower center part of the rear bumper, such as grass or trees, the kick sensor may not operate. In this situation, move the vehicle from the current position and then check if the kick sensor operates. If it does not operate, have the vehicle inspected by your Lexus dealer.
- Do not subject the kick sensor or its surrounding area to a strong impact. If the kick sensor or its surrounding area has been subjected to a strong impact, the kick sensor may not operate properly. If the kick sensor does not operate in the following situations, have the vehicle inspected by your Lexus dealer.
 - The kick sensor or its surrounding area has been subjected to a strong impact.
 - The lower center part of the rear bumper is scratched or damaged.
- Do not disassemble the rear bumper.
- Do not attach stickers to the rear bumper.
- Do not paint the rear bumper.
- If a bicycle carrier or similar heavy object is attached to the power back door, disable the kick sensor.

Canceling the power back door system (vehicles with power back door)

ON (operate) and OFF (stop) can be switched between by the  of the multi-information display. (→P.80)

- 1 Press  or  of the meter control switches and select .



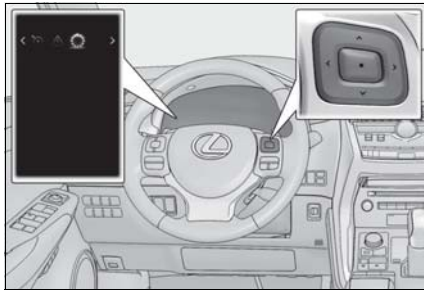
- 2 Press  or  of the meter control switches, select the "Vehicle Settings" and then press .
- 3 Press  or  of the meter control switches, select  and then press .
- 4 Press  or  of the meter control switches, and then select "PBD".
- 5 ON and OFF will be switched over with presses of  on the meter control switches.

When OFF is selected and the operations of the power back door is made to stop from the  of multi-information display, unless it is set to ON, the operation of the power back door will not return. (No return in the engine switch operation)

Canceling the kick sensor (vehicles with Hands Free Power Back Door)

ON (enable) and OFF (disable) can be switched between by the  of the multi-information display. (→P.80)

- 1 Press  or  of the meter control switches and select .



- 2 Press  or  of the meter control switches, select the "Vehicle Settings" and then press .
- 3 Press  or  of the meter control switches, select  and then press .
- 4 Press  or  of the meter control switches, and then select "Kick Sensor".
- 5 ON and OFF will be switched over with presses of  on the meter control switches.

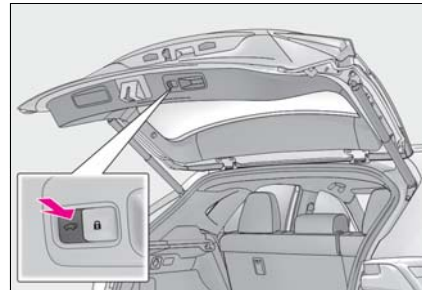
When OFF is selected and the operations of the kick sensor is made to stop from the  of multi-information display, unless it is

set to ON, the operation of the kick sensor will not return. (No return in the engine switch operation)

Adjusting the open position of the back door (vehicles with power back door)

The open position of the power back door can be adjusted.

- 1 Stop the back door in the desirable position. (→P.105)
- 2 Press and hold the power back door switch on the back door for 2 seconds.
 - When the settings are completed, the buzzer sounds 4 times.
 - When opening the back door the next time, the back door will stop at that position.



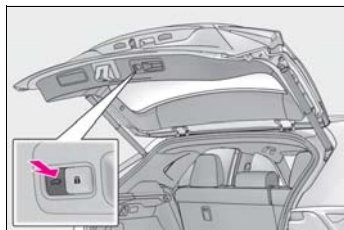
■ Returning the back door automatic stop position to the initial settings

Press and hold the power back door switch on the back door for 7 seconds.

After the buzzer sounds 4 times, it sounds twice more. When the power back door does the opening operation the next time, the door will open to the initial settings position.

3

Before driving



■ When setting the open position of the back door by the navigation system or multimedia system

The opening position can be set with the navigation system or multimedia system. (→P.425)

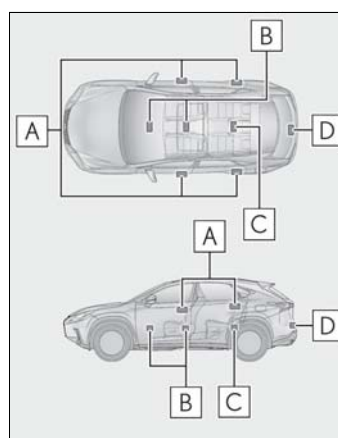
Priority for the stop position is given to the last position set by either the switch, navigation system or multimedia system.

Smart access system with push-button start

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.

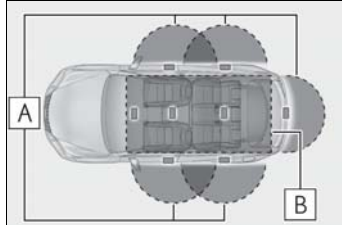
- Locks and unlocks the doors (→P.98)
- Locks and unlocks the back door (→P.103)
- Starts and stops the engine (→P.163)

■ Antenna location



- A** Antennas outside the cabin
- B** Antennas inside the cabin
- C** Antenna inside the luggage compartment
- D** Antenna outside the luggage compartment

■ **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 2.3 ft. (0.7 m) of an outside door handle. (Only the doors detecting the key can be operated.)

- B** When starting the engine or changing engine switch modes
The system can be operated when the electronic key is inside the vehicle.

■ **If an alarm sounds or a warning message is displayed**

A combination of exterior and interior alarms as well as warning messages shown on the multi-information display are used to prevent theft of the vehicle and accidents resulting from erroneous operation. Take appropriate measures in response to any warning message on the multi-information display. (→P.382)

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.

- When an Interior alarm pings repeatedly

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.

■ **When "Smart Access System Malfunction See Owner's Manual" will be displayed on the multi-information display**

The system may be malfunctioning. Have the vehicle inspected by your Lexus dealer immediately.

■ **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 access system with push-button start may take some time to unlock the doors.
 - The electronic key has been left in an area of approximately 6 ft. (2 m) of the outside of the vehicle for 10 minutes or longer.
 - The smart access system with push-button start has not been used for 5 days or longer.
- If the smart access system with push-button start 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.

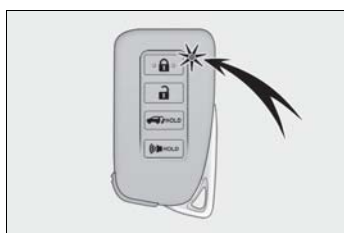
■ **Turning an electronic key to battery-saving mode**

When battery-saving mode is set, battery depletion is minimized by stopping the elec-

tronic 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 access system with push-button start cannot be used. To cancel the function, press any of the electronic key buttons.



■ Conditions affecting operation

The smart access system with push-button start, wireless remote control and immobilizer system use weak radio waves. In the following situations, the communication between the electronic key and the vehicle may be affected, preventing the smart access system with push-button start, wireless remote control and immobilizer system from operating properly. (Ways of coping: →P.395)

- 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 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
 - Portable radio, cellular phone, cordless phone or other wireless communication devices
 - 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

■ 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 rear bumper center when the back door is opened.
 - The electronic key is on the instrument panel, luggage room, 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 door 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.
- 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 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 door will automatically be locked after approximately 60 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. Remove the gloves and touch the lock sensor again.
- 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 that case, follow the following correction procedures to wash the vehicle:
 - Place the electronic key in a location 6 ft. (2 m) 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 access system with push-button start. (→P.115)
- 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 6 ft. (2 m) of the vehicle.
- The smart access system with push-button start can be deactivated in advance.

■ 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 prevention may not operate.)

■ If the smart access system with push button start does not operate properly

- Locking and unlocking the doors: Use the mechanical key. (→P.396)
- Starting the engine: →P.396

■ Customization

Settings (e.g. smart access system with push-button start) can be changed. (Customizable features: →P.425)

If the smart access system with push-button start has been deactivated by a customized setting, refer to the explanations for the following operations.

- Locking and unlocking the doors: Use the wireless remote control or mechanical key. (→P.98, 396)
- Starting the engine and changing engine switch modes: →P.396
- Stopping the engine: →P.164

■ Certification for the smart access system with push-button start

► For vehicles sold in the U.S.A.

FCC ID:HYQ23AAB
FCC ID:HYQ14FLB
FCC ID:HYQ14CBM

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.

FCC ID:NI4TMLF12-4

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.

► For vehicles sold in Canada

NOTE:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

NOTE:

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

- (1) L'appareil ne doit pas produire de brouillage;
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : 1) l'appareil ne doit pas produire de brouillage; 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

3

Before driving

**WARNING**

■ **Caution regarding interference with electronic devices**

- People with implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should keep away from the smart access system with push-button start antennas. (→P.114)
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.

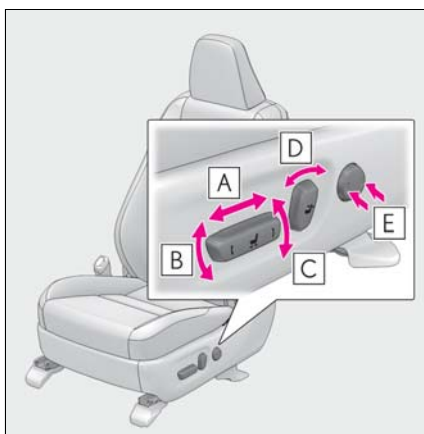
- Users of any electrical medical device other than implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should consult the manufacturer of the device for information about its operation under the influence of radio waves. Radio waves could have unexpected effects on the operation of such medical devices.

Ask your Lexus dealer for details on disabling the entry function.

Front seats

The seats can be adjusted (longitudinally, vertically, etc.). Adjust the seat to ensure the correct driving posture.

Adjustment procedure



- A** Seat position adjustment switch
- B** Seat cushion (front) angle adjustment switch
- C** Vertical height adjustment switch
- D** Seatback angle adjustment switch
- E** Lumbar support adjustment switch (for driver's side)

■ When adjusting the seat

- Make sure that any surrounding passengers or objects are not contact the seat.
- Take care when adjusting the seat so that the head restraint does not touch the ceiling.

■ Power easy access system (if equipped)

The driver's seat and steering wheel move in accordance with engine switch mode and

the driver's seat belt condition. (→P.126)



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.

■ Seat adjustment

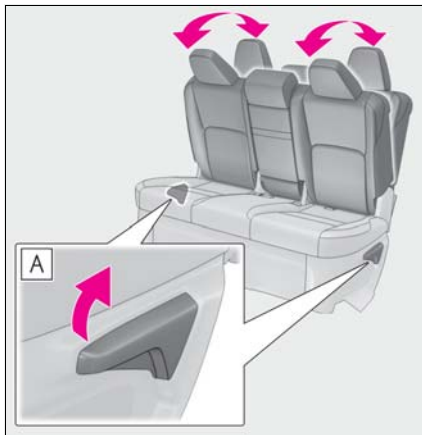
To reduce the risk of sliding under the lap belt during a collision, do not recline the seat more than necessary. If the seat is too reclined, the lap belt may slide past the hips and apply restraint forces directly to the abdomen, or your neck may contact the shoulder belt, increasing the risk of death 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.

Rear seats

Reclining adjustments and folding the seat backs can be done with either lever or switch operations.

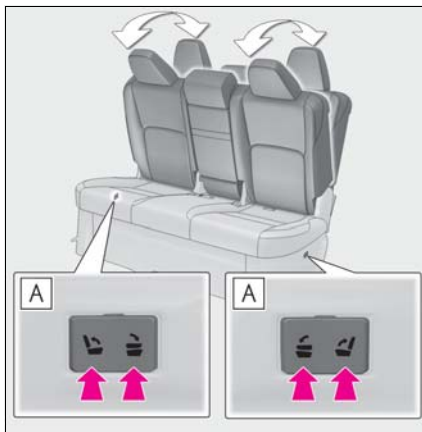
Adjustment procedure

► Manual seat



A Reclining adjustment

► Power seat

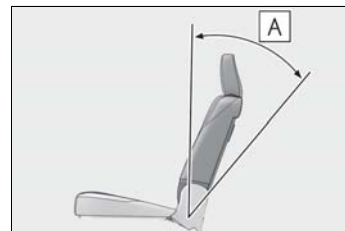


A Reclining adjustment

■ Operating conditions for reclining adjustment (power seat)

When the following conditions are met, switch operations are possible.

- When the seatback position is within the **A** range in the following illustration from the upright position.



- When the other operation switches for the seat being operated are not pressed.

■ Reclining adjustment (power seat)

Stop the seatback partway. To set the seatback to the rearmost position, press the button again.



■ Power seat operations (if equipped)

If the seat has a cover or seat cushion, it may not operate properly. Also, when folding down the seat, check that there is nothing on the rear seat that would interfere with the operation.

⚠ WARNING

■ When operating the seatback

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

- Keep other passengers from being hit with the seatback.

3

Before driving

⚠ WARNING

- Do not bring your hands close to the moving parts or between the seats, as well as do not let any part of your body get caught.
- Vehicles with power seat: Do not let children operate the seatback as other passengers may get caught in seat.
- Vehicles with power seat: Check that there are no passengers sitting in the seat before folding that seat forward. Also, do not let other passengers sit in the seat while the seat is forward folding.

■ Seat adjustment

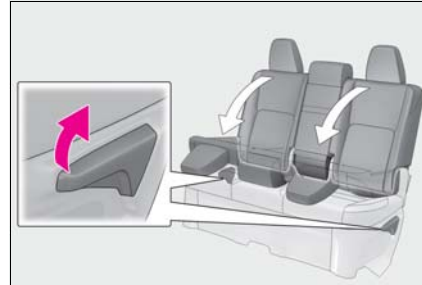
To reduce the risk of sliding under the lap belt during a collision, do not recline the seat more than necessary. If the seat is too reclined, the lap belt may slide past the hips and apply restraint forces directly to the abdomen, or your neck may contact the shoulder belt, increasing the risk of death 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.

Folding down the rear seatbacks**■ Before folding down the rear seatbacks**

- 1 Stow the rear center seat belt, seat belt buckles and armrest. (→P.29)
- 2 Lower the head restraint of the rear seat. (→P.129)

■ Folding down rear seatbacks (manual seat)

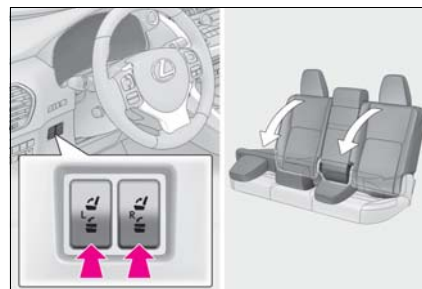
Pull the seatback angle adjustment lever and fold down the seatback.

**■ Folding down rear seatbacks (power seat)**

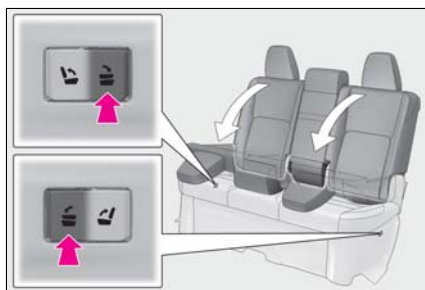
Press and hold the switch to fold down the seatback.

The buzzer sounds and operations start. The buzzer sounds again when the operation is complete.

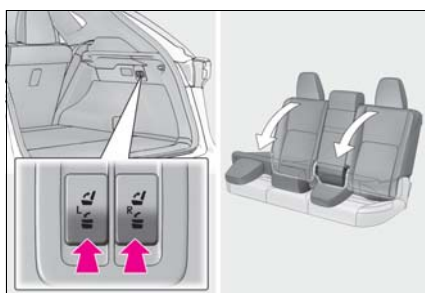
To stop the operation of a seat partway, press either seat operation switch for that seat, once more. Switches for that seat in other locations can be used to stop the operations. (buzzer sounds depending on stopping position of the seatback)

► Instrument panel switch**► Rear seat switch**

When the seatback is collapsed to the rear, put the seatback in the most upright position and press the switch once again.



► Luggage room switch



■ Returning the rear seatbacks (manual seat)

- 1 Raise the rear seatback until it locks.



- 2 Check that the plate for the seat belt is on the front side of the seat.

When using the seat belt for the rear cen-

ter seat (→P.28)



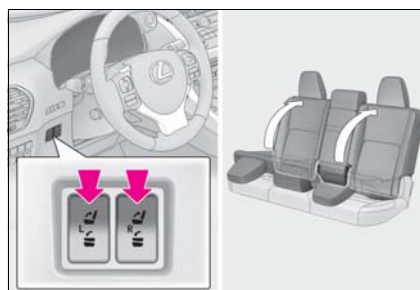
■ Returning the rear seatbacks (power seat)

- 1 Press and hold the switch to return the seatback.

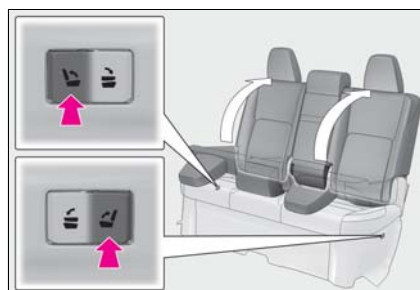
The buzzer sounds and operations start. The buzzer sounds again when the operation is complete.

To stop the operation of a seat partway, press either seat operation switch for that seat, once more. Switches for that seat in other locations can be used to stop the operations. (buzzer sounds depending on stopping position of the seatback)

- Instrument panel switch



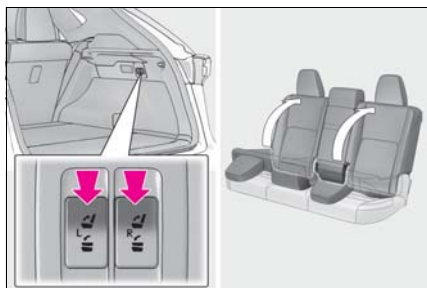
- Rear seat switch



3

Before driving

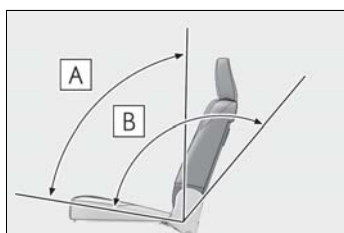
► Luggage room switch

**2** Check that the plate for the seat belt is on the front side of the seat.

When using the seat belt for the rear center seat (→P.28)

**■ Operating conditions for folding down the seatback (power seat)**

When the following conditions are met, switch operations are possible.



- When operating the rear seat switch: The seatback position is within the **A** range in the illustration from the most upright position.
- When operating the instrument panel switch or luggage compartment switch: The seatback position is within the **B**

range in the illustration.

- When operating the rear seat switch: When the rear door for the seat to be operated is open.
- When operating the luggage compartment switch: When the back door is open.
- When the other operation switches for the seat being operated are not pressed.

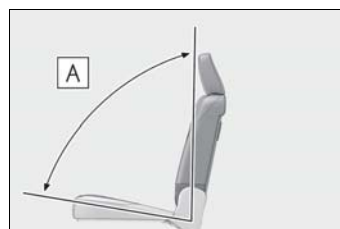
When the engine switch is in IGNITION ON mode, in addition to the above, the power seat operates for any of the following conditions:

- Parking brake is engaged
- The brake pedal is depressed
- The shift lever is in P

■ Operating conditions for returning the seatback (power seat)

When the following conditions are met, switch operations are possible.

- When operating the rear seat switch: The seatback position is within the **A** range in the illustration from the most upright position.



- When operating the rear seat switch: When the rear door for the seat to be operated is open.
- When operating the luggage compartment switch: When the back door is open.
- When the other operation switches for the seat being operated are not pressed.

When the engine switch is in IGNITION ON mode, in addition to the above, the power seat operates for any of the following conditions:

- Parking brake is engaged

- The brake pedal is depressed
- The shift lever is in P

■ Seatback jam protection function (power seat)

When folding down the seatback, if a foreign object is perceived between the seatback and seat cushion, the seatback will reverse operations and then stops operations.

The buzzer sounds intermittently during reverse operations and sounds continuously when operations are stopped.



WARNING

■ When folding the rear seatbacks down and after folded

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

- Do not fold the seatbacks down while driving.
- Stop the vehicle on level ground, set the parking brake and shift the shift lever to P.
- Do not allow anyone to sit on a folded seatback or in the luggage compartment while driving.
- Do not allow children to enter the luggage compartment.

■ After returning the rear seatback to the upright position

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

- Make sure that the seatback is securely locked in position by lightly pushing it back and forth.
- Check that the seat belts are not twisted or caught in the seatback.

■ Jam protection function (vehicles with power seat)

Observe the following precautions. Failure to do so may cause death or 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 seatback is fully folded forward. Be careful not to get fingers caught or anything else.
- 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

■ Stowing the seat belts

The seat belts and the buckles for the rear center seat, as well as the armrest, must be stowed before you fold down the rear seatbacks. (→P.29)

Driving position memory*

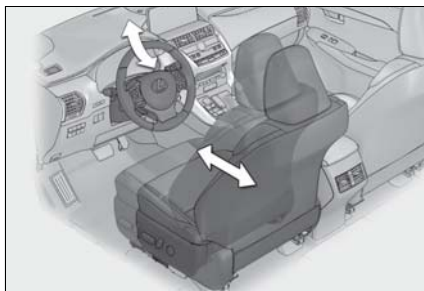
*: If equipped

This feature automatically adjusts the front seats, steering wheel and outside rear view mirrors to make entering and exiting the vehicle easier or to suit your preferences.

Three different driving positions can be recorded into memory.

Each electronic key (including a card key) can be registered to recall your preferred driving position.

Enabling easier driver entry and exit (Power easy access system)



When all of the following have been performed, the driver's seat and steering wheel are automatically adjusted to a position that allows driver to enter and exit the vehicle easily.

- The shift lever has been shifted to P.
- The engine switch has been turned off.
- The driver's seat belt has been unfastened.

When any of the following has been performed, the driver's seat and steer-

ing 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.

■ Operation of the power easy access system

When exiting the vehicle, the power easy access system may not operate if the seat is already close to the rearmost position, etc.

■ Customization

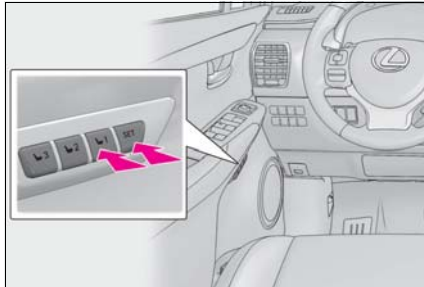
The seat movement amount settings of the power easy access system can be customized. (Customizable features: →P.425)

Recording a driving position into memory

- 1 Check that the shift lever is in P.
- 2 Turn the engine switch to IGNITION ON mode.
- 3 Adjust the driver's seat, steering wheel and outside rear view mirrors 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.



■ Seat positions that can be memorized (→P.120)

The adjusted positions other than the position adjusted by lumbar support switch can be recorded.

■ 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

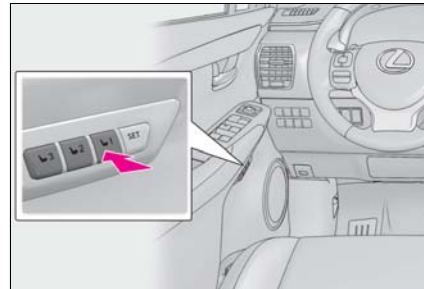
■ Seat adjustment caution

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 Check that the shift lever is in P.
- 2 Turn the engine switch to IGNITION ON mode.

- 3 Press one of the buttons for the driving position you want to recall until the buzzer sounds.



■ To stop the position recall operation part-way through

Perform any of the following:

- Press the "SET" button.
- Press button "1", "2" or "3".
- 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).

■ Operating the driving position memory after turning the engine switch off

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.

Registering/canceling/recall a driving position to an electronic 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

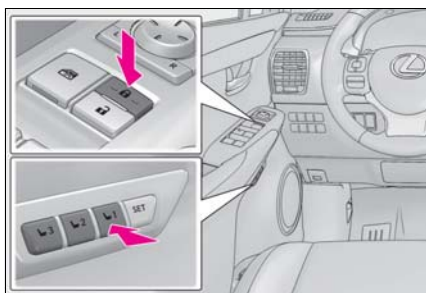
3

Before driving

driving position cannot be recorded properly.

- 1 Check that the shift lever is in P.
- 2 Turn the engine switch to IGNITION ON mode.
- 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 driving position could not be registered, the buzzer sounds continuously for approximately 3 seconds.



■ Cancellation procedure

- 1 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.

- 2 Turn the engine switch to IGNITION ON mode.
- 3 While pressing the "SET" button, press and hold the door lock switch (either lock or unlock) until the buzzer sounds twice.

If it 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 access system with push-button start or wireless remote control.

The driving position will move to the recorded position (not including the steering wheel). 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 and steering wheel 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 access system with push-button start, the driving position cannot be recalled. In this case, press the driving position button which has been set.

■ Customization

The unlock door settings of the memory recall function can be customized. (Customizable features: →P.425)

Head restraints

Head restraints are provided for all seats.

⚠ WARNING

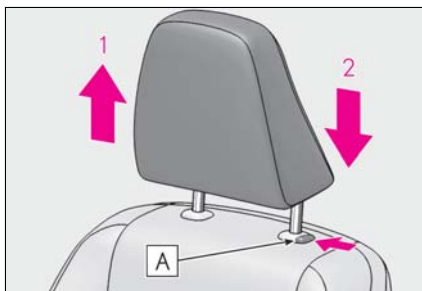
■ Head restraint precautions

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.
- 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.

Vertical adjustment

■ Front seats



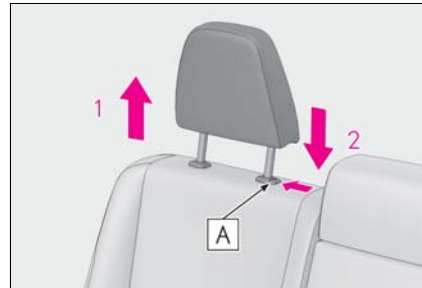
1 Up

Pull the head restraints up.

2 Down

Push the head restraint down while pressing the lock release button **A**.

■ Rear seats



1 Up

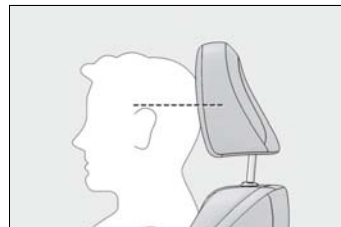
Pull the head restraints up.

2 Down

Push the head restraint down while pressing the lock release button **A**.

■ 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 center rear seat head restraint

Always raise the head restraint one level from the stowed position when using.

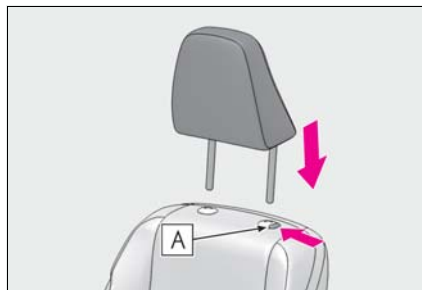
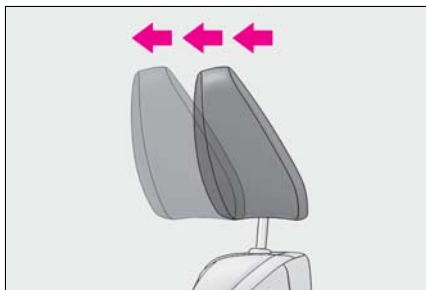
Horizontal adjustment (if equipped)

The position of the front 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.

3

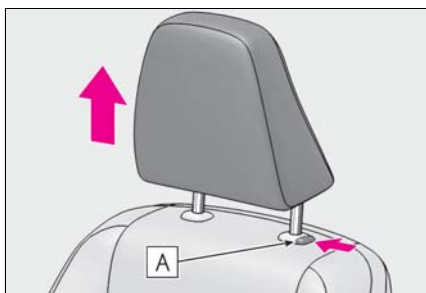
Before driving



Removing the head restraints

Pull the head restraint up while pressing the lock release button **A**.

If the head restraint touches the ceiling, making the removal difficult, change the seat height or angle. (→P.120, 121)



Installing the head restraints

Align the head restraint with the installation holes and push it down to the lock position.

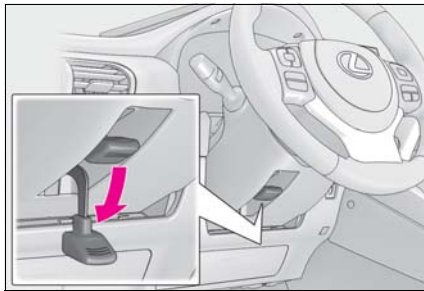
Press and hold the lock release button **A** when lowering the head restraint.

Steering wheel

Adjustment procedure

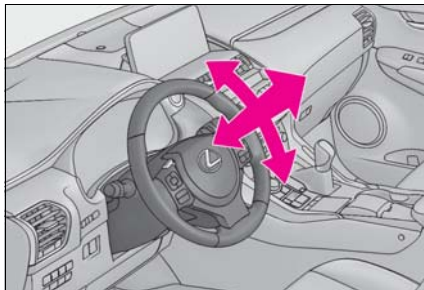
► Manual type

- 1 Hold the steering wheel and push the lever down.



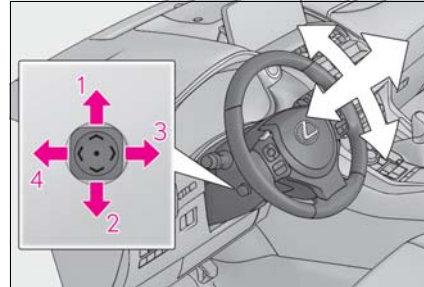
- 2 Adjust to the ideal position by moving the steering wheel horizontally and vertically.

After adjustment, pull the lever up to secure the steering wheel.



► Power type

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 (power type)

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 (if equipped)

A desired steering position can be entered to memory and recalled automatically by the driving position memory system. (→P.126)

■ Power easy access system (if equipped)

The steering wheel and driver's seat move in accordance with engine switch mode and the driver's seat belt condition. (→P.126)

■ After adjusting the steering wheel (manual type)

Make sure that the steering wheel is securely locked.

The horn may not sound if the steering wheel is not securely locked.

! WARNING**■ Caution while driving**

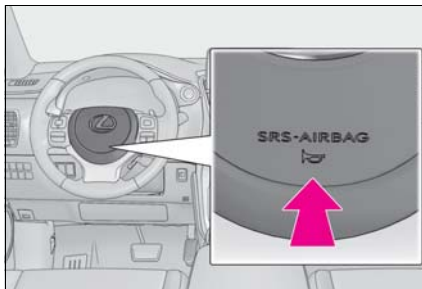
Do not adjust the steering wheel while driving.
Doing so may cause the driver to mishandle the vehicle and cause an accident, resulting in death or serious injury.

■ After adjusting the steering wheel (manual type)

Make sure that the steering wheel is securely locked.
Otherwise, the steering wheel may move suddenly, possibly causing an accident, resulting in death or serious injury.

Sounding the horn

To sound the horn, press on or close to the  mark.

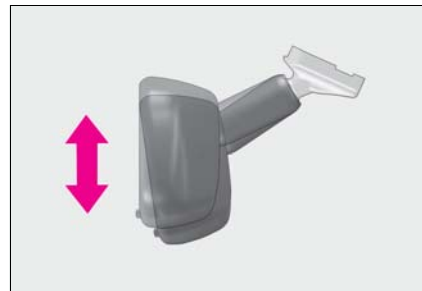
**Inside rear view mirror**

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.

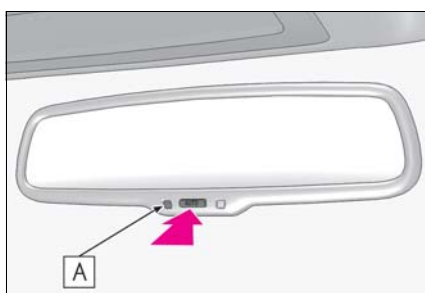
► Type A

Changing 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.)



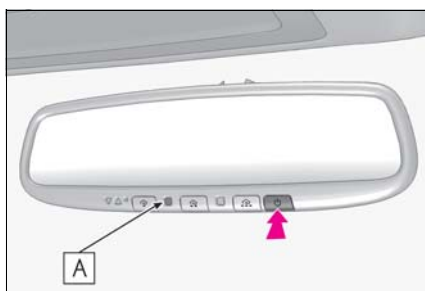
► Type B

Changing 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.)



do not touch or cover them.

► Type A



► Type B



3

Before driving

■ To prevent sensor error

To ensure that the sensors operate properly,

Outside rear view mirrors

For safe driving, adjust the mirror angles to secure visibility before driving.

⚠ WARNING

■ When driving the vehicle

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.

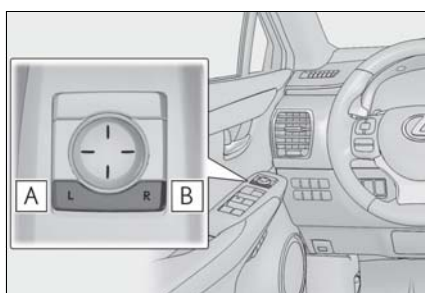
- Do not adjust the mirrors while driving.
- Do not drive with the mirrors folded.
- Both the driver and passenger side mirrors must be extended and properly adjusted before driving.

■ When the mirror defoggers are operating

Do not touch the rear view mirror surfaces, as they can become very hot and burn you.

Adjustment procedure

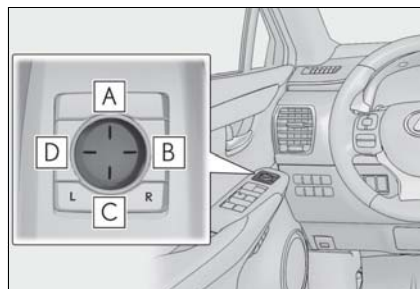
- 1 To select a mirror to adjust, press the switch.



A Left

B Right

- 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.

■ When using in cold weather

Vehicles with driving position memory: When used in cold weather during reverse driving, the door mirror could be frozen and may not automatically point the mirror surface downward. In this event, remove any ice and snow from the mirror surface.

■ 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.278)

■ 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.132)

■ Automatic adjustment of the mirror angle (vehicles with driving position memory)

A desired mirror face angle can be entered to memory and recalled automatically by

the driving position memory. (→P.126)

■ Linked mirror function when reversing (vehicles with driving position memory)

When the mirror select switch is in the "L" or "R" position, 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, move the mirror select switch to the neutral position (between "L" or "R")

With the shift lever in R, adjust the mirror angle to a desired position to set the mirror angle used when the vehicle is reversing.

The adjusted angle will be memorized and the mirror will automatically tilt to the memorized angle whenever the shift lever 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 lever 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.

When used in cold weather, the door mirror could be frozen and may not automatically point the mirror surface downward. In this event, remove any ice and snow from the mirror surface.

Putting the outside rear view mirror folding switch in the neutral position sets the mirrors to automatic mode. Automatic mode allows the folding or extending of the mirrors to be linked to locking/unlocking of the doors.

■ When using 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 event, after removing any ice and snow from the door mirror, operate the mirror using manual mode or move it by hand.

■ Customization

The automatic mirror folding and extending operation can be changed. (Customizable features: →P.425)



WARNING

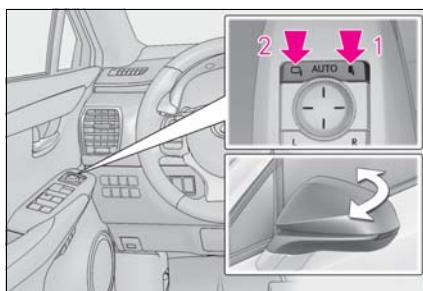
■ When a mirror is moving

To avoid personal injury and mirror malfunction, be careful not to get your hand caught by the moving mirror.

3

Before driving

Folding and extending the mirrors

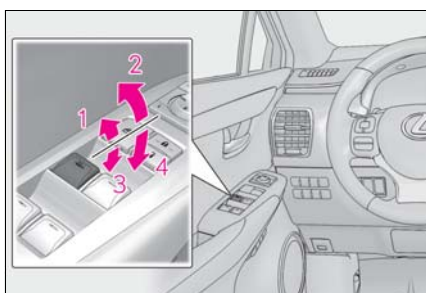


- 1 Folds the mirrors
- 2 Extends the mirrors

Power windows

Opening and closing the power windows

The power windows can be opened and closed by a one-touch operation of the switches.



- 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.

■ 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 window cannot be opened or closed

When the jam protection function or catch protection function operates unusually and the door 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 door window can be opened and closed.
- If the door 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 door 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.
 - 4** Press and hold the power window switch in the one-touch opening direction. After the door 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 door 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.396)
- The power windows can be opened using the wireless remote control. * (→P.98)

* : These settings must be customized at your Lexus dealer.

■ Power windows open warning buzzer

The 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

Setting (e.g. linked door lock operation) can be changed.
(Customizable features: →P.425)



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.137)
- 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 or mechanical key and operating the power windows, 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 window by the 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.
- 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.

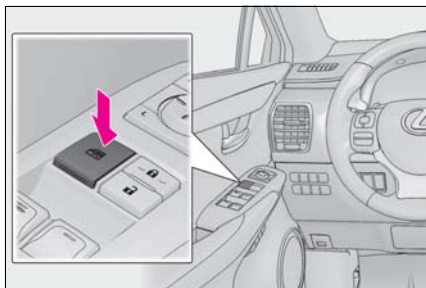
■ Catch protection function

- 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 is designed to prevent children from accidentally opening or closing a passenger window.

Press the switch down to lock the passenger window.



Moon roof*

*: If equipped

For comfortable cabin experience, the ceiling (moon roof) can be opened or tilted up.

⚠ WARNING

■ Opening the moon roof

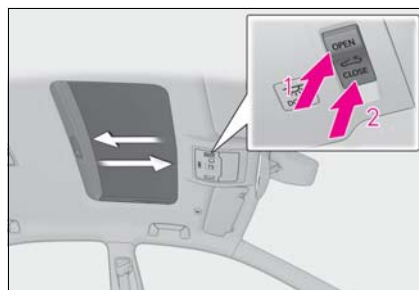
Observe the following precautions.

Failure to do so may cause death or serious injury.

- 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.

Operation instructions

■ Opening and closing



1 Open

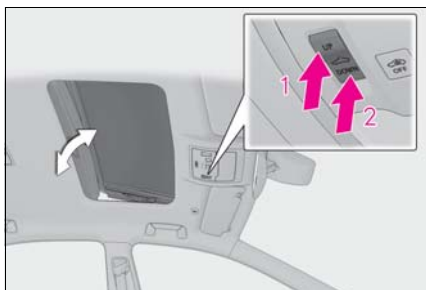
Press and hold the "OPEN" switch. The moon roof tilts up and then fully opens automatically.*

2 Close

Press and hold the "CLOSE" switch. The moon roof fully closes automatically.*

*: Lightly press either end of the moon roof open/close switch to stop the moon roof while it is operating.

■ Tilting up and down



1 Tilt up

Press and hold the "UP" switch. It automatically opens until the tilt up stop position.*

2 Tilt down

Press and hold the "DOWN" switch. The moon roof full close automatically.*

*: Lightly press either end of the moon roof switch to stop the moon roof while it is operating.

■ The moon roof can be operated when

The engine switch is in IGNITION ON mode.

■ 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.

■ When the moon roof does not close normally

Perform the following procedure:

- If the moon roof closes but then re-opens slightly

1 Stop the vehicle.

2 Press and hold the "CLOSE" switch.*¹

The moon roof will close, reopen and pause for approximately 10 seconds.*²

Then it will close again and tilt down. Finally it will stop.

3 Check to make sure that the moon roof completely stops and then release the switch.

- If the moon roof tilts down but then tilts back up

1 Stop the vehicle.

2 Press and hold the "DOWN" switch.*¹

The moon roof will close, reopen and pause for approximately 10 seconds in the tilt up position.*² Then it will close again. Finally it will stop.

3 Check to make sure that the moon roof has completely stopped and then release the switch.

*¹: If the switch is released at the incorrect time, the procedure will have to be performed again from the beginning.

*²: If the switch is released after the above mentioned 10 second pause, automatic operation will be disabled. In that case, perform the moon roof initialization by referring to "When tilt up/down or moon roof opening and closing can be done but automatic full opening and closing cannot be done" on P.139.

If the moon roof does not fully close even after performing the above procedure correctly, have the vehicle inspected by your Lexus dealer.

■ When the moon roof does not move normally

When the opening and closing operation or automatic opening function of the moon roof does not move normally, perform the following initialization procedures.

1 Turn the engine switch to IGNITION ON mode.

2 Operate the moon roof.

The initialization method changes depending on the contents that can be operated.

- If only the tilt up operations can be done when the moon roof is closed

3 Press and hold the "DOWN" or "CLOSE" switch.

3

Before driving

Open until the tilt up stop position. After that the moon roof opens and completely closes.

After that tilt up once again and stop at the completely closed position.

- 4 Confirm that moon roof has completely stopped and release the switch.

- If the moon roof can only be closed when the moon roof is partially opened

- 3 Press and hold the "DOWN" or "CLOSE" switch.

Fully close the moon roof, tilt up and open it close to the fully open position. After that, fully close the moon roof and tilt up once again, then stop the moon roof in the fully closed position.

- 4 Confirm that moon roof has completely stopped and release the switch.

- When tilt up/down or moon roof opening and closing can be done but automatic full opening and closing cannot be done

- 3 Press the "OPEN" switch and fully open.

- 4 Press the "CLOSE" switch and fully close.

- 5 Press the "UP" switch and tilt up until the tilt up stop position.

- 6 Press the "DOWN" switch and tilt down.

If the switch is released before any step is completed, the procedure will have to be performed again from the beginning.

If the opening and closing operations or automatic opening function does not move as normal, even after performing the above mentioned operations, have the vehicle inspected by your Lexus dealer.

■ Moon roof open warning buzzer

The 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.

■ Door lock linked moon roof operation

- The moon roof can be opened and closed using the mechanical key.* (→P.396)
- The moon roof can be opened using the

wireless remote control.* (→P.98)

*: These settings must be customized at your Lexus dealer.



WARNING

Observe the following precautions.

Failure to do so may cause death or serious injury.

■ 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 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 mechanical key. It is possible for children and other passengers to get caught in the 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 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.

3

Before driving

- 4-1. Before driving**
- Driving the vehicle **144**
 - Cargo and luggage **150**
 - Vehicle load limits **152**
 - Trailer towing (vehicles with towing package) **153**
 - Trailer towing (vehicles without towing package) **161**
 - Dinghy towing **162**
- 4-2. Driving procedures**
- Engine (ignition) switch **163**
 - Automatic transmission **167**
 - Turn signal lever **171**
 - Parking brake **171**
 - Brake Hold **174**
 - ASC (Active Sound Control) **176**
- 4-3. Operating the lights and wipers**
- Headlight switch **177**
 - Automatic High Beam **180**
 - Fog light switch **183**
 - Windshield wipers and washer **183**
 - Rear window wiper and washer **188**
- 4-4. Refueling**
- Opening the fuel tank cap **190**
- 4-5. Using the driving support systems**
- Lexus Safety System + 2.0 **192**
 - PCS (Pre-Collision System) . **198**
 - LTA (Lane Tracing Assist) **205**
 - LDA (Lane Departure Alert with steering control) **214**
 - RSA (Road Sign Assist) **222**
 - Dynamic radar cruise control with full-speed range **224**
 - PKSA (Parking Support Alert) **234**
 - Intuitive parking assist **235**
 - Parking Support Brake function (for static objects) **240**
 - BSM (Blind Spot Monitor) **249**
 - Driving mode select switch .. **257**
 - Driving assist systems **259**
 - All-wheel drive lock switch (AWD models) **264**
- 4-6. Driving tips**
- Winter driving tips **265**
 - Utility vehicle precautions **268**

Driving the vehicle

The specified procedures should be observed to ensure safe driving:

Driving procedure

■ Starting the engine

→P.163

■ Driving

- 1 With the brake pedal depressed, shift the shift lever to D. (→P.167)
- 2 Release the parking brake. (→P.172)

If the parking brake is in automatic mode, the parking brake is released automatically when shifting the shift lever to any position other than P. (→P.171)

- 3 Gradually release the brake pedal and gently depress the accelerator pedal to accelerate the vehicle.

■ Stopping

- 1 With the shift lever in D, depress the brake pedal.
- 2 If necessary, set the parking brake. (→P.172)

If the vehicle is to be stopped for an extended period of time, shift the shift lever to P or N. (→P.167)

■ Parking the vehicle

- 1 With the shift lever in D, depress the brake pedal.
- 2 Set the parking brake (→P.172), and shift the shift lever to P (→P.167).
- 3 Press the engine switch to stop the engine.

- 4 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 an uphill

- 1 With the brake pedal depressed, shift the shift lever to D. (→P.167)
- 2 Pull the parking brake switch and parking brake is set manually. (→P.172)
- 3 Release the brake pedal and gently depress the accelerator pedal to accelerate the vehicle.
- 4 Press the parking brake switch and parking brake is released manually. (→P.172)

■ When starting off on an uphill

The hill-start assist control will activate. (→P.260)

■ 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 while Sport mode is selected

■ 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 and head-up display (if equipped) 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 lever 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 and head-up display (if equipped). If a warning message is shown on the multi-information display and head-up display (if equipped), read the message and follow the instructions.
 - When the accelerator pedal is depressed too much while the vehicle is in reverse.
- While Drive-Start Control is being activated, your vehicle may have trouble escaping from the mud or fresh snow. In such case, deactivate TRAC (→P.260) 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 200 miles (300 km):
Avoid sudden stops.
- For the first 1000 miles (1600 km):
 - 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.

- For the first 500 miles (800 km):
Do not tow a trailer. (vehicles with towing package)

■ Operating your vehicle in a foreign country

Comply with the relevant vehicle registration laws and confirm the availability of the correct fuel. (→P.414)

■ Idling time before engine stop

To prevent damage to the turbocharger, allow the engine to idle immediately after high-load driving.

Driving condition	Idling time
Normal city driving or high-speed driving (at the highway speed limit or recommended speed)	Not necessary
Steep hill driving, continuous driving (race track driving, etc.), or towing a trailer or another vehicle (vehicles with towing package)	Approximately 1 minute

■ Eco-friendly driving

→P.76



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 engine running. This prevents the vehicle from creeping.

**WARNING****■ 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 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.
- 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.
In the event of an emergency, such as if it becomes impossible to stop the vehicle in the normal way: →P.364
- 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.167)

- 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.

- Do not drive across a river or through other bodies of water. This may cause electric/electronic components to short circuit, damage the engine or cause other serious damage to the vehicle.

- Do not drive in excess of the speed limit. Even if the legal speed limit permits it, do not drive over 85 mph (140 km/h) unless your vehicle has high-speed capability tires.
Driving over 85 mph (140 km/h) may result in tire failure, loss of control and possible injury. Be sure to consult a tire dealer to determine whether the tires on your vehicle are high-speed capability tires or not before driving at such speeds.

■ 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.

**WARNING**

■ **When shifting the shift lever**

- Do not let the vehicle roll backward while the shift lever is in a driving position, or roll forward while the shift lever 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 lever 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 lever 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 lever 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.
- Shifting the shift lever to N while the vehicle is moving will disengage the engine.
Engine braking is not available when N is selected.
- Be careful not to shift the shift lever with the accelerator pedal depressed.
Shifting the shift lever to any position 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.

■ **If you hear a squealing or scraping noise (brake pad wear limit indicators)**

Have the brake pads checked and replaced by your Lexus dealer as soon as possible. Rotor damage may result if the pads are not replaced when needed. 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 shift lever is in any position 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.

**WARNING****■ 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 lever 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 lever 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.

■ 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.
- 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.
- 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.
- 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.

■ If the vehicle becomes stuck (AWD models)

Do not spin the wheels excessively when any of the tires 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.

■ **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.
- Make sure to idle the engine immediately after high-speed driving or hill climbing. 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.385)

■ **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 vehicles), rear differential (AWD vehicles), etc.
- Lubricant condition for the propeller shaft (AWD models), bearings and suspension joints (where possible), and the function of all joints, bearings, etc.

■ **When parking the vehicle**

Always set the parking brake, and shift the shift lever 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 luggage compartment

The following things may cause a fire if loaded in the luggage compartment:

- 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 luggage compartment whenever possible.
- Do not stack cargo and luggage in the luggage compartment higher than the seatbacks.
- When you fold down the rear seats, long items should not be placed directly behind the front seats.
- Never allow anyone to ride in the luggage compartment. It is not designed for passengers. They should ride in their seats with their seat belts properly fastened.
- 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 luggage cover
 - On the instrument panel
 - On the dashboard

- Secure all items in the occupant compartment.

■ When using a roof luggage carrier (vehicles with roof rails)

Observe the following precautions:

- Place the cargo so that its weight is distributed evenly between the front and rear axles.
- If loading long or wide cargo, never exceed the vehicle overall length or width. (→P.406)
- Before driving, make sure the cargo is securely fastened on the roof luggage carrier.
- Loading cargo on the roof luggage carrier will make the center of gravity of the vehicle higher. Avoid high speeds, sudden starts, sharp turns, sudden braking or abrupt maneuvers, otherwise it may result in loss of control or vehicle rollover due to failure to operate this vehicle correctly and result in death or serious injury.
- If driving for a long distance, on rough roads, or at high speeds, stop the vehicle now and then during the trip to make sure the cargo remains in its place.
- Do not exceed 176.3 lb. (80 kg) cargo weight on the roof luggage carrier.

NOTICE

■ When loading cargo (vehicles with moon roof)

Do not set luggage on the moon roof. Failure to observe so may lead to cause damage.

Capacity and distribution

Cargo capacity depends on the total weight of the occupants.

(Cargo capacity) = (Total load capac-

ity) – (Total weight of occupants)
Steps for Determining Correct Load Limit—

(1) Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.

(2) Determine the combined weight of the driver and passengers that will be riding in your vehicle.

(3) Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.

(4) The resulting figure equals the available amount of cargo and luggage load capacity.

For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. ($1400 - 750 (5 \times 150) = 650$ lbs.)

(5) Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

(6) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle. (→P.152)

Vehicles without towing package: Lexus does not recommend towing a trailer with your vehicle. Your vehicle is not designed

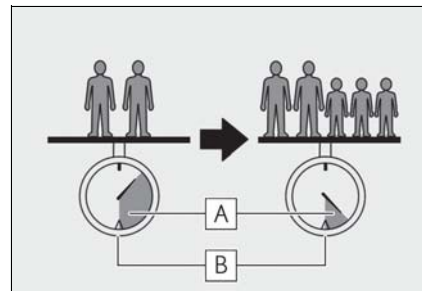
for trailer towing.

⚠ WARNING

■ Capacity and distribution

- Do not exceed the maximum axle weight rating or the total vehicle weight rating.
- Even if the total load of occupant's weight and the cargo load is less than the total load capacity, do not apply the load unevenly. Improper loading may cause deterioration of steering or braking control which may cause death or serious injury.

Calculation formula for your vehicle



A Cargo capacity

B Total load capacity (vehicle capacity weight) (→P.406)

When 2 people with the combined weight of A lb. (kg) are riding in your vehicle, which has a total load capacity (vehicle capacity weight) of B lb. (kg), the available amount of cargo and luggage load capacity will be C lb. (kg) as follows:

$$B^{*2} \text{ lb. (kg)} - A^{*1} \text{ lb. (kg)} = C^{*3} \text{ lb. (kg)}$$

*1: A = Weight of people

*2: B = Total load capacity

*3: C = Available cargo and luggage load

In this condition, if 3 more passengers with the combined weight of D lb. (kg) get on, the available cargo and luggage load will be reduced E lb. (kg) as follows:

$$C \text{ lb. (kg)} - D^{*4} \text{ lb. (kg)} = E^{*5} \text{ lb. (kg)}$$

*4: D = Additional weight of people

*5: E = Available cargo and luggage load

As shown in the example above, if the number of occupants increases, the cargo and luggage load will be reduced by an amount that equals the increased weight due to the additional occupants. In other words, if an increase in the number of occupants causes an excess of the total load capacity (combined weight of occupants plus cargo and luggage load), you must reduce the cargo and luggage on your vehicle.

Vehicle load limits

Vehicle load limits include total load capacity, seating capacity, towing capacity and cargo capacity.

Description

- **Total load capacity (vehicle capacity weight):**
→P.406

Total load capacity means the combined weight of occupants, cargo and luggage.

- **Seating capacity:**
→P.406

Seating capacity means the maximum number of occupants whose estimated average weight is 150 lb. (68 kg) per person.

- **TWR (Trailer Weight Rating) (vehicles with towing package):**
→P.158, 406

TWR means the maximum gross trailer weight (trailer weight plus its cargo weight) that your vehicle is able to tow.

- **TWR (Trailer Weight Rating) (vehicles without towing package)**

Lexus does not recommend towing a trailer with your vehicle.

- **Cargo capacity**

Cargo capacity may increase or decrease depending on the weight and the number of occupants.

■ Total load capacity and seating capacity

These details are also described on the tire and loading information label. (→P.349)



WARNING

■ Overloading the vehicle

Do not overload the vehicle. It may not only cause damage to the tires, but also degrade steering and braking ability, resulting in an accident.

Trailer towing (vehicles with towing package)

Your vehicle is designed primarily as a passenger-and-load-carrying vehicle. Towing a trailer can have an adverse impact on handling, performance, braking, durability, and fuel consumption. For your safety and the safety of others, you must not overload your vehicle or trailer. You must also ensure that you are using appropriate towing equipment, that the towing equipment has been installed correctly and used properly, and that you employ the requisite driving habits.

Vehicle-trailer stability and braking performance are affected by trailer stability, brake performance and setting, trailer brakes, the hitch and hitch systems (if equipped).

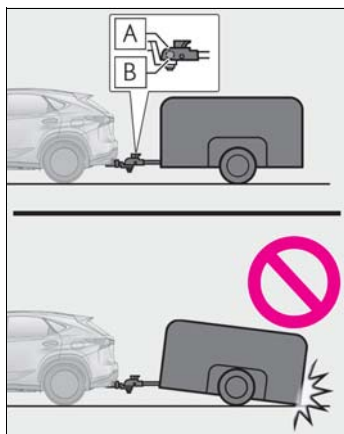
To tow a trailer safely, use extreme care and drive the vehicle in accordance with your trailer's characteristics and operating conditions.

Lexus warranties do not apply to damage or malfunction caused by towing a trailer for commercial purposes.

Contact your Lexus dealer for further information about additional requirements such as a towing kit, etc.

■ Matching trailer ball height to trailer coupler height

No matter which class of tow hitch applies, for a more safe trailer hookup, the trailer ball setup must be the proper height for the coupler on the trailer.



A Coupler

B Trailer ball

■ Before towing

Check that the following conditions are met:

- Ensure that your vehicle's tires are properly inflated. (→P.411)
- Trailer tires are inflated according to the trailer manufacturer's recommendation.
- All trailer lights work as required by law.
- All lights work each time you connect them.
- The trailer ball is set at the proper height for the coupler on the trailer.
- The trailer is level when it is hitched. Do not drive if the trailer is not level, and check for improper tongue weight, overloading, worn suspension, or other possible causes.
- The trailer cargo is securely loaded.
- The rear view mirrors conform to all applicable federal, state/provincial or local regulations. If they do not, install rear view mirrors appropriate for towing purposes.

■ AVS (Adaptive Variable Suspension System) (if equipped)

The suspension can be switched for improvement in driveability. (→P.260)

■ Break-in schedule

If your vehicle is new or equipped with any new power train components (such as an engine, transmission, differential or wheel bearing), Lexus recommends that you do not tow a trailer until the vehicle has been driven for over 500 miles (800 km). After the vehicle has been driven for over 500 miles (800 km), you can start towing. However, for the next 500 miles (800 km), drive the vehicle at a speed of less than 50 mph (80 km/h) when towing a trailer, and avoid full throttle acceleration.

■ Maintenance

- If you tow a trailer, your vehicle will require more frequent maintenance due to the additional load. (See "Warranty and Services Guide", "Owner's Manual Supplement" or "Scheduled Maintenance".)
- Retighten the fixing bolts of the towing ball and bracket after approximately 600 miles (1000 km) of trailer towing.

■ If trailer sway occurs

One or more factors (crosswinds, passing vehicles, rough roads, etc.) can adversely affect handling of your vehicle and trailer, causing instability.

- If trailer swaying occurs:
 - Firmly grip the steering wheel. Steer straight ahead. Do not try to control trailer swaying by turning the steering wheel.
 - Begin releasing the accelerator pedal immediately but very gradually to reduce speed. Do not increase speed. Do not apply vehicle brakes.

If you make no extreme correction with the steering or brakes, your vehicle and trailer should stabilize.

- After the trailer swaying has stopped:
 - Stop in a safe place. Get all occupants out of the vehicle.
 - Check the tires of the vehicle and the trailer.
 - Check the load in the trailer. Make sure the load has not shifted. Make sure the tongue weight is appropriate, if possible.

- Check the load in the vehicle.
Make sure the vehicle is not overloaded after occupants get in.

If you cannot find any problems, the speed at which trailer swaying occurred is beyond the limit of your particular vehicle-trailer combination. Drive at a lower speed to prevent instability. Remember that swaying of the towing vehicle-trailer increases as speed increases.



WARNING

■ Trailer towing precautions

To tow a trailer safely, use extreme care and drive the vehicle in accordance with the trailer's characteristics and operating conditions. Failure to do so could cause an accident resulting in death or serious injury. Vehicle stability and braking performance are affected by trailer stability, brake setting and performance, and the hitch. Your vehicle will handle differently when towing a trailer.

■ To avoid accident or injury

- Do not exceed the TWR, unbraked TWR, GCWR, GVWR or GAWR.
- Adjust the tongue weight within the appropriate range. Place heavier loads as close to the trailer axle as possible.
- Do not exceed 65 mph (104 km/h), the posted towing speed limit or the speed limit for your trailer as set forth in your trailer owner's manual, whichever is lowest. Slow down sufficiently before making a turn, in cross winds, on wet or slippery surface, etc. to help avoid an accident. If you experience a vehicle-trailer instability from reducing a certain speed, slow down and make sure you keep your vehicle speed under the speed of which you experience the instability.
- Do not make jerky, abrupt or sharp turns.

- Do not apply the brakes suddenly as you may skid, resulting in jackknifing and loss of vehicle control. This is especially true on wet or slippery surfaces.

- Do not exceed the trailer hitch assembly weight, gross vehicle weight, gross axle weight and trailer tongue weight capacities.

- Do not use the dynamic radar cruise control system when trailer towing.

- Slow down and downshift before descending steep or long downhill grades. Do not make sudden downshifts while descending steep or long downhill grades.

- Vehicle-trailer instability is more likely on steep long downhills. Before descending steep or long downhill grades, slow down and downshift. Do not make sudden downshifts when descending steep or long downhill grades. Avoid holding the brake pedal down too long or applying the brakes too frequently. This could cause the brakes to overheat and result in reduced braking efficiency.

- Do not tow a trailer when the compact spare tire is installed on your vehicle.

■ When towing a trailer

Lexus recommends trailers with brakes that conform to any applicable federal and state/provincial regulations.

- If the gross trailer weight exceeds unbraked TWR, trailer brakes are required. Lexus recommends trailers with brakes that conform to all applicable federal and state/provincial regulations.
- Never tap into your vehicle's hydraulic system, as this will lower the vehicle's braking effectiveness.

**WARNING**

- Never tow a trailer without using a safety chain securely attached to both the trailer and the vehicle. If damage occurs to the coupling unit or hitch ball, there is danger of the trailer wandering into another lane.

**NOTICE**

■ **When installing a trailer hitch**

Use only the position recommended by your Lexus dealer. Do not install the trailer hitch on the bumper; this may cause body damage.

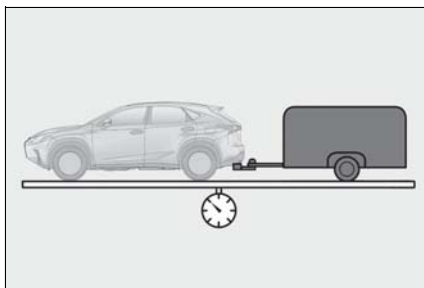
■ **Do not directly splice trailer lights**

Do not directly splice trailer lights. Directly splicing trailer lights may damage your vehicle's electrical system and cause a malfunction.

Towing related terms

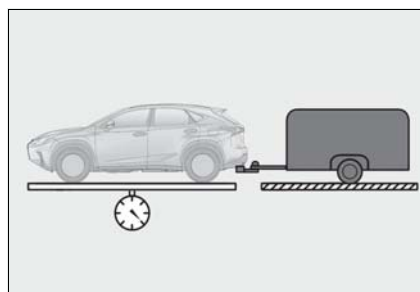
■ **GCWR (Gross Combination Weight Rating)**

The maximum allowable gross combination weight. The gross combination weight is the sum of the total vehicle weight (including the occupants, cargo and any optional equipment installed on the vehicle) and the weight of the trailer being towed (including the cargo in the trailer).



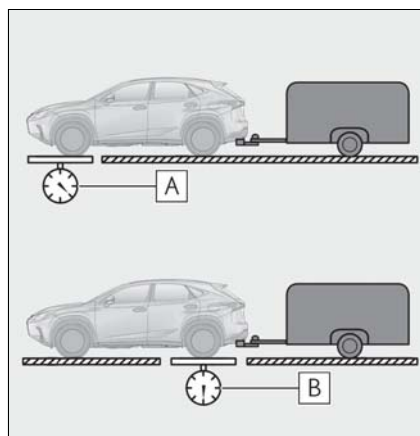
■ **GVWR (Gross Vehicle Weight Rating)**

The maximum allowable gross vehicle weight. The gross vehicle weight is the total weight of the vehicle. When towing a trailer, it is the sum of the vehicle weight (including the occupants, cargo and any optional equipment installed on the vehicle) and the tongue weight.



■ **GAWR (Gross Axle Weight Rating)**

The maximum allowable gross axle weight. The gross axle weight is the load placed on each axle (front and rear).



A Front GAWR

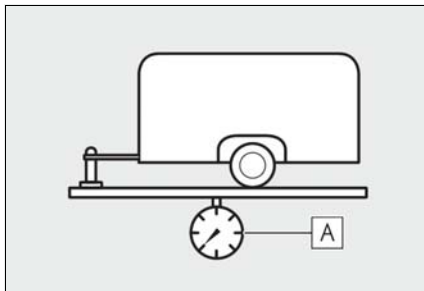
B Rear GAWR

■ TWR (Trailer Weight Rating)

The maximum allowable gross trailer weight. The gross trailer weight is the sum of the trailer weight and the weight of the cargo in the trailer.

TWR is calculated assuming base vehicle with one driver, one front passenger, towing package (if available), hitch and hitch systems (if required).

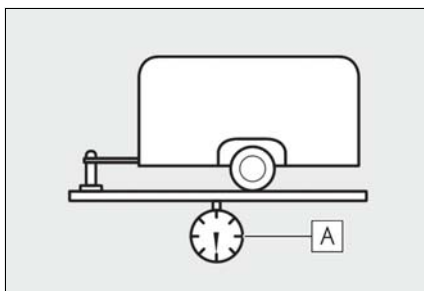
Additional optional equipment, passengers and cargo in the vehicle will reduce the trailer weight rating so as not to exceed GCWR, GVWR and GAWR.



A With brakes

■ Unbraked TWR (Unbraked Trailer Weight Rating)

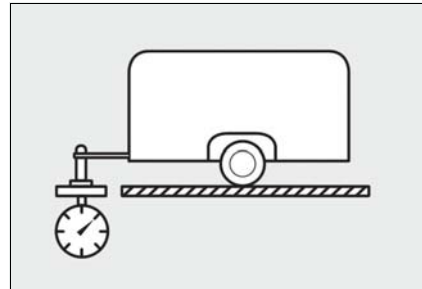
The trailer weight rating for towing a trailer without a trailer service brake system.



A Without brakes

■ Tongue Weight

The load placed on the trailer hitch ball. (→P.158)



Weight limits

- The gross trailer weight must never exceed 2000 lb. (910 kg).
- The gross combination weight must never exceed the following:
2WD models: 6306 lb. (2860 kg)
AWD models: 6416 lb. (2910 kg)



- The gross vehicle weight must never exceed the GVWR indicated on the Certification Label.
- The gross axle weight on each axle must never exceed the GAWR indicated on the Certification Label.
- If the gross trailer weight is over the unbraked TWR, trailer service brakes are required.

GCWR, TWR and Unbraked TWR

Confirm that the gross trailer weight, gross combination weight, gross vehicle weight, gross axle weight and tongue weight are all within the limits.

■ GCWR*

2WD models: 6306 lb. (2860 kg)

AWD models: 6416 lb. (2910 kg)

■ TWR*

2000 lb. (910 kg)

■ Unbraked TWR*

1000 lb. (450 kg)

*: These models meet the tow-vehicle trailering requirement of SAE International per SAE J2807.

Trailer Tongue Weight

- A recommended tongue weight varies in accordance with the types of trailers or towing as described below.
- To ensure the recommended values shown below, the trailer must be loaded by referring to the following instructions.

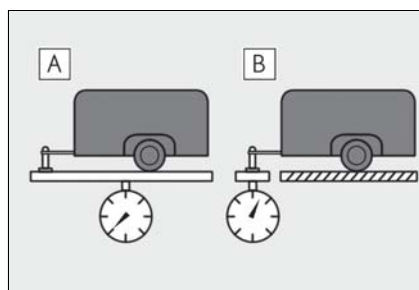
• Tongue Weight

The gross trailer weight should be distributed so that the tongue weight is 9% to 11%.

(Tongue weight / Gross trailer weight x 100 = 9% to 11%)

The gross trailer weight, gross axle weight and tongue weight can be measured with platform scales found at a highway weighing station, building supply company,

trucking company, junk yard, etc.



A Gross trailer weight

B Tongue weight

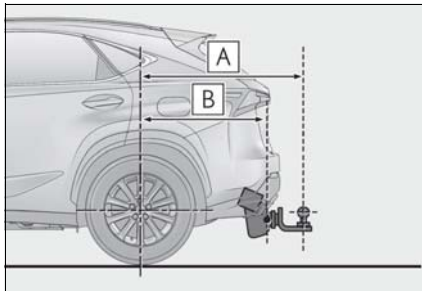
Hitch

Trailer hitch assemblies have different weight capacities. Lexus recommends the use of Lexus hitch/bracket for your vehicle. For details, contact your Lexus dealer.

- If you wish to install a trailer hitch, contact your Lexus dealer.
- Use only a hitch that conforms to the gross trailer weight requirement of your vehicle.
- Follow the directions supplied by the hitch manufacturer.
- Lubricate the hitch ball with a light coating of grease.
- Remove the hitch ball whenever you are not towing a trailer. Remove the trailer hitch if you do not need it. After removing the hitch, seal any mounting hole in the vehicle body to prevent entry of any substances into the vehicle.

**WARNING****Hitch**

Trailer hitch assemblies have different weight capacities established by the hitch manufacturer. Even though the vehicle may be physically capable of towing a higher weight, the operator must determine the maximum weight rating of the particular hitch assembly and never exceed the maximum weight rating specified for the trailer-hitch. Exceeding the maximum weight rating set by the trailer-hitch manufacturer can cause an accident resulting in death or serious personal injuries.

Positions for towing hitch receiver and hitch ball


- A** Weight carrying ball position:
42.1 in. (1069.9 mm)
- B** Hitch receiver pin hole position:
33.7 in. (855.6 mm)

Connecting trailer lights

Please consult your dealer when installing trailer lights, as incorrect installation may cause damage to the vehicle's lights. Please take care to comply with your state's laws when installing trailer lights.

Trailer towing tips

Your vehicle will handle differently when towing a trailer. Help to avoid an accident, death or serious injury, keep the following in mind when towing:

- Speed limits for towing a trailer vary by state or province. Do not exceed the posted towing speed limit.
- Lexus recommends that the vehicle-trailer speed limit is 65 mph (104 km/h) on a flat, straight, dry road. Do not exceed this limit, the posted towing speed limit or the speed limit for your trailer as set forth in your trailer owner's manual, whichever is lowest. Instability of the towing vehicle-trailer combination (trailer sway) increases as speed increases. Exceeding speed limits may cause loss of control.
- Before starting out, check the trailer lights, tires and the vehicle-trailer connections. Recheck after driving a short distance.
- Practice turning, stopping and reversing with the trailer attached in an area away from traffic until you become accustomed to the feel of the vehicle-trailer combination.
- Reversing with a trailer attached is difficult and requires practice. Grip the bottom of the steering wheel and move your hand to the left to move the trailer to the left. Move your hand to the right to move the trailer to right. (This is generally opposite to reversing without a trailer attached.) Avoid sharp or

prolonged turning. Have someone guide you when reversing to reduce the risk of an accident.

- As stopping distance is increased when towing a trailer, vehicle-to-vehicle distance should be increased. For each 10 mph (16 km/h) of speed, allow at least one vehicle and trailer length.
- Avoid sudden braking as you may skid, resulting in the trailer jackknifing and a loss of vehicle control. This is especially true on wet or slippery surfaces.
- Avoid jerky starts or sudden acceleration.
- Avoid jerky steering and sharp turns, and slow down before making turn.
- Note that when making a turn, the trailer wheels will be closer than the vehicle wheels to the inside of the turn. Compensate by making a wider than normal turning radius.
- Slow down before making a turn, in cross winds, on wet or slippery surfaces, etc.
Increasing vehicle speed can destabilize the trailer.
- Take care when passing other vehicles. Passing requires considerable distance. After passing a vehicle, do not forget the length of your trailer, and be sure you have plenty of room before changing lanes.
- To maintain engine braking efficiency and charging system performance when using engine braking, do not put the transmission in D. If in the M mode, the transmission shift range position must be in 4 or lower. (→P.167)
- Instability happens more frequently when descending steep or long downhill grades. Before descending, slow down and downshift. Do not make sudden downshifts while descending steep or long downhill grades.
- Avoid holding the brake pedal down too long or applying the brakes too frequently. This could cause the brakes to overheat and result in reduced braking efficiency.
- Due to the added load of the trailer, your vehicle's engine may overheat on hot days (at temperatures over 85°F [30°C]) when driving up a long or steep grade. If the engine coolant temperature gauge indicates overheating, immediately turn off the air conditioning (if in use), pull your vehicle off the road and stop in a safe spot. (→P.401)
- Always place wheel blocks under both the vehicle's and the trailer's wheels when parking. Put the transmission in P and apply the parking brake. Avoid parking on a slope, but if unavoidable, do so only after performing the following:
 - 1 Apply the brakes and keep them applied.
 - 2 Have someone place wheel blocks under both the vehicle's and trailer's wheels.

- 3 When the wheel blocks are in place, release the brakes slowly until the blocks absorb the load.
- 4 Shift into P and apply the parking brake.
- 5 Turn off the engine.
- When restarting after parking on a slope:
 - 1 With the transmission in P, start the engine. Be sure to keep the brake pedal depressed.
 - 2 Shift into a forward gear. If reversing, shift into R.
 - 3 If the parking brake is in manual mode, release the parking brake. (→P.172)
 - 4 Release the brake pedal, and slowly pull or back away from the wheel blocks. Stop and apply the brakes.
 - 5 Have someone retrieve the blocks.

Trailer towing (vehicles without towing package)

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.



4

Driving

Dinghy towing

Your vehicle is not designed to be dinghy towed (with 4 wheels on the ground) behind a motor home.

**NOTICE**

■ **To avoid serious damage to your vehicle**

Do not tow your vehicle with the four wheels on the ground.

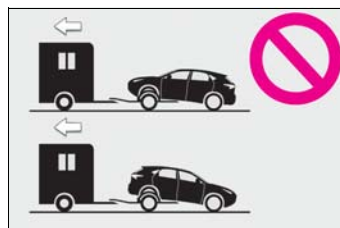
■ **To prevent causing serious damage to the transmission and Dynamic Torque Control AWD system (AWD models)**

2WD models: Never tow this vehicle from the rear with the front wheels on the ground.

This may cause serious damage to the transmission.



AWD models: Never tow this vehicle with any of the wheels on the ground. This may cause serious damage to the transmission and Dynamic Torque Control AWD system.



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

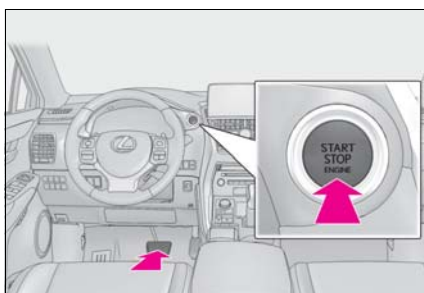
- 1 Check that the parking brake is set.
- 2 Check that the shift lever is in P.
- 3 Firmly depress the brake pedal.

 and a message will be displayed on the multi-information display. If it is not displayed, the engine cannot be started.

- 4 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.

**■ If the engine does not start**

- The engine immobilizer system may not have been deactivated. (→P.67)

Contact your Lexus dealer.

- Check that the shift lever is securely set in P. The engine may not start if the shift lever is displaced out of P. "To Start Vehicle, Put Shift Lever into P" will be displayed on the multi-information display.
- The smart access system with push-button start may not be operating properly. (→P.396)

■ Electronic key battery depletion

→P.94

■ Conditions affecting operation

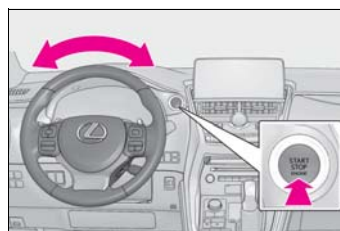
→P.116

■ Note for the entry function

→P.116

■ 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, "Steering Wheel Lock Press Engine Switch while Turning Wheel" will be displayed on the multi-information display. Check that the shift lever is in P. Press the engine switch 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 running the engine. After about 10 seconds, the steering lock motor will resume functioning.

■ **If “Smart Access System Malfunction See Owner’s Manual” is displayed on the multi-information display**

The system may be malfunctioning. Have the vehicle inspected by your Lexus dealer immediately.

■ **Electronic key battery**

→P.353

■ **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.

■ **If the smart access system with push-button start has been deactivated by a customized setting**

→P.425



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. The steering lock function will activate and this 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

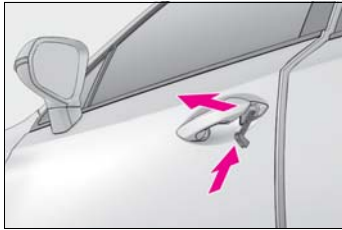
- 1 Stop the vehicle completely.
- 2 Set the parking brake (→P.172), and shift the shift lever to P (→P.167).
- 3 Press the engine switch.
- 4 Release the brake pedal and check that the display on the instrument cluster is off.

■ **Automatic engine shut off feature**

- The vehicle is equipped with a feature that automatically shuts off the engine when the shift lever is in P with the engine running for an extended period.
- The engine will automatically shut off after approximately 1 hour if it has been left running while the shift lever is in P.
- The timer for the automatic engine shut off feature will reset if the brake pedal is depressed or if the shift lever is in a position other than P.
- After the vehicle is parked, if the door is locked with the door lock switch (→P.100) from the inside or the mechanical key from the outside, the automatic engine shut off feature will be disabled. The timer for the automatic engine shut off feature will be re-enabled if the driver’s door is opened.

■ Locking the door from outside with the engine running

- 1 With the driver's door open, pull the driver's door handle and insert the mechanical key.



- 2 Turn the mechanical key counterclockwise.



- 3 Pull out the mechanical key and close the door.



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.364)

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, 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.

■ When parking

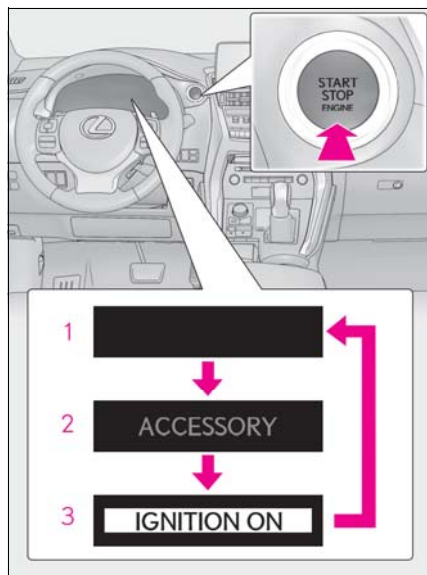
Exhaust gases include harmful carbon monoxide (CO), which is colorless and odorless. Observe the following precautions.

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

- 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 running 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.

Changing engine switch modes

Modes can be changed by pressing the engine switch with 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 multi-information display.

3 IGNITION ON mode

All electrical components can be used. "IGNITION ON" will be displayed on the multi-information display.

* : If the shift lever is in a position other than P when turning off the engine, the engine switch will be turned to ACCESSORY mode, not to off.

■ Auto power off function

If the vehicle is left in ACCESSORY mode for more than 20 minutes or IGNITION ON mode (the engine is not running) for more than an hour with the shift lever in P, the engine switch will automatically turn off. However, this function cannot entirely prevent 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 stopping the engine with the shift lever in a position other than P

If the engine is stopped with the shift lever in a position other than P, the engine switch will not be turned off but instead be turned to ACCESSORY mode. Perform the following procedure to turn the switch off:

- 1** Check that the parking brake is set.
- 2** Shift the shift lever to P.
- 3** Check that "Turn Off Vehicle" is displayed on the multi-information display and then press the engine switch once.
- 4** Check that "Turn Off Vehicle" on the multi-information display is off.

**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 multi-information display while the engine is not running, the engine switch is not off. Exit the vehicle after turning the engine switch off.
- Do not stop the engine when the shift lever is in a position other than P. If the engine is stopped in another shift lever position, the engine switch will not be turned off but instead be turned to ACCESSORY mode. If the vehicle is left in ACCESSORY mode, battery discharge may occur.

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
D	Normal driving ^{*1}
M	M mode driving ^{*2} (→P.169)

^{*1}: To improve fuel efficiency and reduce noise, shift the shift lever to D for normal driving.

You can choose gear range suitable for your driving situation by operating the paddle shift switches.

^{*2}: Any gear range can be fixed when driving in M mode.

■ To protect the automatic transmission

"Transmission Fluid Temp High See Owner's Manual" is displayed on the multi-information display and a function is adopted that automatically selects a higher shift range when the fluid temperature is high. Have the vehicle inspected by your Lexus dealer.

■ When driving with 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 activate because dynamic radar cruise control with full-speed range will not be canceled.

- While driving in D position, downshifting to 5 or 4. (→P.169)
- When switching the driving mode to Sport mode while driving in D position. (→P.257)

■ Restraining sudden start (Drive-Start Control)

When the following unusual operation is performed, the engine output may be restrained.

- When the shift lever 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 instructions.
- When the accelerator pedal is depressed too much while the vehicle is in reverse.
- If the "M" indicator does not come on or the "D" indicator is displayed even after shifting the shift lever to M

This may indicate a malfunction in the automatic transmission system. Have the vehicle inspected by your Lexus dealer. (In this situation, the transmission will operate in the same)

■ AI-SHIFT

- The AI-SHIFT automatically selects the suitable gear according to driver performance and driving conditions. The AI-SHIFT automatically operates when the driving mode select switch is set to Normal mode with the shift lever in the D position. (The function will be canceled, if the driving mode select switch is set to Sport mode or shift lever is put in the M position.)
- The G AI-SHIFT is automatically changed to a suitable gear step while running in Sport mode according to the driving operations and running conditions. The G AI-SHIFT automatically operates when the driving mode select switch is set to Sport mode with the shift lever in the D position. (The function will be canceled, if the driving mode select switch is set to Normal mode or shift lever is put

in the M position.)

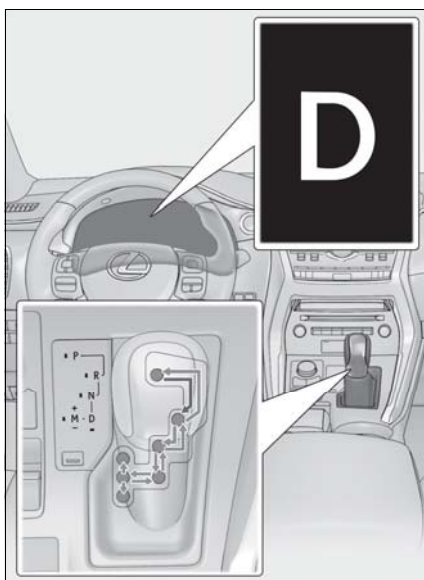


WARNING

■ When driving on slippery road surfaces

Be careful of downshifting and sudden acceleration, as this could result in the vehicle skidding to the side or spinning.

Shifting the shift lever



← While the engine switch is in IGNITION ON mode, move the shift lever with the brake pedal depressed. When shifting the shift lever between P and D, make sure that the vehicle is completely stopped.

■ Shift lock system

The shift lock system is a system to prevent accidental operation of the shift lever in starting.

The shift lever can be shifted from P only when the engine switch is in IGNITION ON mode and the brake pedal is being depressed.

■ If the shift lever cannot be shifted from P

First, check whether the brake pedal is being depressed.

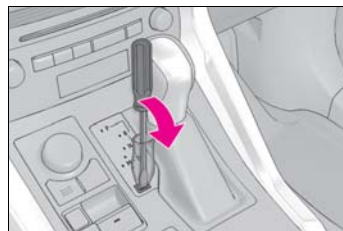
If the shift lever cannot be shifted with your foot on the brake pedal, there may be a problem with the shift lock system. Have the vehicle inspected by your Lexus dealer immediately.

The following steps may be used as an emergency measure to ensure that the shift lever can be shifted.

Releasing the shift lock:

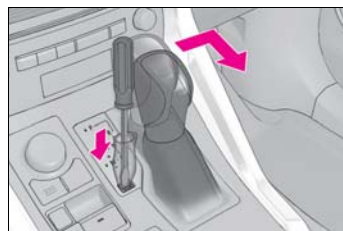
- 1 Set the parking brake.
- 2 Turn the engine switch off.
- 3 Depress the brake pedal.
- 4 Pry the cover up with a flathead screwdriver or equivalent tool.

To prevent damage to the cover, cover the tip of the screwdriver with a rag.



- 5 Press the shift lock override button.

The shift lever can be shifted while the button is pressed



⚠ WARNING

■ **To prevent an accident when releasing the shift lock**

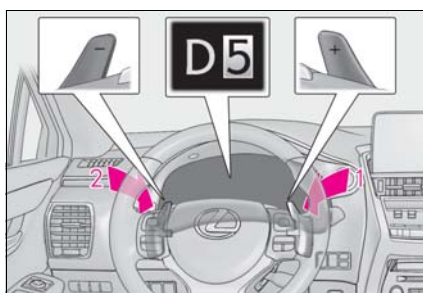
Before pressing the shift lock override button, make sure to set the parking brake and depress the brake pedal. If the accelerator pedal is accidentally depressed instead of the brake pedal when the shift lock override button is pressed and the shift lever is shifted out of P, the vehicle may suddenly start, possibly leading to an accident resulting in death or serious injury.

Selecting the driving mode

→P.257

Selecting shift ranges in the D position

To drive using temporary shift range selection, operate the “-” paddle shift switch while the shift lever in D. Changing the shift range enables the level of engine braking force to be selected. The shift range can then be selected by operating the “-” and “+” paddle shift switches.



- 1** Upshifting
- 2** Downshifting

The selected shift range, from 1 to 6, will be displayed on the multi-informa-

tion display.

The initial shift range when the “-” paddle shift switch is operated is automatically set to 2, 3, 4 or 5 according to the vehicle speed.

To return to normal D position driving, the “+” paddle shift switch must be held down for a period of time.

Meter display	Function
D2 - D6	A gear in the range between 1 and the selected gear is automatically chosen depending on vehicle speed and driving conditions
D1	1st gear is set

A lower shift range will provide greater engine braking forces than a higher shift range.

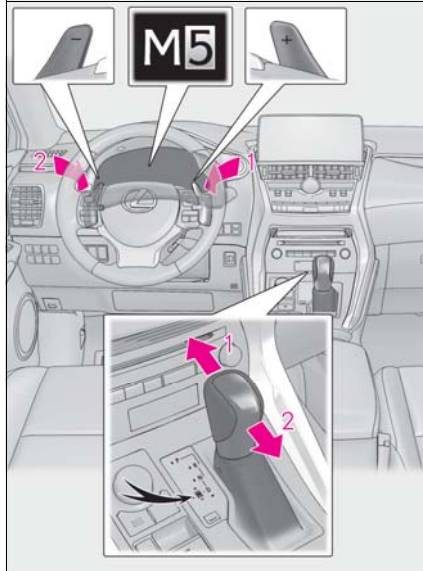
■ **Automatic deactivation of shift range selection in the D position**

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 lever is shifted to a position other than D

Selecting gears in the M position

To enter M mode, shift the shift lever to M. Gears can then be selected by operating the shift lever or paddle shift switches, allowing you to drive in the gear of your choice. The gear can be selected by operating the shift lever or the “-” and “+” paddle shift switches.



1 Upshifting

2 Downshifting

The gear changes once every time the shift lever or paddle shift switch is operated. The selected gear, from 1 to 6, will be fixed and displayed on the multi-information display.

When in the M position, the gear will not change unless the shift lever or paddle shift switches are operated.

However, even when in the M position, the gears will be automatically changed in the following situation:

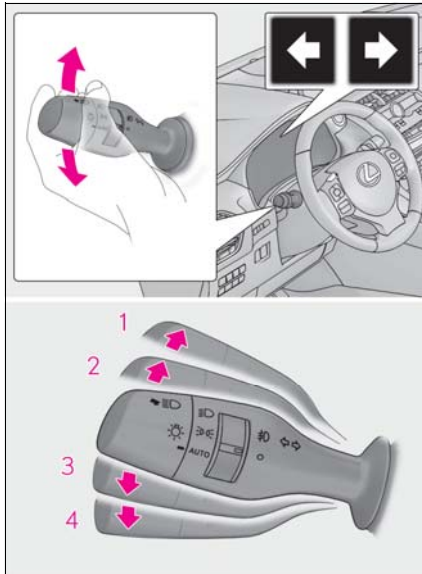
- When vehicle speed drops (downshift only).
- When the accelerator pedal is depressed further, while driving (downshift only).
- When the needle of the tachometer is in the red zone (the range which exceeds the allowable revs of the engine).

■ 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 shift lever 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.

■ Customization

→P.425

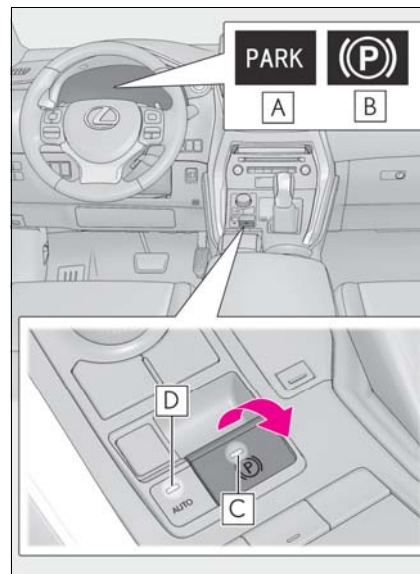
Parking brake

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 shift lever operation. Also, even in automatic mode, the parking brake can be set or released manually.

Operating instructions

■ Turns automatic mode on

While the vehicle is stopped, pull and hold the parking brake switch until the automatic mode lamp turns on.



- A** Parking brake indicator (U.S.A.)
- B** Parking brake indicator (Canada)
- C** Parking brake lamp
- D** Automatic mode lamp

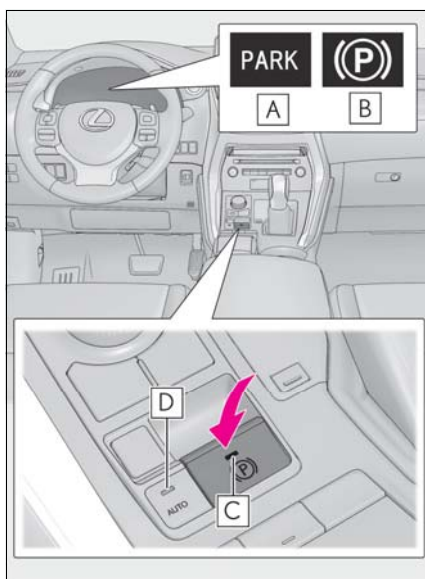
The parking brake is set or released automatically according to shift lever operation.

- When the shift lever is moved out of P, the parking brake will be released, and the parking brake indicator light and parking brake lamp turn off.
- When the shift lever is moved into P, the parking brake will be set, and the parking brake indicator light and parking brake lamp turn on.

Operate the shift lever with the brake pedal depressed.

■ Turns automatic mode off

While the vehicle is stopped, press and hold the parking brake switch until the automatic mode lamp turns off.

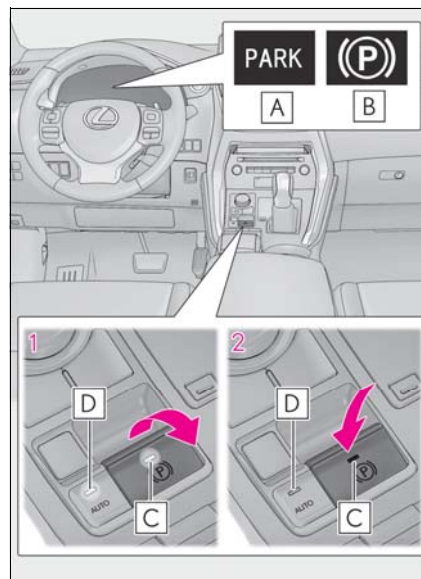


- A** Parking brake indicator (U.S.A.)
- B** Parking brake indicator (Canada)
- C** Parking brake lamp

D Automatic mode lamp

■ Using the manual mode

The parking brake can be set and released manually.



- A** Parking brake indicator (U.S.A.)
- B** Parking brake indicator (Canada)
- C** Parking brake lamp
- D** Automatic mode lamp

1 Sets the parking brake

The parking brake indicator light and parking brake lamp will turn on. Pull and hold the parking brake switch if an emergency occurs and it is necessary to operate the parking brake while driving.

2 Releases the parking brake

Operate the parking brake switch while depressing the brake pedal. Make sure that the parking brake indicator light and parking brake lamp turn off.

If the parking brake indicator light and parking brake lamp flashes, operate

the switch again. (→P.377)

■ 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.

■ If “Parking Brake Overheated Parking Brake Unavailable” 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.

■ 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 indicator light and parking brake lamp

- Depending on the engine switch mode, the parking brake indicator light and parking brake lamp 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 and parking brake lamp will stay on for about 15 seconds. This does not indicate a malfunction.

■ Changing the mode

When changing the automatic mode on/off, the message will be shown on the multi-information display and the buzzer sounds.

■ Parking the vehicle

→P.144

■ Parking brake engaged warning buzzer

A buzzer will sound if the vehicle is driven

with the parking brake engaged. “Release Parking Brake” is displayed on the multi-information display.

■ 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 system warning light comes on

→P.374

■ Usage in winter time

→ P.266



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.

■ Parking brake switch

Do not set any objects near the parking brake switch. Objects may interfere with the switch and may lead the parking brake to unexpectedly operate.



NOTICE

■ When parking the vehicle

Before you leave the vehicle, shift the shift lever to P, set the parking brake 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.

**NOTICE**

■ **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 contact your Lexus dealer immediately if this occurs.

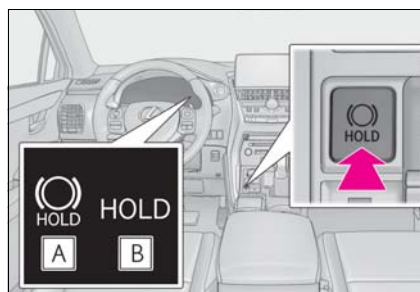
Brake Hold

The brake hold system keeps the brake applied when the shift lever 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 lever in D or M to allow smooth start off.

Enabling the system

Turns the brake hold system on

The brake hold standby indicator **A** (green) comes on. While the system is holding the brake, the brake hold operated indicator **B** (yellow) 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

With the brake pedal depressed, release the parking brake by operating the parking brake switch, making sure that the parking brake indicator light goes off. (→P.171)

■ 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" 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-informa-

tion display, read the message and follow the instructions.

■ If the brake hold operated indicator flashes

→P.377



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 lever to P and set the parking brake.

ASC (Active Sound Control)*

* : If equipped

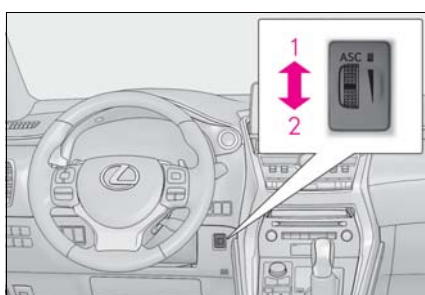
The ASC system is an electronic sound system that generates engine sound, conveying the kinetic situations of the vehicle's acceleration and deceleration to the driver through the speakers inside the instrument panel. The vehicle's response to the driver's acceleration behavior and shift operations are also conveyed in sound. When Sport mode is selected, the sound conveyed to the driver will be louder.

in Eco mode.

■ Temporary cancelation of the ASC system functions

The ASC system may be temporarily canceled depending on the driving conditions, such as when the tires slip due to sudden acceleration.

Controlling volume



1 Louder

2 Lower

The indicator comes on when the ASC system is on.

When the dial is turned to the lowest volume, the ASC system will be turned off and the indicator will go off.

■ Operating conditions

When the driving mode select switch is not

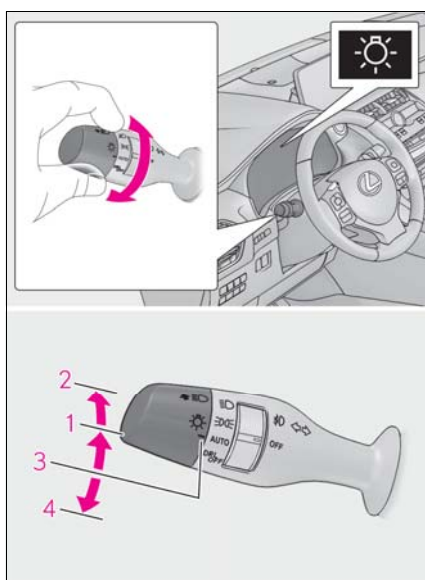
Headlight switch

The headlights can be operated manually or automatically.

Operating instructions

Operating the  switch turns on the lights as follows:

► Type A

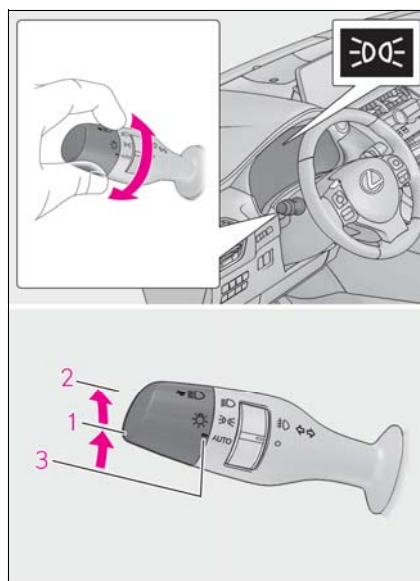


- 1**  The side marker, parking, tail, license plate, instrument panel lights, and daytime running lights (→P.178) turn on.
- 2**  The headlights and all the lights listed above (except daytime running lights) turn on.
- 3** **AUTO** The headlights, daytime running lights (→P.178) and all the

lights listed above turn on and off automatically.

- 4**  The daytime running lights turn off.

► Type B



- 1**  The side marker, parking, tail, license plate, instrument panel lights, and daytime running lights (→P.178) turn on.
- 2**  The headlights and all the lights listed above (except daytime running lights) turn on.
- 3** **AUTO** The headlights, daytime running lights (→P.178) and all the lights listed above turn on and off automatically (when the engine switch is in IGNITION ON mode).

■ AUTO mode can be used when

The engine switch is in IGNITION ON mode.

■ Daytime running light system

- The daytime running lights illuminate using the same lights as the parking lights and illuminate brighter than the parking lights.
- To make your vehicle more visible to other drivers during daytime driving, the daytime running lights turn on automatically when all of the following conditions are met. (The daytime running lights are not designed for use at night.)
 - The engine is running
 - The parking brake is released
 - The headlight switch is in the  or **AUTO** * position

* : When the surroundings are bright

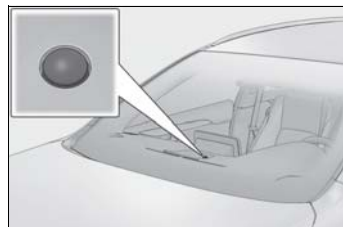
The daytime running lights remain on after they illuminate, even if the parking brake is set again.

- For the U.S.A.: Daytime running lights can be turned off by operating the switch.
- Compared to turning on the headlights, the daytime running light system offers greater durability and consumes less electricity, so it can help improve fuel
- If a turn signal light is in use, the daytime running light, on the same side, is turned off. For emergency flashers, both are turned off.

■ 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

- When the headlights come on: The headlights and tail lights turn off 30 seconds after a 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 locked.)
- When only the tail lights come 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 .

■ 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 (if equipped)

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

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 func-

tion 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 is opened or closed

■ Customization

Settings (e.g. light sensor sensitivity) can be changed. (Customizable features: →P.425)

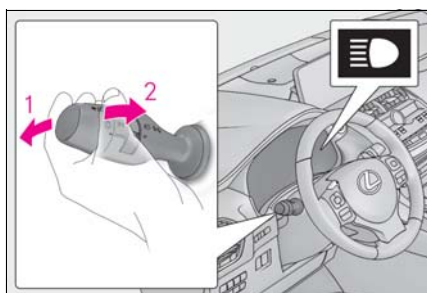


NOTICE

■ To prevent battery discharge

Do not leave the lights on longer than necessary when the engine is off.

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.

Cornering lights (if equipped)

When the following conditions are met, while the headlights (low beam) are on, the cornering lights will additionally turn on and light up the direction of movement for the vehicle. This is to ensure excellent visibility when either driving at intersections or parking at night.

- The steering wheel is operated
- The turn signal lever is operated
- The shift lever is in R

■ Cornering light control

- However, when vehicle speed is 25 mph (40 km/h) or above, the cornering lights do not turn on.
- After the lights remain illuminated for 30 minutes, they automatically turn off.

AFS (Adaptive Front-lighting System) (if equipped)

AFS (Adaptive Front-lighting System) secures excellent visibility at intersections and on curves by automatically adjusting the direction of the light axis of the headlights according to vehicle speed and the degree of the tire's angle as controlled by steering input.

AFS operates at speeds of 6 mph (10 km/h) or higher.

Automatic High Beam

The Automatic High Beam uses an in-vehicle camera sensor to assess the brightness of streetlights, the lights of oncoming and preceding vehicles, etc., and automatically turns high beam on or off as necessary.

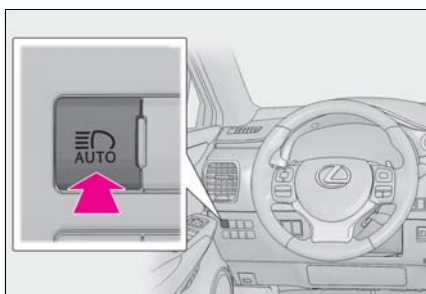
⚠ WARNING

■ Limitations of the Automatic High Beam

Do not rely on the Automatic High Beam. Always drive safely, taking care to observe your surroundings and turning high beam on or off manually if necessary.

Activating the Automatic High Beam system

- 1 Press the Automatic High Beam switch.



- 2 Turn the headlight switch to the **AUTO** or  position.

The Automatic High Beam indicator will

come on when the system is operating.



■ Operating conditions

The engine switch is in IGNITION ON mode.

■ High beam automatic turning on or off conditions

When all of the following conditions are fulfilled, high beam will be automatically turned on:

- Vehicle speed is above approximately 21 mph (34 km/h).
- The area ahead of the vehicle is dark.
- There are no oncoming or preceding vehicles with headlights or tail lights turned on.
- There are few streetlights on the road ahead.

If any of the following conditions are fulfilled, high beam will be automatically turned off:

- Vehicle speed drops below approximately 17 mph (27 km/h).
- The area ahead of the vehicle is not dark.
- Oncoming or preceding vehicles have headlights or tail lights turned on.
- There are many streetlights on the road ahead.

■ Camera sensor detection information

- High beam may not be automatically turned off in the following situations:
 - When oncoming vehicles suddenly appear from a curve
 - When the vehicle is cut in front of by another vehicle
 - When oncoming or preceding vehicles

are hidden from sight due to repeated curves, road dividers or roadside trees

- High beam may be turned off if an oncoming vehicle that is using fog lights without using the headlights is detected.
- House lights, street lights, red traffic signals, and illuminated billboards or signs may cause the high beam to turn off.
- The following factors may affect the amount of time taken to turn high beam on or off:
 - The brightness of headlights, fog lights, and tail lights of oncoming and preceding vehicles
 - The movement and direction of oncoming and preceding vehicles
 - When a oncoming or preceding vehicle only has operational lights on one side
 - When a oncoming or preceding vehicle 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
- High beam may be turned on or off when unexpected by the driver.
- In the situations below, the system may not be able to correctly detect the surrounding brightness levels, and may flash or expose nearby pedestrians to the high beam. Therefore, you should consider turning the high beams on or off manually rather than relying on the Automatic High Beam system.
 - In bad weather (rain, snow, fog, sandstorms, etc.)
 - The windshield is obscured by fog, mist, ice, dirt, etc.
 - The windshield is cracked or damaged.
 - The camera sensor is deformed or dirty.
 - The camera sensor temperature is extremely high.
 - Surrounding brightness levels are equal to those of headlights, tail lights or fog lights.
 - Vehicles ahead have headlights or tail lights that are either switched off, dirty, are changing color, or are not aimed properly.
 - 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 tracks, etc.).
- When frequently and repeatedly taking curves or driving on a winding road.
- There is a highly reflective object ahead of the vehicle, such as a sign or a mirror.
- The back of a vehicle ahead is highly reflective, such as a container on a truck.
- The vehicle's headlights are damaged or dirty.
- The vehicle is listing or tilting, due to a flat tire, a trailer being towed, etc.
- The driver believes that the high beam may be causing problems or distress to other drivers or pedestrians nearby.

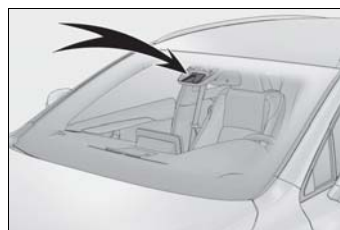


NOTICE

■ Notes when using the Automatic High Beam system

Observe the following to ensure that the Automatic High Beam functions correctly.

- Do not touch the camera sensor.



- Do not subject the camera sensor to a strong impact.
- Do not disassemble the camera sensor.
- Do not spill liquids onto the camera sensor.
- Do not apply window tinting or stickers to the camera sensor or the area of windshield near the camera sensor.

**NOTICE**

- Do not place items on the dashboard. There is a possibility that the camera sensor will mistake items reflected in the windshield for streetlights, the headlights of other vehicles, etc.
- Do not install a parking tag or any other accessories near or around the camera sensor.
- Do not overload the vehicle.
- Do not modify the vehicle.
- Do not replace windshield with non-genuine windshield. Contact your Lexus dealer.

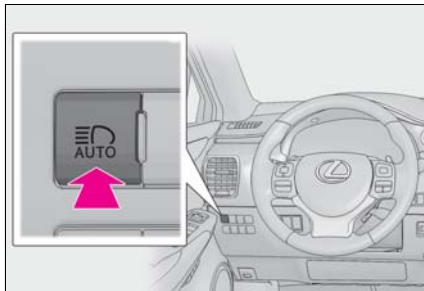
Turning the high beams on/off manually

■ Switching to low beam

Press the Automatic High Beam switch.

The Automatic High Beam indicator will turn off.

Press the switch to activate the Automatic High Beam system again.

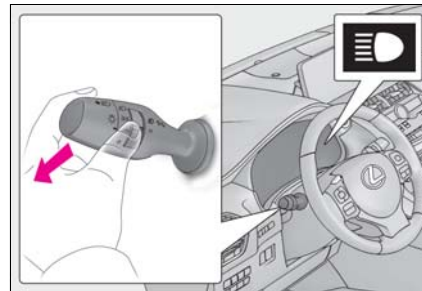


■ Switching to high beam

Push the lever away from you.

The Automatic High Beam 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 again.



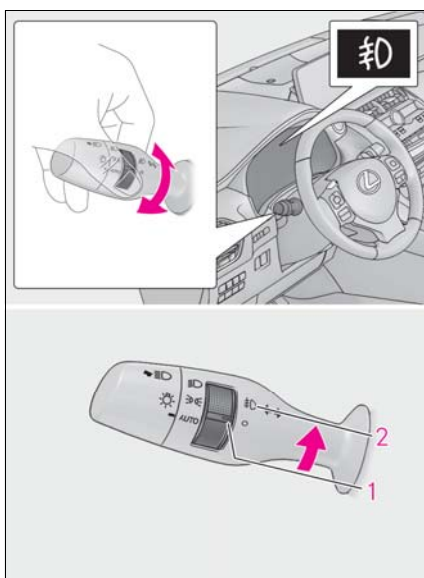
■ Switching to the high beams temporarily

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.

Fog light switch

When in difficult driving conditions, such as in rain and fog, turn on the front fog lights to secure front visibility and turn on the rear fog lights to notify following vehicles the existence of your vehicle.

Operating instructions



- 1 ○ Turns the fog lights off
- 2 𐄀 Turns the fog lights on

■ Fog lights can be used when

The headlights are on in low beam.

⚠ NOTICE

■ To prevent battery discharge

Do not leave the lights on longer than necessary when the engine is off.

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

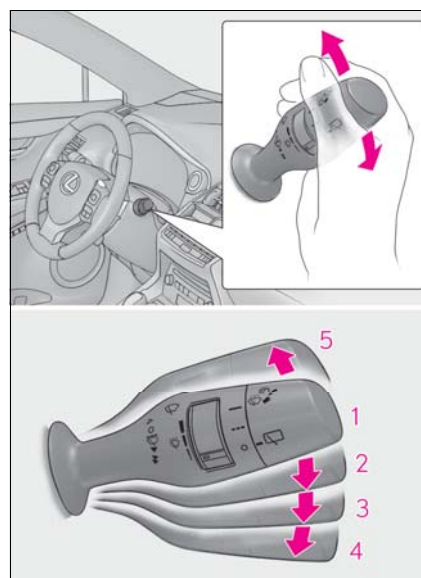
Do not use the wipers, as they may damage the windshield.

Operating the wiper lever

Operating the  lever operates the wipers or washer as follows.

■ Intermittent windshield wipers with interval adjuster (if equipped)

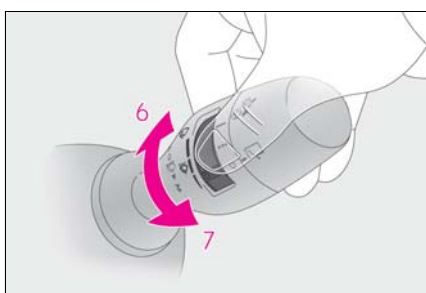
► Type A



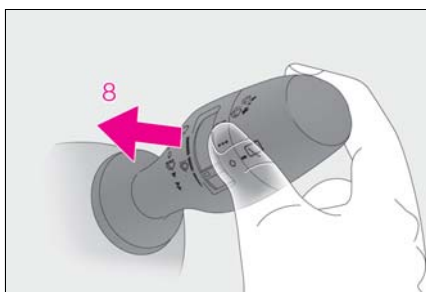
- 1 ○ Off

- 2  Intermittent operation
- 3  Low speed operation
- 4  High speed operation
- 5  Temporary operation

Wiper intervals can be adjusted when intermittent operation is selected.



- 6 Increases the intermittent wind-shield wiper frequency
- 7 Decreases the intermittent wind-shield wiper frequency



- 8  Washer/wiper dual operation

Pulling the lever operates the wipers and washer.

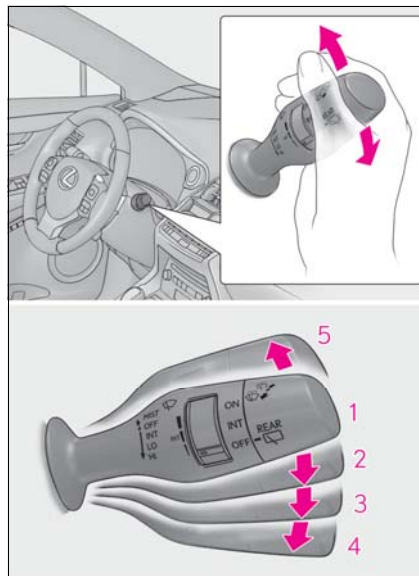
The wipers will automatically operate a couple of times after the washer squirts.

Vehicles with headlight cleaners:

When the headlights are on and the lever is pulled and held, the headlight cleaners will

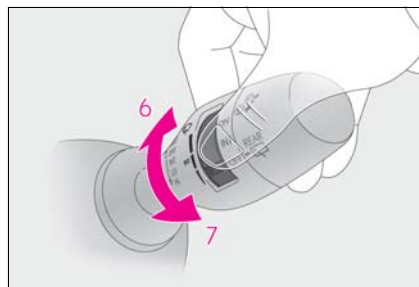
operate once. After this, the headlight cleaners will operate every 5th time the lever is pulled.

► Type B

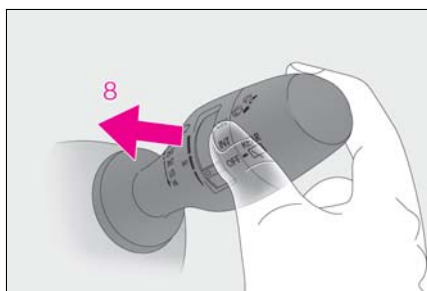


- 1 **OFF** Off
- 2 **INT** Intermittent operation
- 3 **LO** Low speed operation
- 4 **HI** High speed operation
- 5 **MIST** Temporary operation

Wiper intervals can be adjusted when intermittent operation is selected.



- 6 Increases the intermittent windshield wiper frequency
- 7 Decreases the intermittent windshield wiper frequency



8 Washer/wiper dual operation

Pulling the lever operates the wipers and washer.

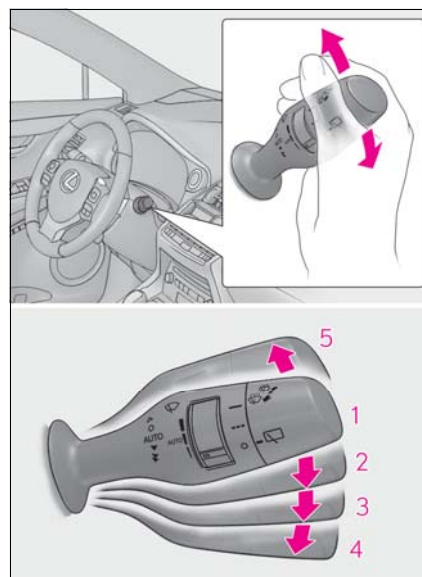
The wipers will automatically operate a couple of times after the washer squirts.

Vehicles with headlight cleaners:

When the headlights are on and the lever is pulled and held, the headlight cleaners will operate once. After this, the headlight cleaners will operate every 5th time the lever is pulled.

■ Rain-sensing windshield wipers (if equipped)

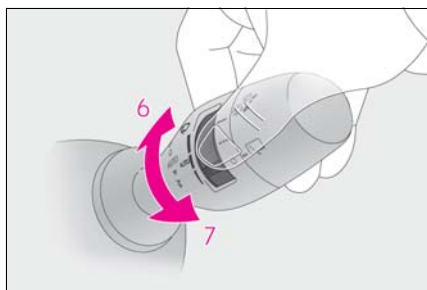
► Type A



- 1 ○ Off
- 2 **AUTO** Rain-sensing operation
- 3 ▼ Low speed operation
- 4 ▼ High speed operation
- 5 ▲ Temporary operation

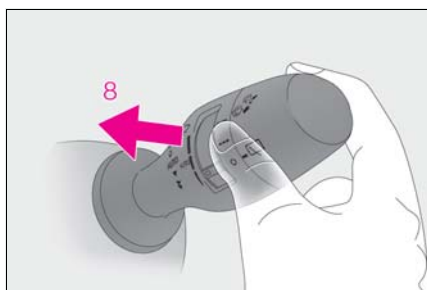
When **AUTO** is selected, the wipers will operate automatically when the sensor detects falling rain. The system automatically adjusts wiper timing in accordance with rain volume and vehicle speed.

The sensor sensitivity can be adjusted when **AUTO** is selected.



6 Increases the sensitivity

7 Decreases the sensitivity



8  Washer/wiper dual operation

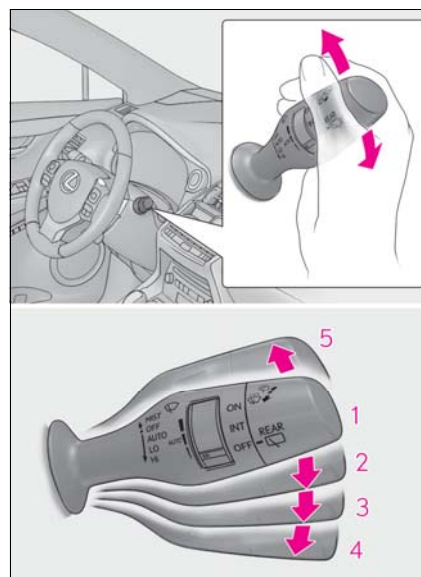
Pulling the lever operates the wipers and washer.

The wipers will automatically operate a couple of times after the washer squirts.

Vehicles with headlight cleaners:

When the headlights are on and the lever is pulled and held, the headlight cleaners will operate once. After this, the headlight cleaners will operate every 5th time the lever is pulled.

► Type B



1 OFF Off

2 AUTO Rain-sensing operation

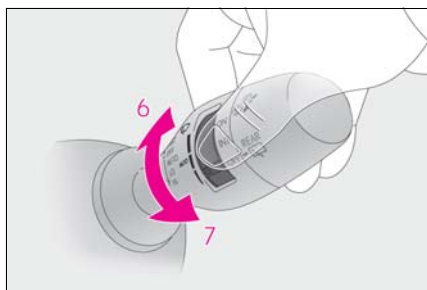
3 LO Low speed operation

4 HI High speed operation

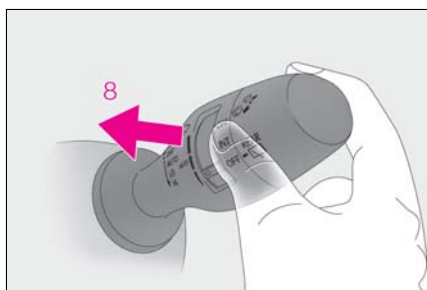
5 MIST Temporary operation

When **AUTO** 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.

The sensor sensitivity can be adjusted when **AUTO** is selected.



- 6** Increases the sensitivity
7 Decreases the sensitivity



- 8**  Washer/wiper dual operation

Pulling the lever operates the wipers and washer.

The wipers will automatically operate a couple of times after the washer squirts.

Vehicles with headlight cleaners:
 When the headlights are on and the lever is pulled and held, the headlight cleaners will operate once. After this, the headlight cleaners will operate every 5th time the lever is pulled.

■ **The windshield wipers and washer can be operated when**

The engine switch is in IGNITION ON mode.

■ **Dripping prevention wiper sweep (vehicles with rain-sensing windshield wipers)**

After washing and wiping operation several times, the wipers operate one more time

after a short delay to prevent dripping. However, this function will not operate while driving.

■ **Effects of vehicle speed on wiper operation (vehicles with rain-sensing windshield wipers)**

Vehicle speed affects the Intermittent wiper interval.

■ **Raindrop sensor (vehicles with rain-sensing windshield wipers)**

- 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 switch is turned to the **AUTO** position 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 194°F (90°C) or higher, or 5°F (-15°C) 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 washer fluid tank.

⚠ WARNING**■ Caution regarding the use of windshield wipers in AUTO mode (vehicles with rain-sensing windshield wipers)**

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, etc. 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 the washer fluid tank is empty**

Do not operate the switch continually as the washer fluid pump may overheat.

■ 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.

■ To prevent battery discharge

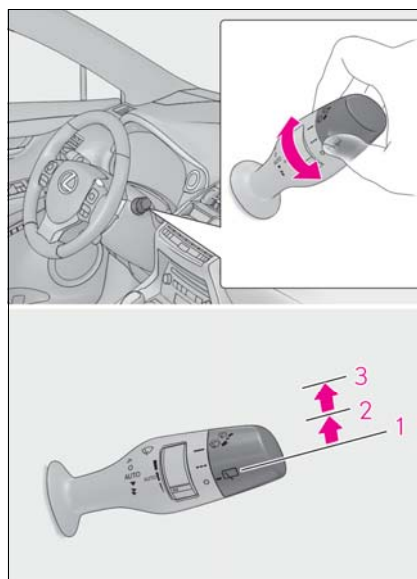
Do not leave the wipers on longer than necessary when the engine is off.

Rear window wiper and washer**⚠ NOTICE****■ When the rear window is dry**

Do not use the wiper, as it may damage the rear window.

Operating the wiper lever

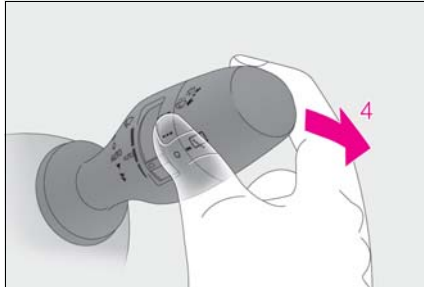
Operating the  switch operates the rear wiper as follows:

► Type A

1 ○ Off

2 --- Intermittent operation

3 — Normal operation

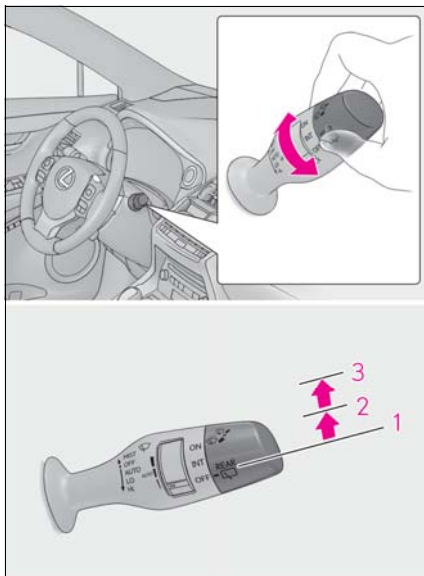


4 Washer/wiper dual operation

Pushing the lever operates the wiper and washer.

The wiper will automatically operate a couple of times after the washer squirts.

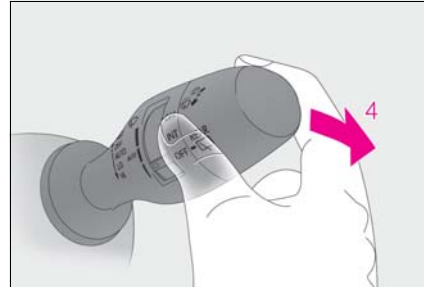
► Type B



1 **OFF** Off

2 **INT** Intermittent operation

3 **ON** Normal operation



4 Washer/wiper dual operation

Pushing the lever operates the wiper and washer.

The wiper will automatically operate a couple of times after the washer squirts.

■ The rear window wiper and washer can be operated when

The engine switch is in IGNITION ON mode.



NOTICE

■ When the washer fluid tank is empty

Do not operate the switch continually as the washer fluid pump may overheat.

■ 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.

■ To prevent battery discharge

Do not leave the wiper on longer than necessary when the engine is off.

Opening the fuel tank cap

Before refueling the vehicle

- Turn the engine switch off and ensure that all the doors and windows are closed.
- Confirm the type of fuel.

Fuel types

→P.414

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

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 of 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

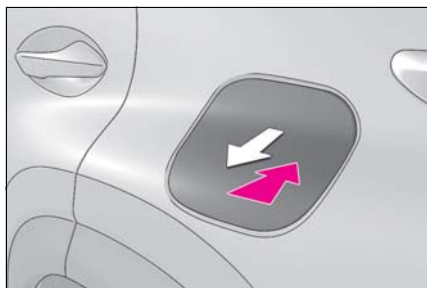
Do not spill fuel during refueling. Doing so may damage the vehicle, such as causing the emission control system to operate abnormally, damaging fuel system components or the vehicle's painted surface.

Opening the fuel tank cap

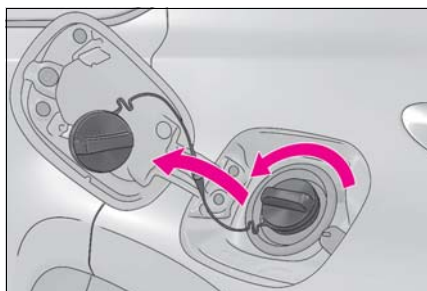
- 1 With all doors unlocked, press the center of the rear edge of the fuel filler door.

Push inward and take your hand away to slightly open the fuel filler door. Then open

the door fully by hand.



- 2 Turn the fuel tank cap slowly to open and put it into the holder on the fuel filler door.

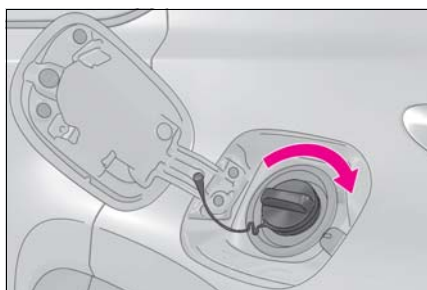


■ When the fuel filler door cannot be opened

→P.395

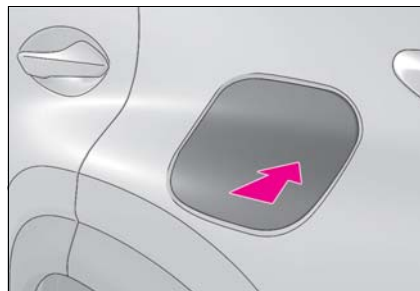
Closing the fuel tank cap

- 1 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.



- 2 Close the fuel filler door, and press the center of the rear edge of the fuel filler door.

When you lock the doors, the fuel filler door will lock also.



■ Fuel filler door lock condition

The fuel filler door may not be locked even when the vehicle's doors are locked in the following conditions:

- When operating the door lock button inside the vehicle
- When the automatic door locking system is operated
- When the fuel filler door is closed after the vehicle's doors are locked

■ Warning buzzer for loose fuel cap

When the engine switch is IGNITION ON mode and the cap is loose, the buzzer sounds and a message is displayed on the multi-information display.

⚠ 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 + 2.0

The Lexus Safety System + 2.0 consists of the following drive assist systems and contributes to a safe and comfortable driving experience:

Driving assist system

■ PCS (Pre-Collision System)

→P.198

■ LTA (Lane Tracing Assist) (if equipped)

→P.205

■ LDA (Lane Departure Alert with steering control) (if equipped)

→P.214

■ AHB (Automatic High Beam)

→P.180

■ RSA (Road Sign Assist) (if equipped)

→P.222

■ Dynamic radar cruise control with full-speed range

→P.224



WARNING

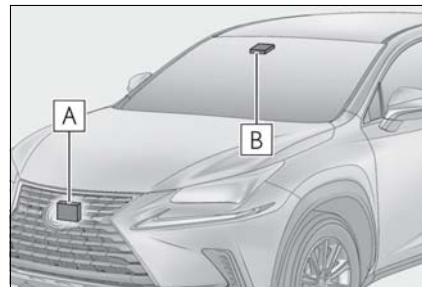
■ Lexus Safety System + 2.0

The Lexus Safety System + 2.0 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



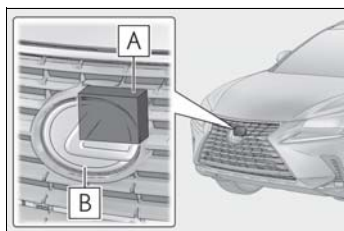
WARNING

■ 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.

⚠ WARNING

- Keep the radar sensor and the radar sensor cover clean at all times.



A Radar sensor

B Radar sensor cover

If the front of the radar sensor or the front or back of the radar sensor cover is dirty or covered with water droplets, snow, etc., clean it.

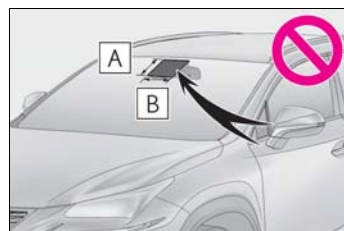
Clean the radar sensor and radar sensor cover with a soft cloth to avoid damaging them.

- Do not attach accessories, stickers (including transparent stickers) or other items to the radar sensor, radar sensor 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 radar sensor cover.
- In the following cases, the radar sensor must be recalibrated. Contact your Lexus dealer for details.
 - When the radar sensor or front grille are removed and installed, or replaced
 - When the front bumper is replaced

■ **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.
- 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 0.4 in. (1 cm) below the bottom of the front camera

B Approximately 7.9 in. (20 cm) (Approximately 4.0 in. [10 cm] to the right and left from the center of the front camera)

**WARNING**

- 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.278)
 - 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.
 - Do not attach window tint to the windshield.
 - Replace the windshield if it is damaged or cracked.
After replacing the windshield, the front camera must be recalibrated.
Contact your Lexus dealer for details.
 - 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

- For vehicles sold in the U.S.A.

FCC ID: HYQDNMWR009

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.

Radiofrequency radiation exposure Information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator (antenna) and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

- For vehicles sold in Canada

NOTE:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from person's body.

NOTE:

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) L'appareil ne doit pas produire de brouillage;
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'ISDE. Cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le dispositif rayonnant et le corps.

■ **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.278).

Situation	Actions
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 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)

The pre-collision system uses a radar sensor and front camera to detect objects (→P.198) 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.200)

Detectable objects

The system can detect the following:

- Vehicles
- Bicyclists
- Pedestrians

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.

■ Suspension control (if equipped)

When the system determines that the possibility of a frontal collision is high, the Adaptive Variable Suspension System (→P.260) will control the damping force of the shock absorbers to help maintain an appropriate vehicle posture.

**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.202
 - Conditions under which the system may not operate properly: →P.203
 - 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:

- 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

⚠ WARNING

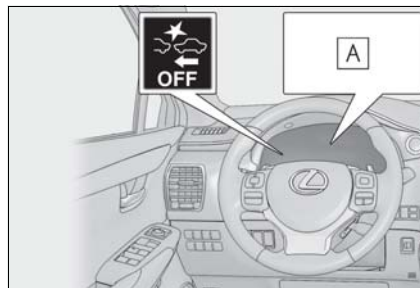
- If the vehicle cannot be driven in a stable manner, such as when the vehicle has been in an accident or is malfunctioning
- When the vehicle is driven in a sporty manner or off-road
- When the tires are not properly inflated
- When the tires are very worn
- When tires of a size other than specified 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.84) of the multi-information display.

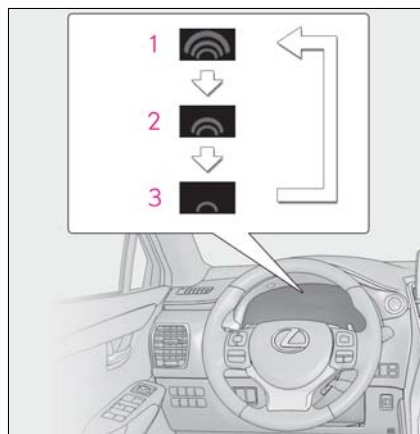
The system is automatically enabled each time the engine switch is turned to IGNITION ON mode.

If the system is disabled, the PCS warning light will turn on and a message will be displayed on the multi-information display.

**A** "Pre-Collision System Off"**■ Changing the pre-collision warning timing**

The pre-collision warning timing can be changed on  (→P.84) 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).

**1** Early**2** Middle

This is the default setting.

3 Late

■ 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. 7 to 110 mph (10 to 180 km/h)	Approx. 7 to 110 mph (10 to 180 km/h)
Bicyclists and pedestrians	Approx. 7 to 50 mph (10 to 80 km/h)	Approx. 7 to 50 mph (10 to 80 km/h)

● Pre-collision brake assist

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Vehicles	Approx. 20 to 110 mph (30 to 180 km/h)	Approx. 20 to 110 mph (30 to 180 km/h)
Bicyclists and pedestrians	Approx. 20 to 50 mph (30 to 80 km/h)	Approx. 20 to 50 mph (30 to 80 km/h)

● Pre-collision braking

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Vehicles	Approx. 7 to 110 mph (10 to 180 km/h)	Approx. 7 to 110 mph (10 to 180 km/h)
Bicyclists and pedestrians	Approx. 7 to 50 mph (10 to 80 km/h)	Approx. 7 to 50 mph (10 to 80 km/h)

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 lever 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 prop-

erly. (→P.203) The illustration shows an image of detectable objects.



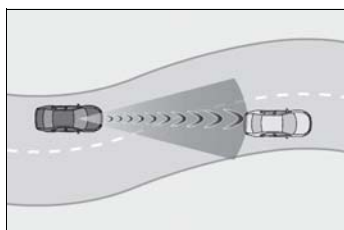
■ Cancellation of the pre-collision braking

If either of the following occur while the pre-collision braking function is operating, it will be canceled:

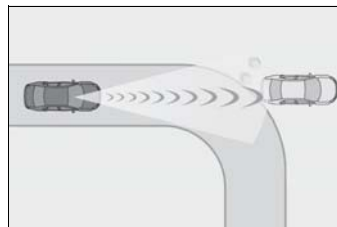
- The accelerator pedal is depressed strongly.
- The steering wheel is turned sharply or abruptly.

■ Conditions under which the system may operate even if there is no possibility of a collision

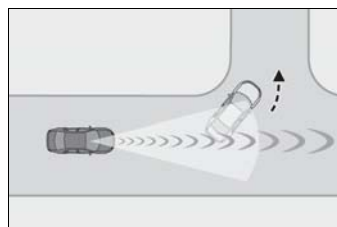
- In some situations such as the following, the system may determine that there is a possibility of a frontal collision and operate.
- When passing a detectable object, etc.
- When changing lanes while overtaking a detectable object, etc.
- When approaching a detectable object in an adjacent lane or on the roadside, such as when changing the course of travel or driving on a winding road



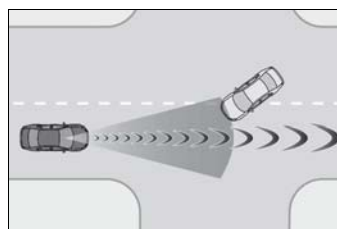
- When rapidly closing on a detectable object, etc.
- When approaching objects on the roadside, such as detectable objects, guard-rails, utility poles, trees, or walls
- When there is a detectable object or other object by the roadside at the entrance of a curve



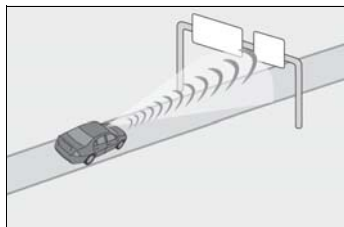
- When there are patterns or paint in front of your vehicle that may be mistaken for a detectable object
- When the front of your vehicle is hit by water, snow, dust, etc.
- When overtaking a detectable object that is changing lanes or making a right/left turn



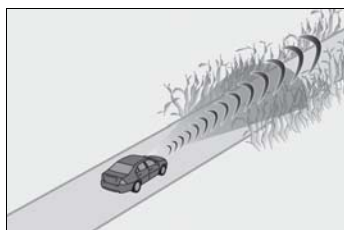
- When passing a detectable object in an oncoming lane that is stopped to make a right/left turn



- 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.)



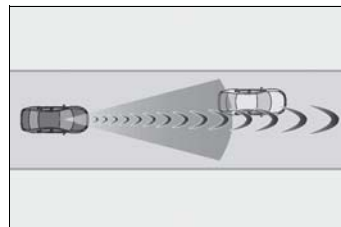
- When approaching an electric toll gate barrier, parking area barrier, or other barrier that opens and closes
- When using an automatic car wash
- When driving through or under objects that may contact your vehicle, such as thick grass, tree branches, or a banner



- 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

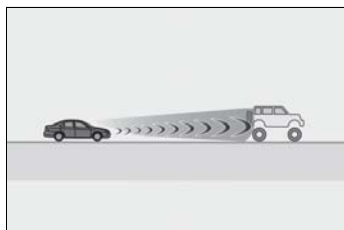


- When a detectable object is near a wall, fence, guardrail, manhole cover, vehicle, steel plate on the road, etc.
- When a detectable object is under a structure
- When part of a detectable object is hidden by an object, such as large baggage, an umbrella, or guardrail
- When multiple detectable objects 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 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

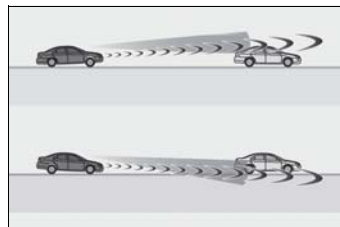


- If a vehicle ahead has extremely high

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 3.2 ft. (1 m) or taller than approximately 6.5 ft. (2 m)
- 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 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

■ If VSC is disabled

- If VSC is disabled (→P.261), 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.

LTA (Lane Tracing Assist)*

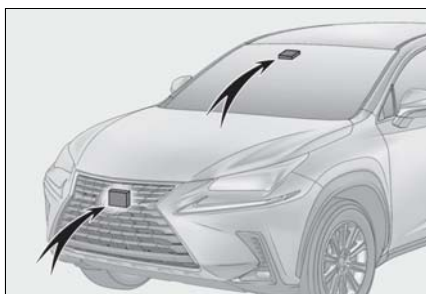
*: If equipped

Summary of functions

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.
- When the tires have been excessively worn, or when the tire inflation pressure is low.

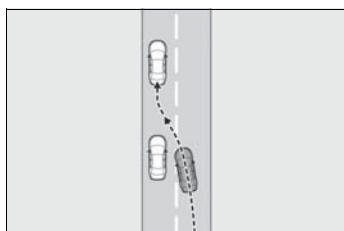
**WARNING**

- When tires of a size other than specified are installed.
- Vehicle is driven in traffic lanes other than that highways and freeways.
- When your vehicle is towing a trailer or 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.

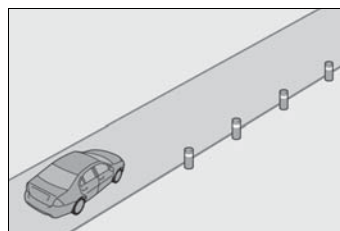
■ **Conditions in which functions may not operate properly**

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.210) and the preceding vehicle changes lanes. (Your vehicle may follow the preceding vehicle and also change lanes.)

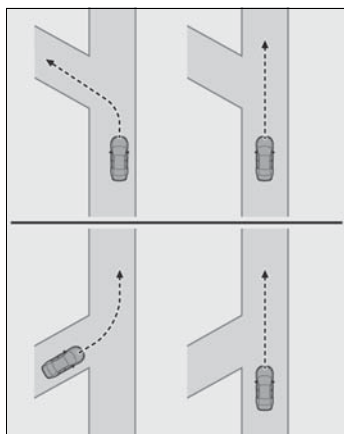


- When the follow-up cruising display is displayed (→P.210) and the preceding vehicle is swaying. (Your vehicle may sway accordingly and depart from the lane.)
- When the follow-up cruising display is displayed (→P.210) and the preceding vehicle departs from its lane. (Your vehicle may follow the preceding vehicle and depart from the lane.)
- When the follow-up cruising display is displayed (→P.210) 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.).

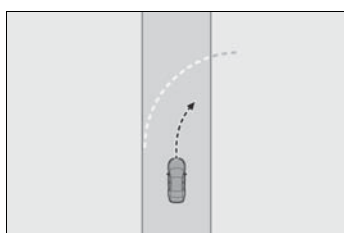


**WARNING**

- 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, "Botts' dots", "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.
- The vehicle is struck by a crosswind.

**WARNING**

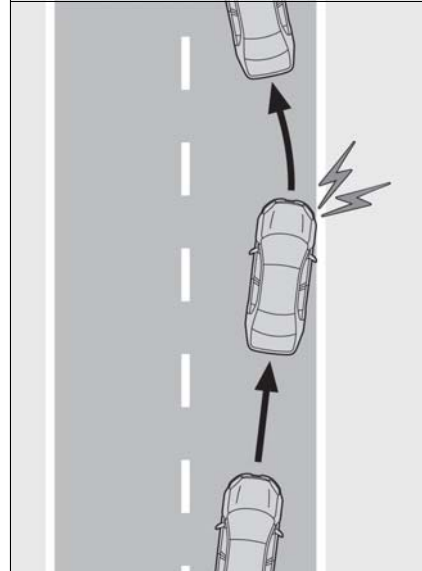
- The vehicle is affected by wind from a vehicle driven in a nearby lane.
- The vehicle has just changed lanes or crossed an intersection.
- Tires which differ by structure, manufacturer, brand or tread pattern are used.
- Snow tires, etc. are equipped.
- The vehicle is being driven at extremely high speeds.

Functions included in LTA system**■ Lane departure alert function**

When the system determines that the vehicle might depart from its lane or course^{*}, 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.

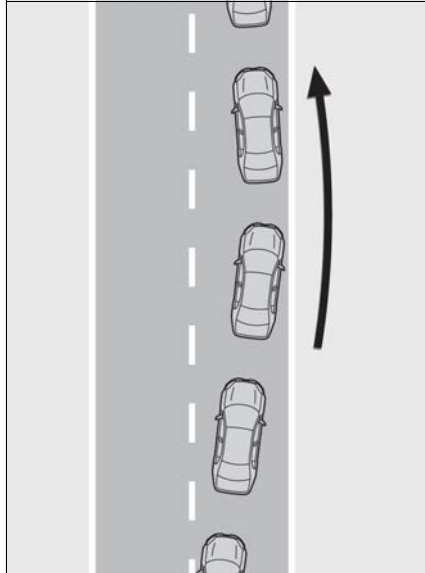
^{*}: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

**■ Steering assist function**

When the system determines that the vehicle might depart from its lane or course^{*}, 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.

^{*}: Boundary between asphalt and the side of the road, such as grass, soil, or a curb



■ 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.

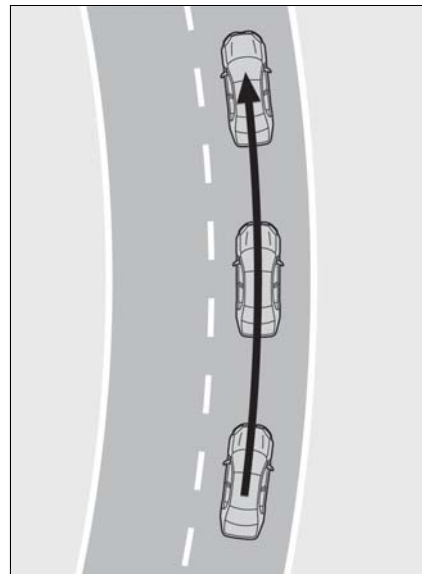
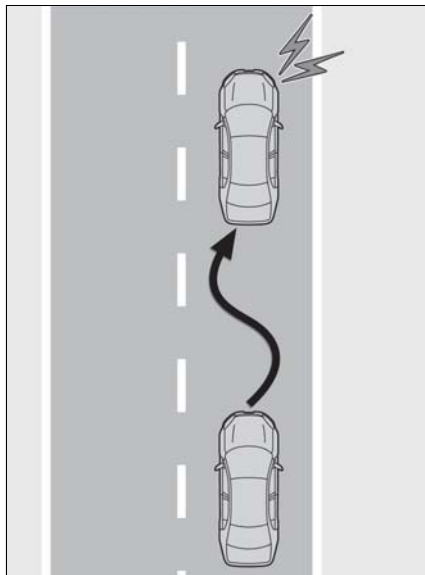
When dynamic radar cruise control with full-speed range is not operating, the lane centering function does not operate.

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.

■ 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.



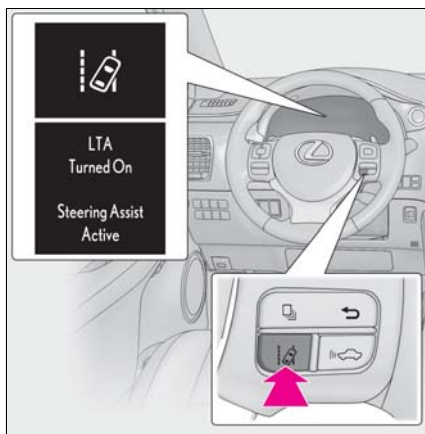
Turning LTA system on

Press the LTA switch to turn the LTA system on.

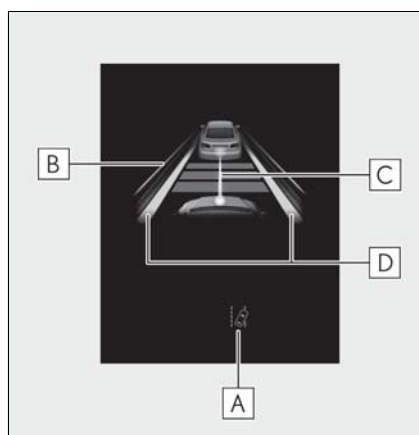
The LTA indicator illuminates and a message is displayed on the multi-information display.

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 assist system information screen.

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 Follow-up cruising display

Displayed when the multi-information display is switched to the driving assist system information screen.

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.

D Lane departure alert function display

Displayed when the multi-information display is switched to the driving assist system information screen.

► 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.

- LTA is turned on.
- Vehicle speed is approximately 32 mph (50 km/h) or more.^{*1}
- System recognizes white (yellow) lane lines or a course^{*2}. (When a white [yellow] line or course^{*2} is recognized on only one side, the system will operate only for the recognized side.)
- Width of traffic lane is approximately 9.8 ft. (3 m) or more.
- Turn signal lever is not operated.
- Vehicle is not being driven around a sharp curve.
- No system malfunctions are detected. (→P.213)

^{*1}: The function operates even if the vehicle speed is less than approximately 32 mph (50 km/h) when the lane centering function is operating.

^{*2}: 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 fol-

lowing 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.80)
- 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, TRAC and PCS are not operating.
- TRAC or VSC is not turned off.
- Hands off steering wheel warning is not displayed. (→P.213)

● 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.80)
- Vehicle speed is approximately 32 mph (50 km/h) or more.
- Width of traffic lane is approximately 9.8 ft. (3 m) or more.
- No system malfunctions are detected. (→P.213)

● Lane centering function

This function operates when all of the following conditions are met.

- LTA is turned on.
- Setting for "Steering Assist" and "Lane Center" in  of the multi-information display are set to "On". (→P.80)
- 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 10 to 13 ft. (3 to 4 m).
- Turn signal lever is not operated.
- Vehicle is not being driven around a sharp curve.
- No system malfunctions are detected.

(→P.213)

- 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, TRAC and PCS are not operating.
- TRAC or VSC is not turned off.
- Hands off steering wheel warning is not displayed. (→P.213)
- 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.211)

- If the operation conditions (→P.211) 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.

■ 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.
- 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.

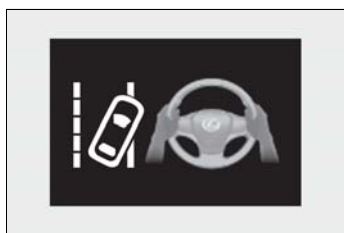
- If the edge of the course* is not clear or straight, the lane departure alert function may not operate.

- 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.

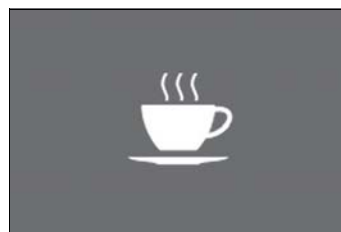
- When the system determines that the driver is driving without holding the steering wheel while the steering wheel assist of the steering assist function is operating.

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 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.425)

LDA (Lane Departure Alert with steering control)*

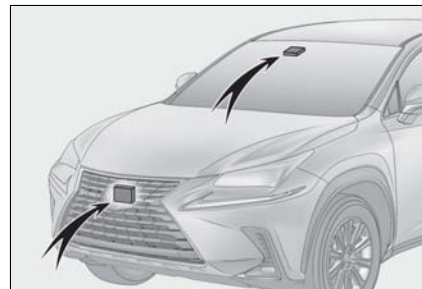
* : If equipped

Summary of functions

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.

- When your vehicle is towing a trailer or during emergency towing.

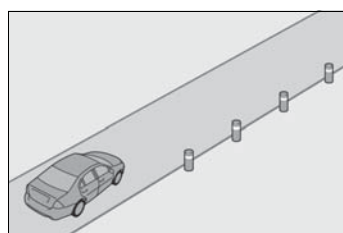
■ Preventing LDA system malfunctions and operations performed by mistake

- 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

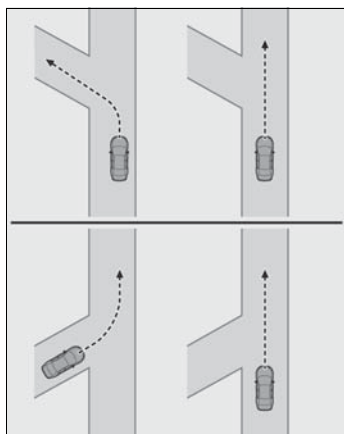
In the following situations, the functions may not operate properly and the vehicle may depart from its lane. Drive safely by always paying careful attention to your surroundings and operate the steering wheel to correct the path of the vehicle without relying solely on the functions.

- 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.).

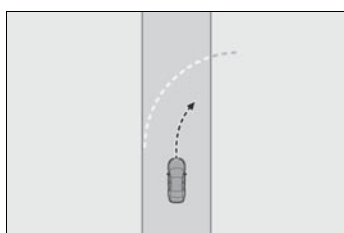


**WARNING**

- 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, "Botts' dots", "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.
- The vehicle is struck by a crosswind.

**WARNING**

- 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.

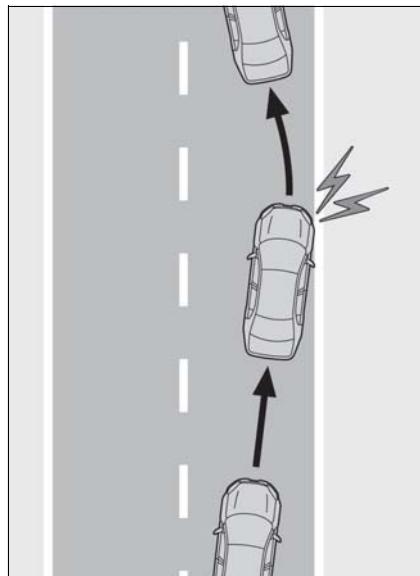
Functions included in LDA system

■ Lane departure alert function

When the system determines that the vehicle might depart from its lane or course^{*}, 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.

^{*}: Boundary between asphalt and the side of the road, such as grass, soil, or a curb

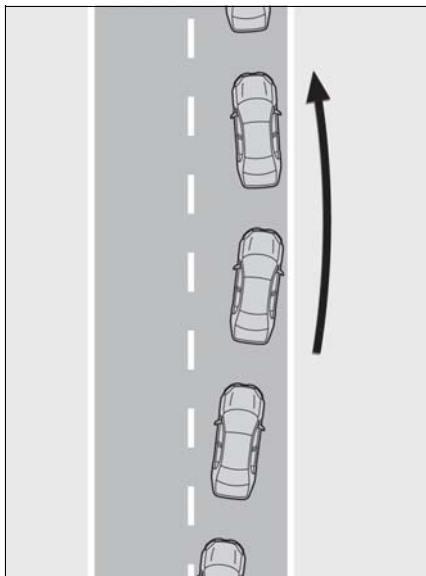


■ Steering assist function

When the system determines that the vehicle might depart from its lane or course^{*}, 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.

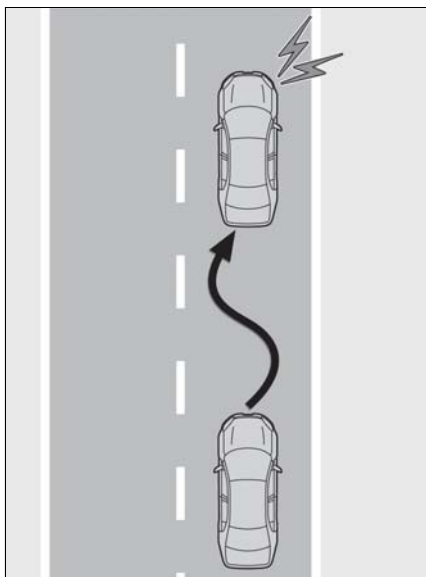
If the system detects that the steering wheel has not been operated for a fixed amount of time or the steering wheel is not being firmly gripped, a warning is displayed on the multi-information display and the function is temporarily canceled.

^{*}: 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.



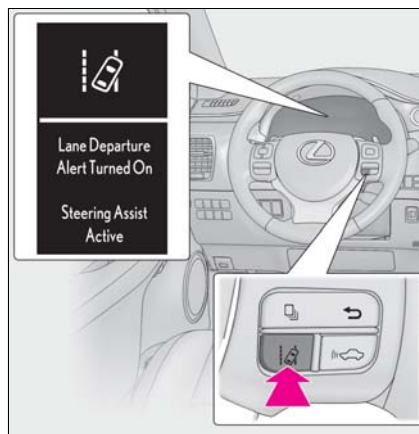
Turning LDA system on

Press the LDA switch to turn the LDA system on.

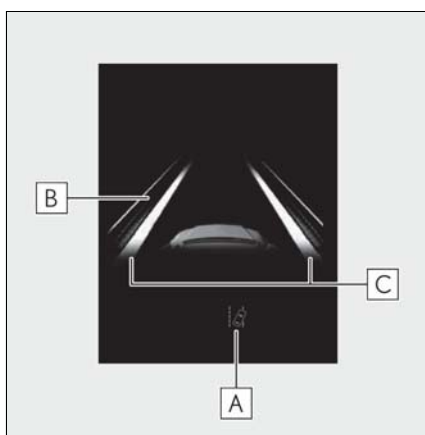
The LDA indicator illuminates and a message is displayed on the multi-information display.

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 operating.

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 assist system information screen.

Indicates that steering wheel assistance of the steering assist function is operating.

C Lane departure alert function display

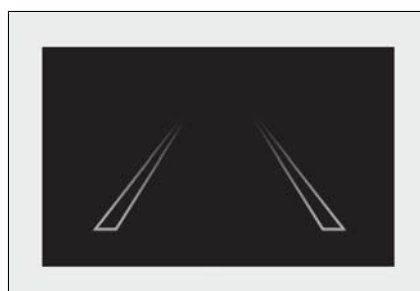
Displayed when the multi-information display is switched to the driving assist system information screen.

► 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 32 mph (50 km/h) 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 9.8 ft. (3 m) or more.
- Turn signal lever is not operated.
- Vehicle is not being driven around a sharp curve.
- No system malfunctions are detected. (→P.221)

* : 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.80)
- 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, TRAC and PCS are not operating.
- TRAC or VSC is not turned off.
- Hands off steering wheel warning is not displayed. (→P.220)

● 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.80)
- Vehicle speed is approximately 32 mph (50 km/h) or more.
- Width of traffic lane is approximately 9.8 ft. (3 m) or more.
- No system malfunctions are detected. (→P.221)

■ 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.219)

■ 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.

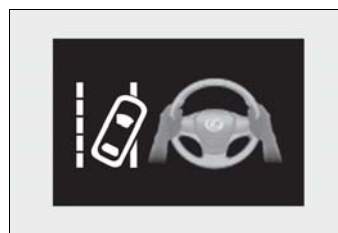
■ Lane departure alert function

- 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.
- 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 32 mph (50 km/h). Drive the vehicle at approximately 32 mph (50 km/h) or more.

■ Customization

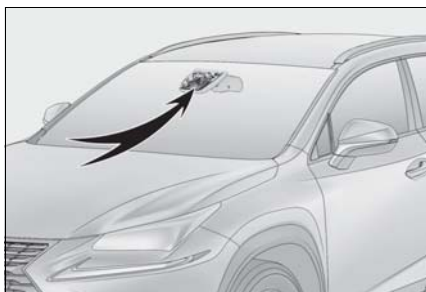
Function settings can be changed. (Customizable features: →P.425)

RSA (Road Sign Assist)*

*: If equipped

Summary of functions

The RSA system recognizes specific road signs using the front camera to provide information to the driver via the display.



If the system judges that the vehicle is being driven over the speed limit, performing prohibited actions, etc., according to the recognized road signs, it notifies the driver through a visual notification and notification buzzer.

⚠ WARNING**■ Before using the RSA**

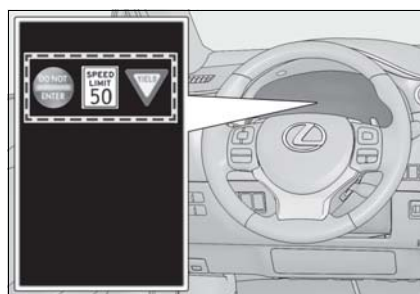
Do not rely solely upon the RSA system. RSA is a system which supports the driver by providing information, but it is not a replacement for a driver's own vision and awareness. Drive safely by always paying careful attention to the traffic rules.

Indication on the multi-information display

When the front camera recognizes a sign, the sign will be displayed on the

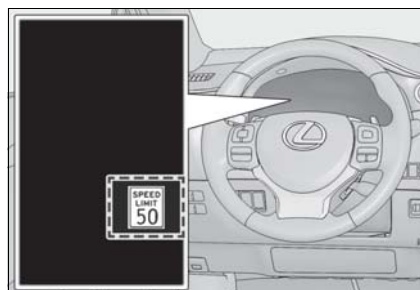
multi-information display.

- When the driving assist system information is selected, a maximum of 3 signs can be displayed. (→P.80)



- When a tab other than the driving assist system information is selected, the following types of road signs will be displayed.(→P.80)

- Speed limit sign
- Do Not Enter sign (when notification is necessary)



If signs other than speed limit signs are recognized, they will be displayed in an overlapping stack under the current speed limit sign.

Supported types of road signs

The following types of road signs, including electronic signs and blinking signs, are recognized.

A non-official or a recently introduced traffic sign may not be recognized.



: Speed limit



: Do Not Enter



: Stop



: Yield

Notification function

In the following situations, the RSA system will notify the driver.

- When the vehicle speed exceeds the speed notification threshold of the speed limit sign displayed, the sign display will be emphasized and a buzzer will sound.
- When the RSA system recognizes a do not enter sign and determines that your vehicle has entered a no-entry area, the displayed sign will flash and a buzzer will sound.

Depending on the situation, a notification function may not operate properly.

Setting procedure

- 1 Press or of the meter control switches and select

- 2 Press or of the meter control switches and select

- 3 Press or of the meter control switches, select the desired setting, and then press

Automatic turn-off of RSA sign display

In the following situations, a displayed speed limit sign and/or do not enter signs will stop being displayed automatically:

- No sign has been recognized for a certain distance.
- The road changes due to a left or right turn, etc.

In the following situations, stop and yield signs will stop being displayed automatically:

- The system determines that your vehicle has passed the sign.
- The road changes due to a left or right turn, etc.

Conditions in which the function may not operate or detect correctly

In the following situations, RSA does not operate normally and may not recognize signs, display the incorrect sign, etc. However, this does not indicate a malfunction.

- The front camera is misaligned due to a strong impact being applied to the sensor, etc.
- Dirt, snow, stickers, etc. are on the windshield near the front camera.
- In inclement weather such as heavy rain, fog, snow or sand storms
- Light from an oncoming vehicle, the sun, etc. enters the front camera.
- The sign is dirty, faded, tilted or bent.
- The contrast of electronic sign is low.
- All or part of the sign is hidden by the leaves of a tree, a pole, etc.
- The sign is only visible to the front camera for a short amount of time.

- The driving scene (turning, lane change, etc.) is judged incorrectly.
- If a sign not appropriate for the currently traveled lane, but the sign exists directly after a freeway branches, or in an adjacent lane just before merging.
- Stickers are attached to the rear of the preceding vehicle.
- A sign resembling a system compatible sign is recognized.
- Side road speed signs may be detected and displayed (if positioned in sight of the front camera) while the vehicle is traveling on the main road.
- Roundabout exit road speed signs may be detected and displayed (if positioned in sight of the front camera) while traveling on a roundabout.
- The front of the vehicle is raised or lowered due to the carried load.
- The surrounding brightness is not sufficient or changes suddenly.
- When a sign intended for trucks, etc. is recognized.
- The speed information displayed on the meter and on the navigation system may be different due to the navigation system using map data.

■ Speed limit sign display

If the engine switch was last turned off while a speed limit sign was displayed on the multi-information display, the same sign displays again when the engine switch is turned to IGNITION ON mode.

■ If "RSA malfunction Visit Your Dealer" is shown

The system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

■ Customization

Some functions can be customized. (Customizable features:→P.425)

Dynamic radar cruise control with full-speed range

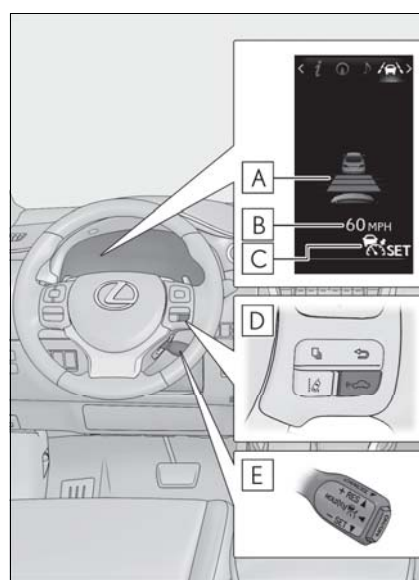
Summary of functions

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.227)
- Constant speed control mode (→P.231)

System Components



- A** Multi-information display
- B** Set speed
- C** Indicators
- D** Vehicle-to-vehicle distance switch
- E** Cruise control 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.232
- Conditions under which the vehicle-to-vehicle distance control mode may not function correctly: →P.233
- 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 "ON/OFF" button 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.

**WARNING**

- 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.

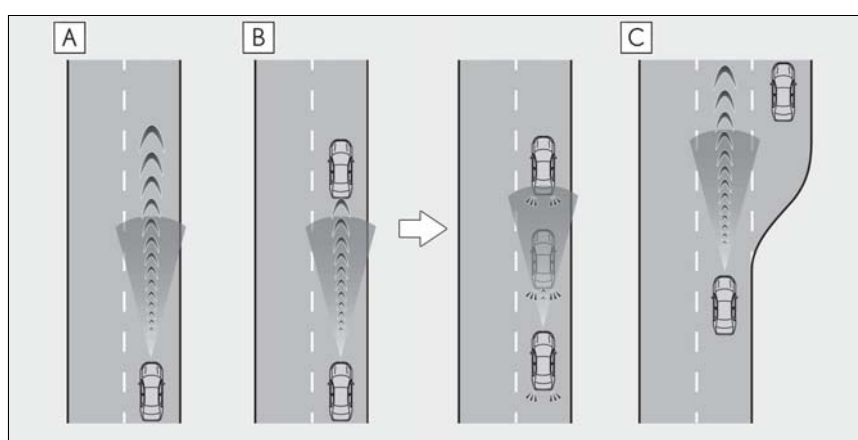
Doing so may result in inappropriate speed control and could cause an accident resulting in death or serious injury.

- 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
- 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
- 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
- When your vehicle is towing a trailer or 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 328 ft. (100 m) 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, pushing the cruise control lever up 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 an overtaking lane while driving at 50 mph (80 km/h) or more, the vehicle will accelerate to help to overtake a passing vehicle.

The system's identification of what is an overtaking lane may be determined solely based on the location of the steering wheel in the vehicle (left side driver position versus right side driver position.) If the vehicle is driven to a region where the overtaking lane is on a different side from where the vehicle is normally driven, the vehicle may accelerate when the turn signal lever is operated in the opposite direction to the overtaking lane (e.g., if the driver normally operates the vehicle in a region where the overtaking lane is to the right but then drives to a region where the overtaking lane is to the left, the vehicle may accelerate when the right turn signal is activated).

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.

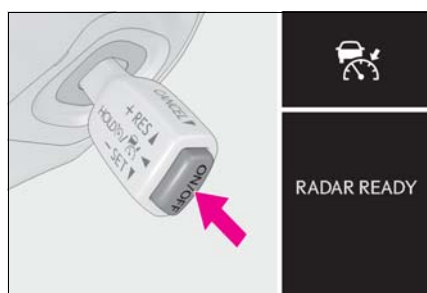
Setting the vehicle speed (vehicle-to-vehicle distance control mode)

- 1 Press the "ON/OFF" button 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 button again to deactivate the cruise control.

If the "ON/OFF" button is pressed and held for 1.5 seconds or more, the system turns on in constant speed control mode. (→P.231)

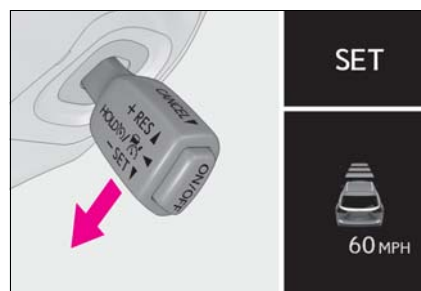


- 2 Accelerate or decelerate, with accelerator pedal operation, to the desired vehicle speed (at or above approximately 20 mph [30 km/h])

and push the lever down to set the speed.

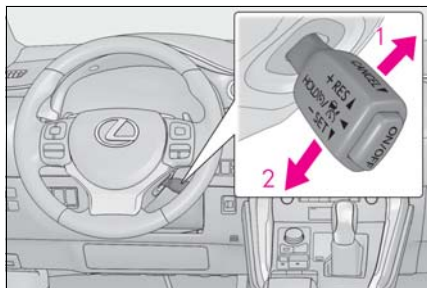
Cruise control "SET" indicator will come on.

The vehicle speed at the moment the lever is released becomes the set speed.



Adjusting the set speed

To change the set speed, operate the lever 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: Momentarily move the lever in the desired direction.

Large adjustment: Hold the lever up or down 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:

► For the U.S. mainland and Hawaii

Fine adjustment: By 1 mph (1.6 km/h)^{*1} or 1 km/h (0.6 mph)^{*2} each time the lever is operated

Large adjustment: Increases or decreases in 1 mph (1.6 km/h)^{*1} or 1 km/h (0.6 mph)^{*2} increments for as long as the lever is held

► For Canada, Guam and Puerto Rico

Fine adjustment: By 1 mph (1.6 km/h)^{*1} or 1 km/h (0.6 mph)^{*2} each time the lever is operated

Large adjustment: Increases or decreases in 5 mph (8 km/h)^{*1} or 5 km/h (3.1 mph)^{*2} increments for as long as the lever is held

In the constant speed control mode (→P.231), the set speed will be increased or decreased as follows:

Fine adjustment: By 1 mph (1.6 km/h)^{*1} or 1 km/h (0.6 mph)^{*2} each time the lever is operated

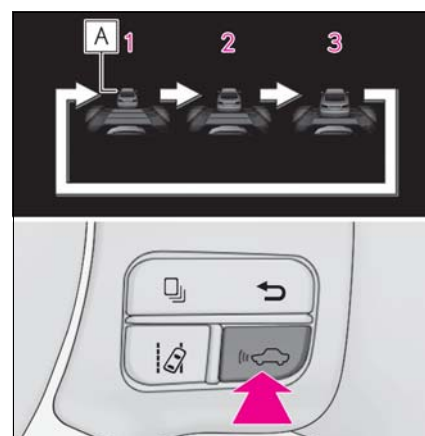
Large adjustment: The speed will continue to change while the lever is held.

^{*1}: When the set speed is shown in "MPH"

^{*2}: When the set speed is shown in "km/h"

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.

4

Driving

Vehicle-to-vehicle distance settings (vehicle-to-vehicle distance control mode)

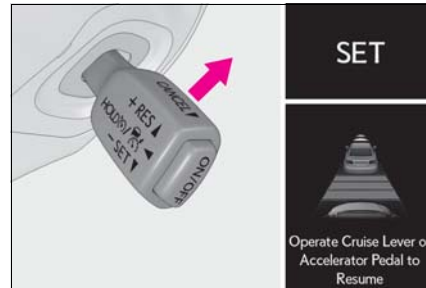
Select a distance from the table below. Note that the distances shown correspond to a vehicle speed of 50 mph (80 km/h). Vehicle-to-vehicle distance increases/decreases in accordance with vehicle speed. When the vehicle is stopped by system control, the vehicle stops at a certain vehicle-to-vehicle distance depending on the situation.

Distance options	Vehicle-to-vehicle distance
Long	Approximately 160 ft. (50 m)
Medium	Approximately 130 ft. (40 m)
Short	Approximately 100 ft. (30 m)

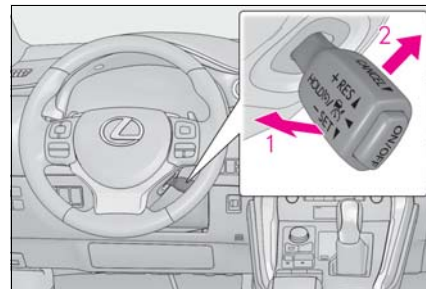
Resuming follow-up cruising when the vehicle has been stopped by system control (vehicle-to-vehicle distance control mode)

After the vehicle ahead of you starts off, push the lever up.

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 Pulling the lever toward you cancels the speed control.

The speed control is also canceled when the brake pedal is depressed.

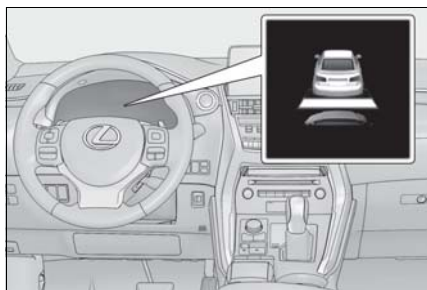
(When the vehicle has been stopped by system control, depressing the brake pedal does not cancel the setting.)

- 2 Pushing the lever up 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

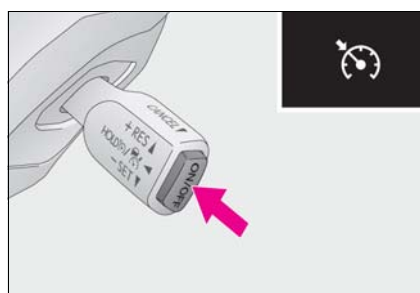
Selecting constant speed control mode

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 "ON/OFF" button for 1.5 seconds or more.

Immediately after the "ON/OFF" button 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 lever with the cruise control off.



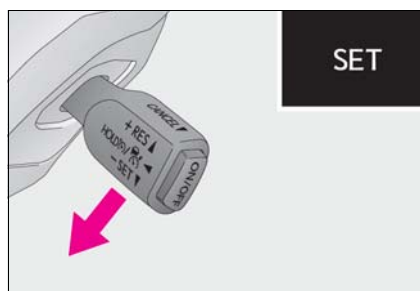
- 2 Accelerate or decelerate, with accelerator pedal operation, to the desired vehicle speed (at or above approximately 20 mph [30 km/h]) and push the lever down to set the speed.

Cruise control "SET" indicator will come on.

The vehicle speed at the moment the lever is released becomes the set speed.

Adjusting the speed setting: →P.228

Canceling and resuming the speed setting: →P.230



■ Dynamic radar cruise control with full-speed range can be set when

- The shift lever is in D.
- The desired set speed can be set when the vehicle speed is approximately 20 mph (30 km/h) or more. (However, when the vehicle speed is set while driving at below approximately 20 mph [30 km/h], the set speed will be set to approximately 20 mph [30 km/h].)

■ 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

- Pushing the lever up while the vehicle ahead stops will resume follow-up cruising if the vehicle ahead starts off within approximately 3 seconds after the lever is pushed up.
- 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.
- TRAC is activated for a period of time.
- When the VSC or TRAC system is turned off.
- 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 con-

trol:

- 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 10 mph (16 km/h) below the set vehicle speed.
- Actual vehicle speed falls below approximately 20 mph (30 km/h).
- VSC is activated.
- TRAC is activated for a period of time.
- When the VSC or TRAC 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 with full-speed range

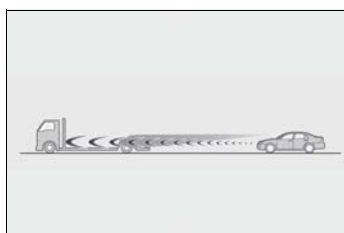
Warning messages and buzzers are used to indicate a system malfunction or to inform the driver of the need for caution while driving. If a warning message is shown on the multi-information display, read the message and follow the instructions. (→P.196, 382)

■ When the sensor may not be correctly detecting the vehicle ahead

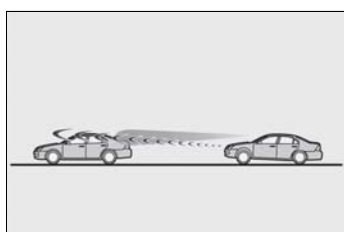
In the case of the following and depending on the conditions, operate the brake pedal when deceleration of the system is insufficient or operate the accelerator pedal

when acceleration is required.
As the sensor may not be able to correctly detect these types of vehicles, the approach warning (→P.230) may not be activated.

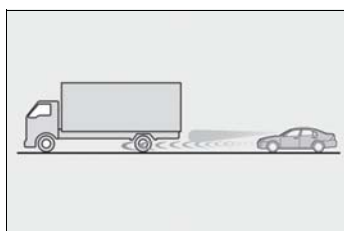
- Vehicles that cut in suddenly
- Vehicles traveling at low speeds
- Vehicles that are not moving in the same lane
- Vehicles with small rear ends (trailers with no load on board, etc.)



- 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

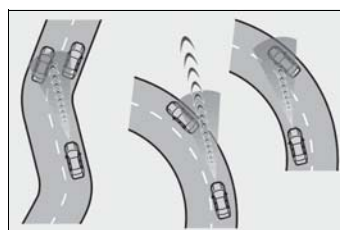


■ Conditions under which the vehicle-to-vehicle distance control mode may not function correctly

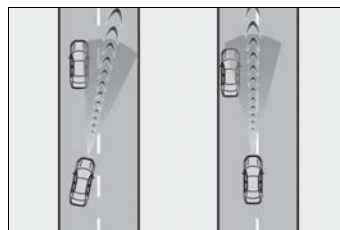
In the case of the following conditions, operate the brake pedal (or accelerator pedal, depending on the situation) as necessary.

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

PKSA (Parking Support Alert)*

*: If equipped

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 is high, a warning operates to urge the driver to take evasive action.

Each time the switch is pressed, the volume level change between 1, 2, and 3.

■ Muting buzzer

→P.236

PKSA (Parking Support Alert) system

■ Intuitive parking assist (if equipped)

Ultrasonic sensors are used to detect static objects in the detection area when driving at a low speed or backing up. (→P.235)

Setting the buzzer volume

■ Adjusting the buzzer volume

The buzzer volume can be adjusted on the multi-information display.

Use the meter control switches to change settings. (→P.80)

- 1 Press  or  to select .
- 2 Press  or  to select "PKSA" and then press .
- 3 Press  or  to select  and then press .

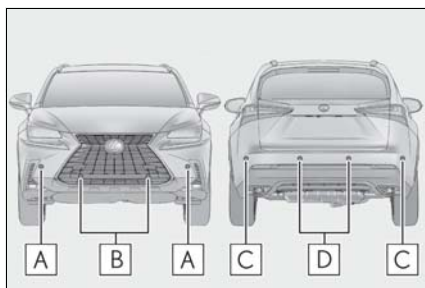
Intuitive parking assist*

*: If equipped

The distance from your vehicle to nearby obstacles when parallel parking or maneuvering into a garage is measured by the sensors and communicated via the displays and a buzzer. Always check the surrounding area when using this system.

System components

■ Types of sensors

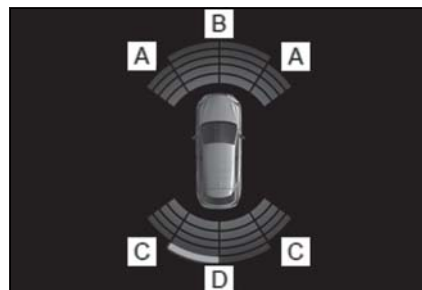


- A** Front corner sensors
- B** Front center sensors
- C** Rear corner sensors
- D** Rear center sensors

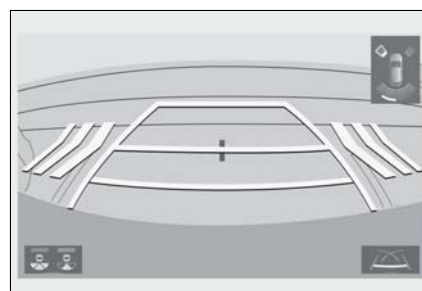
■ Display

When the sensors detect an obstacle, the following displays inform the driver of the position and distance to the obstacle.

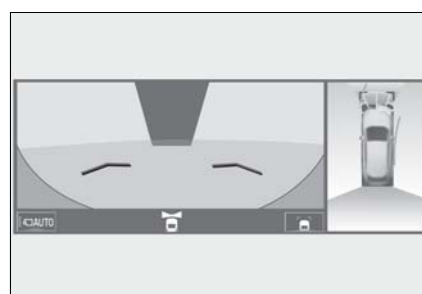
- Multi-information display



- A** Front corner sensor operation
- B** Front center sensor operation
- C** Rear corner sensor operation
- D** Rear center sensor operation
- Navigation or multimedia system
- Lexus parking assist monitor



- Panoramic view monitor



Turning intuitive parking assist on/off

Intuitive parking assist can be

enabled/disabled on the multi-information display as following:

- 1 Press or of meter control switches and select .
- 2 Press or of meter control switches and select "PKSA".
- 3 Press or of meter control switches, select , and then press to select the desired setting (on/off).

When ON (enable) is selected, the intuitive parking assist indicator comes on.

When switched to OFF (disable) and the intuitive parking assist is deactivated, the system will not reactivate if it is not switched to ON again from the screen of the multi-information display (Will not reactivate via engine switch operations).



■ The intuitive parking assist can be operated when

- The engine switch is in IGNITION ON mode.
- Intuitive parking assist function is on.
- The vehicle speed is less than about 6

mph (10 km/h).

- A shift position other than P is selected.

■ Setting the buzzer volume

The buzzer volume can be adjusted on the multi-information display. (→P.234)

■ Muting the buzzer sound

- To mute the buzzer sound
The buzzer can be temporarily muted by pressing of the meter control switches while an obstacle detection display is shown on the multi-information display.
- To cancel the mute
Mute will be automatically canceled in the following situations.
 - When the shift position is changed
 - When the vehicle speed has reached or exceeded approximately 6 mph (10 km/h) with the shift lever in D
 - When the intuitive parking assist is turned off once and turned on again
 - When the engine switch is turned off once and turned to IGNITION ON mode again
 - When a sensor is malfunctioning

■ Intuitive parking assist display

When an obstacle is detected while the intuitive parking assist monitor is in use, the warning indicator will appear in the upper corner of the screen even if the display setting has been set to off.

■ If "Parking Assist Unavailable" or "Parking Assist Unavailable Clean Parking Assist Sensor" is displayed on the multi-information display

A sensor may be dirty or covered with snow or ice. In such cases, if it is removed from the sensor, the system should return to normal.

Also, due to the sensor being frozen at low temperatures, a malfunction display may appear or an obstacle may not be detected. If the sensor thaws out, the system should return to normal.

■ If “Parking Assist Malfunction Visit Your Dealer” is displayed on the multi-information display

Depending on the malfunction of the sensor, the device may not be working normally. Have the vehicle inspected by your Lexus dealer.

■ Sensor detection information

- The sensor’s detection areas are limited to the areas around the vehicle’s bumper.
- Certain vehicle conditions and the surrounding environment may affect the ability of a sensor to correctly detect an obstacle. Particular instances where this may occur are listed below.
 - There is dirt, snow or ice on the sensor. (Wiping the sensors will resolve this problem.)
 - The sensor is frozen. (Thawing the area will resolve this problem.)
In especially cold weather, if a sensor is frozen the screen may show an abnormal display, or obstacles may not be detected.
 - The sensor is covered in any way.
 - The vehicle is leaning considerably to one side.
 - 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.
 - The sensor is coated with a sheet of spray or heavy rain.
 - The vehicle is equipped with a fender pole or wireless antenna.
 - Towing eyelets are installed.
 - The bumper or sensor receives a strong impact.
 - A backlit license plate, license plate holder, etc., are installed.
 - The vehicle is approaching a tall or curved curb.
 - In harsh sunlight or intense cold weather.
 - The area directly under the bumpers is not detected.
 - If obstacles draw too close to the sensor.
 - A non-genuine Lexus suspension (lowered suspension, etc.) is installed.

- People may not be detected if they are wearing certain types of clothing.

In addition to the examples above, there are instances in which, because of their shape, signs and other objects may be judged by a sensor to be closer than they are.

- The shape of the obstacle may prevent a sensor from detecting it. Pay particular attention to the following obstacles:

- Wires, fences, ropes, etc.
- Cotton, snow and other materials that absorb sound waves
- Sharply-angled objects
- Low obstacles
- Tall obstacles with upper sections projecting outwards in the direction of your vehicle

- The following situations may occur during use.

- Depending on the shape of the obstacle and other factors, the detection distance may shorten, or detection may be impossible.
- Obstacles may not be detected if they are too close to the sensor.
- There will be a short delay between obstacle detection and display. Even at slow speeds, there is a possibility that the obstacle will come within the sensor’s detection areas before the display is shown and the buzzer sounds.
- Thin posts or objects lower than the sensor may not be detected when approached, even if they have been detected once.
- It might be difficult to hear beeps due to the volume of audio system or air flow noise of the air conditioning system.

■ Customization

Some functions can be customized.
(Customizable features: →P.425)

**WARNING**

■ **When using the intuitive parking assist**

Observe the following precautions.

Failure 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 6 mph (10 km/h).
- 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.

**NOTICE**

■ **When using intuitive parking assist**

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 intuitive parking assist operation display flashes, and a buzzer sounds when no obstacles are detected.
- If the area around a sensor collides with something, or is subjected to strong impact.
- If the bumper collides with something.
- If the display shows continuously without beeping, except when the buzzer mute switch has been turned on.
- If a display error occurs, first check the sensor.
If the error occurs even if there is no ice, snow or mud on the sensor, it is likely that the sensor is malfunctioning.

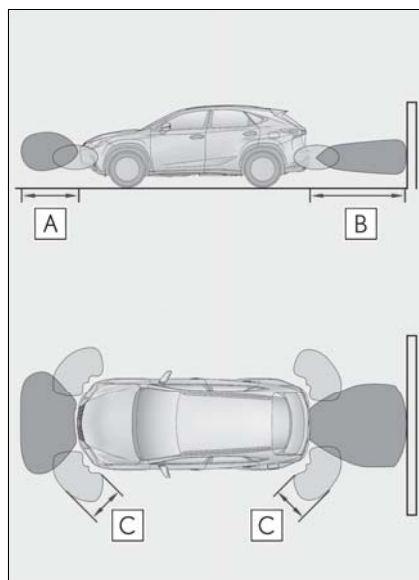
■ **Notes when washing the vehicle**

Do not apply intensive bursts of water or steam to the sensor area.

Doing so may result in the sensor malfunctioning.

Sensor detection display, obstacle distance

■ **Detection range of the sensors**



A Approximately 3.3 ft. (100 cm)

B Approximately 4.9 ft. (150 cm)

C Approximately 1.9 ft. (65 cm)

The diagram shows the detection range of the sensors. Note that the sensors cannot detect obstacles that are extremely close to the vehicle.

The range of the sensors may change depending on the shape of the object, etc.

■ **Distance display**

Sensors that detect an obstacle will illuminate continuously or blink.

Approximate distance to obstacle	Display ^{*1}
Rear center sensor: 4.9 ft. (150 cm) to 1.9 ft. (65 cm) ^{*2}	
Front center sensor: 3.3 ft. (100 cm) to 1.9 ft. (65 cm) ^{*2}	
1.9 ft. (65 cm) to 1.5 ft. (45 cm) ^{*2}	
1.5 ft. (45 cm) to 1.0 ft. (30 cm) ^{*2}	
1.0 ft. (30 cm) to 0.5 ft. (15 cm) ^{*3}	
Less than 0.5 ft. (15 cm) ^{*3}	

^{*1}: The images may differ from that shown in the illustrations. (→P.235)

^{*2}: Automatic buzzer mute function is enabled. (→P.239)

^{*3}: The distance segments will blink slowly.

■ Buzzer operation and distance to an obstacle

A buzzer sounds when the sensors are operating.

- The buzzer sounds faster as the vehicle approaches an obstacle. When the vehicle comes within the

approximately 1.2 ft. (35 cm) of the obstacle, the buzzer sounds continuously.

- When 2 or more obstacles are detected simultaneously, the buzzer system responds to the nearest obstacle. If one or both come within the above distances, the beep 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 1.0 ft. (30 cm) or less, this function will not operate.)

Parking Support Brake function (for static objects)*

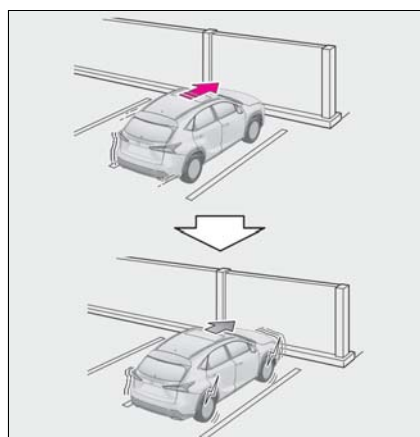
*: If equipped

When a collision may occur with a static object while parking or traveling at low speeds, when the vehicle suddenly moves forward due to mistaken accelerator pedal operation, or when the vehicle moves due to the shift lever being in the wrong position, the sensors detect static objects to the front or rear in the traveling direction of the vehicle, and the system operates to lessen impact with static objects such as walls, and reduce resulting damage.

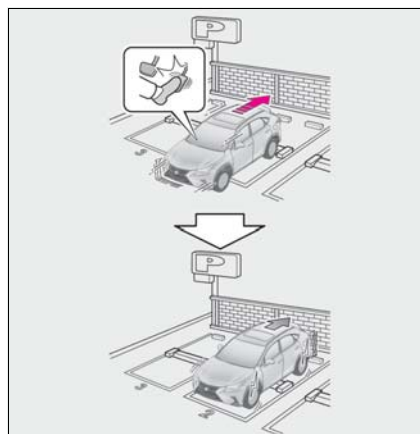
Examples of system operation

The system operates in the following situations when a static object is detected in the traveling direction of the vehicle.

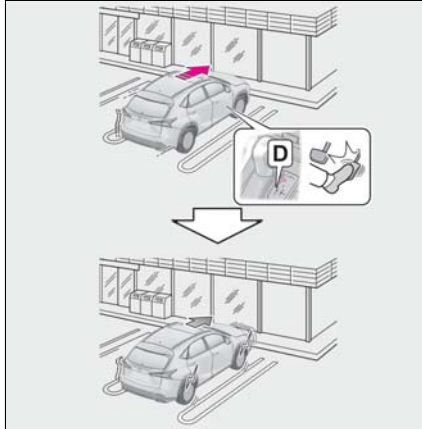
- The vehicle is driven at low speeds and the brake pedal is not depressed, or is depressed too late



- The accelerator pedal is depressed too far



- When the shift lever is mistakenly in D and the vehicle moves forward

**WARNING**

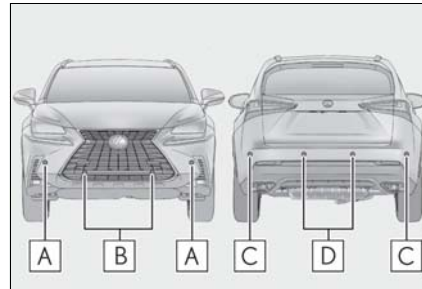
- For safe use

Do not rely solely upon the system. Relying solely upon the system may lead to an unexpected accident.

- Driving safely is the sole responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving. The Parking Support Brake function (for static objects) can provide support to lessen the severity of collisions. However, it may not operate depending on the situation.
- The Parking Support Brake function (for static objects) is not a system designed to completely stop the vehicle. Furthermore, even if the Parking Support Brake function (for static objects) is able to stop the vehicle, brake control is canceled after approximately 2 seconds, so depress the brake pedal immediately.

Sensor positions and types

- Sensor positions and types



A Front corner sensors

B Front center sensors

C Rear corner sensors

D Rear center sensors

**NOTICE**

- Preventing sensor malfunctions

- If the area around a sensor is subjected to an impact, equipment may not operate properly due to a sensor malfunction. Have the vehicle inspected by your Lexus dealer.
- When using a high-pressure washer to wash the vehicle, do not spray water directly on the sensors. The sensors may not function properly if subjected to an impact from strong water pressure.
- When using steam to wash the vehicle, do not direct steam too close to the sensors. The sensors may not function properly if subjected to steam.

Changing settings of the Parking Support Brake function (for static objects)

This system can be enabled/disabled on the multi-information display.

- 1 Press “<” or “>” of the meter control switches and select .
- 2 Press “^” or “v” of the meter control switches and select .
- 3 Press  on the meter control switches to enable/disable the system.
The PKSB OFF indicator comes on when the Parking Support Brake function is OFF (not operating).
When the Parking Support Brake func-

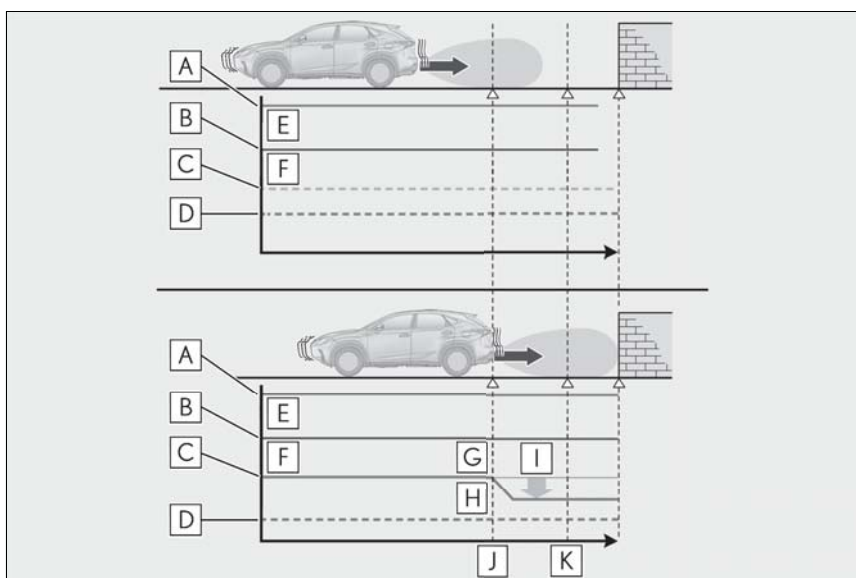
tion is switched OFF, system operation does not resume until the function is switched back ON through the settings screen on the multi-information display. (System operation does not resume by operating the engine switch.)



Operation

■ Engine output restraint control

When there is a static object, where a potential collision may occur, is detected, the increase of the vehicle speed is restrained due to engine output being controlled.

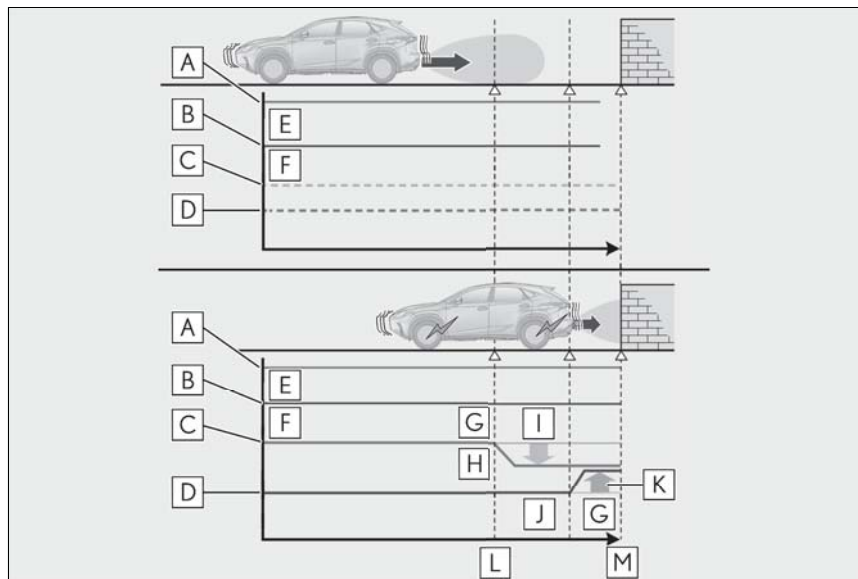


A Accelerator pedal

- B** Brake pedal
- C** Engine output
- D** Braking force
- E** ON
- F** OFF
- G** Control starts
- H** Collision is likely
- I** DOWN
- J** "BRAKE!" is displayed in the multi-information display
- K** "Switch to Brake" is displayed in the multi-information display

■ Brake Control

If the accelerator is continuously depressed even after the engine output is being controlled, the brakes are engaged and the vehicle decelerates.



- A** Accelerator pedal
- B** Brake pedal
- C** Engine output
- D** Braking force

- E** ON
- F** OFF
- G** Control starts
- H** Collision is likely
- I** DOWN
- J** Collision possibility is very high
- K** UP
- L** "BRAKE!" is displayed in the multi-information display
- M** "Switch to Brake" is displayed in the multi-information display

■ Operation starting conditions

When the PKSBB OFF indicator is not illuminated or flashing (→P.241, 376) and all of the following conditions are met, the system operates.

- Engine output restriction control
 - The Parking Support Brake function (for static objects) is on.
 - The vehicle speed is 10 mph (15 km/h) or less.
 - There is a static object in the traveling direction of the vehicle (6 to 13 ft. [2 to 4 m] ahead).
 - The system determined that a stronger than-normal brake operation was necessary to avoid a collision.
- Brake control
 - Engine output restriction control is being performed.
 - The system determined that an emergency brake operation was necessary to avoid a collision.

■ Operation ending conditions

In any of the following situations, the system stops operating.

- Engine output restriction control
 - The Parking Support Brake function (for static objects) has been turned off (stopped).
 - The collision became avoidable with normal brake operation.
 - The static object is no longer in the traveling direction of the vehicle (6 to 13 ft. [2

to 4 m] ahead).

- Brake control
 - The Parking Support Brake function (for static objects) has been turned off (stopped).
 - Approximately 2 seconds elapsed after the vehicle was stopped by brake control.
 - The brake pedal was depressed after the vehicle was stopped by brake control.
 - The static object is no longer in the traveling direction of the vehicle (6 to 13 ft. [2 to 4 m] ahead).

■ Sensor detection range

The detection range of the Parking Support Brake function (for static objects) differs from the detection range of the clearance sonar (→P.238).

Therefore, even if the clearance sonar detects a static object and provides a warning, the Parking Support Brake function (for static objects) may not start operating.

■ Static objects not detected by the sensors

The following static objects may not be detected by the sensors.

- Objects such as people, cloth and snow, that are difficult for sonic waves to reflect off of. (In particular, people may also not be detected depending on the type of clothing they are wearing.)
- Objects not perpendicular with the ground, objects not at a right angle to the traveling direction of the vehicle, uneven

objects or waving objects

- 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 (for static objects) may not operate**

When driving with the shift lever in N

■ **Situations when the system may operate even though there is no possibility of a collision**

In the following situations, the system may operate even though there is no possibility of a collision.

- Environmental influence
 - The vehicle is driven on a narrow road



- The vehicle is driven on a gravel road or in an area with tall grass



- The vehicle is driven toward a banner or flag, a low-hanging branch or a boom barrier (such as those used at railroad crossings, toll gates and parking lots).
- There is a static object on the shoulder of the road (when the vehicle is driven in a narrow tunnel, on a narrow bridge or on a

narrow road)

- The vehicle is being parallel parked
- There is a rut or hole in the surface of the road
- When the vehicle is driven on a metal cover (grating), such as those used for drainage ditches
- The vehicle is driven on a steep slope
- The sensor is covered by water on a flooded road
- Influence from the weather
 - Ice, snow, dirt, etc., has adhered to the sensor (if removed, the system returns to normal)
 - Heavy rain or water strikes the vehicle
 - In severe weather such as fog, snow or a sand storm

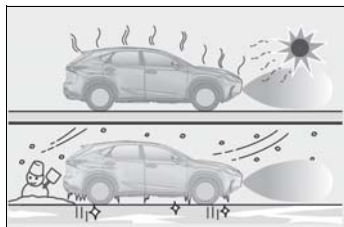
- Influence from other sonic waves
 - An ultrasonic wave source is nearby, such as the horn or clearance sonar of another vehicle, a vehicle detector, a motorcycle engine or the air brake of a large vehicle
 - Electronic components (such as a backlit license plate (especially fluorescent types), fog lights, a fender pole or a wireless antenna) are installed near the sensors

- Changes in the vehicle
 - The vehicle is tilted a large amount
 - The height of the vehicle has drastically changed due to the carried load (the nose tilts up or down)
 - The direction of the sensor has deviated due to a collision or other impact

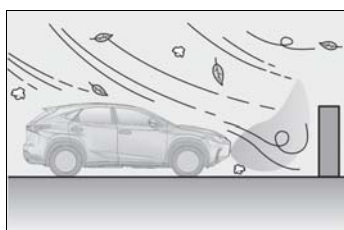
■ **Situations in which the system may not operate normally**

In the following situations, the system may not operate normally.

- Environmental influence
 - There is a static object that cannot be detected between the vehicle and another static object that can be detected
 - A static object such as another vehicle, a motorcycle, a bicycle or a pedestrian cuts in front of the vehicle or jumps out from the side.
- Influence from the weather
 - The area around the sensor is extremely hot or cold



- The vehicle is driven on a gravel road or in an area with tall grass



- Ice, snow, dirt, etc., has adhered to the sensor (if removed, the system returns to normal)
- Heavy rain or water strikes the vehicle
- In severe weather such as fog, snow or a sand storm
- Influence from other sonic waves
- An ultrasonic wave source is nearby, such as the horn or clearance sonar of another vehicle, a vehicle detector, a motorcycle engine or the air brake of a large vehicle
- Electronic components (such as a backlit license plate (especially fluorescent types), fog lights, a fender pole or a wireless antenna) are installed near the sensors
- Changes in the vehicle
- The vehicle is tilted a large amount
- The height of the vehicle has drastically changed due to the carried load (the nose tilts up or down)
- The direction of the sensor has deviated due to a collision or other impact
- **When “Parking Support Brake Unavailable” is displayed on the multi-information display and the PKSB OFF indicator flashes**
- Ice, snow, dirt, etc., may have adhered to the sensor. If this occurs, remove the ice, snow, dirt, etc., from the sensor to return the system to normal.

Also, a warning message may be displayed at low temperatures due to ice forming on the sensor, and the sensor may not detect static objects. Once the ice melts, the system will return to normal.

- If this message is shown even after removing dirt from the sensor, or shown when the sensor was not dirty to begin with, have the vehicle inspected by your Lexus dealer.
- System initialization may not have been performed after removal and installation of the battery. Perform system initialization.

■ When removing and installing the battery

The system needs to be initialized.

The system can be initialized by driving the vehicle straight ahead for 5 seconds or more at a speed of approximately 22 mph (35 km/h) or higher.

■ When “Parking Support Brake Malfunction Visit Your Dealer” is displayed on the multi-information display, the PKSB OFF indicator flashes and the buzzer sounds

The system may not be operating properly. Have the vehicle inspected by your Lexus dealer.

⚠ WARNING

■ In order for the system to operate properly

Make sure to observe the following precautions regarding the sensors (→P.238). Failure to observe these precautions may cause the sensors not to operate properly, and may result in an unexpected accident.

- Do not perform work such as modification, disassembly or painting
- Only perform replacements using genuine parts
- Do not subject the area around the sensors to any impacts

⚠ WARNING

- Do not damage the sensors, and always keep them clean

■ Handling the suspension

Do not modify the suspension, as changes to the height or incline of the vehicle may prevent the sensors from correctly detecting static objects, may cause the system not operate, or may cause the system to operate unnecessarily.

⚠ NOTICE

■ Preventing unnecessary operation

In the following situations, turn the Parking Support Brake function (for static objects) OFF. The system may operate even though there is no possibility of a collision.

- A chassis roller, chassis dynamo, free roller or similar equipment is being used for an inspection, etc.
- The vehicle is being loaded onto a ship, truck or other transport vessel
- The suspension has been lowered or tires that have a different size than the genuine tires are equipped
- The height of the vehicle has drastically changed due to the carried load (the nose tilts up or down).
- A towing hook is installed
- When using an automatic car wash

Display and buzzer for engine output restriction control and brake control

When the engine output restriction control or brake control operates, the buzzer sounds and a message is displayed on the multi-information display, head-up display and navigation/multimedia system screen to alert the driver.

Depending on the situation, output restriction control operates to either limit acceleration or restrict output as much as possible.

■ Engine output restriction control is operating (acceleration limitation control)

Situation	Acceleration at a certain speed or higher is not possible.
Multi-information display/Head-up display	"Object Detected Acceleration Reduced"
Navigation/multimedia system screen	—
PKSB OFF Indicator	Not illuminated
Buzzer	—

■ Engine output restriction control is operating (control to restrict output as much as possible)

Situation	A stronger than normal brake operation is necessary
Multi-information display/Head-up display	"BRAKE!"
Navigation/multimedia system screen	

PKSB OFF Indicator	Not illuminated
Buzzer	Short beep

■ Brake control is operating

Situation	Emergency braking is necessary
Multi-information display/Head-up display	"BRAKE!"
Navigation/multimedia system screen	
PKSB OFF Indicator	Not illuminated
Buzzer	Short beep

■ The vehicle is stopped by system operation

Situation	The vehicle is stopped after brake control operation
Multi-information display/Head-up display	"Switch to Brake"*
Navigation/multimedia system screen	"Press Brake Pedal"
PKSB OFF Indicator	Illuminated
Buzzer	Short beep

*: If the accelerator pedal is not depressed, "Press Brake Pedal" will be displayed.

■ 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 system operation, perform any of the following operations. At this time, the PKSB OFF indicator will turn off (→P.74)

- Turn the PKSB system on (→P.241)
- Turn the engine switch off, and then back to IGNITION ON mode
- Shift the shift lever to P
- Drive with no operation targets in the traveling direction of the vehicle
- Change the traveling direction of the vehicle

■ Lexus parking assist-sensor buzzer

Regardless of whether the Lexus parking assist-sensor buzzer is enabled or not (→P.235), if the Parking Support Brake function (static objects) is enabled (→P.241), 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.

■ In the unlikely event that the Parking Support Brake function (for static objects) mistakenly operates at a crossing or elsewhere

Even in the unlikely event that the Parking Support Brake function (for static objects) mistakenly operates at a crossing or elsewhere, brake control is canceled after approximately 2 seconds, allowing you to proceed forward and leave the area. Furthermore, brake control is also canceled

when the brake pedal is depressed.
Depressing the accelerator pedal again
allows you to proceed forward and leave
the area.

BSM (Blind Spot Monitor)*

*: If equipped

The Blind Spot Monitor uses the sensors installed behind the rear bumper. The system is intended to assist the driver check areas that are not easily visible. The system has the following two functions:

- The Blind Spot Monitor function

Assists the driver in making the decision when changing lanes

- The Rear Cross Traffic Alert function

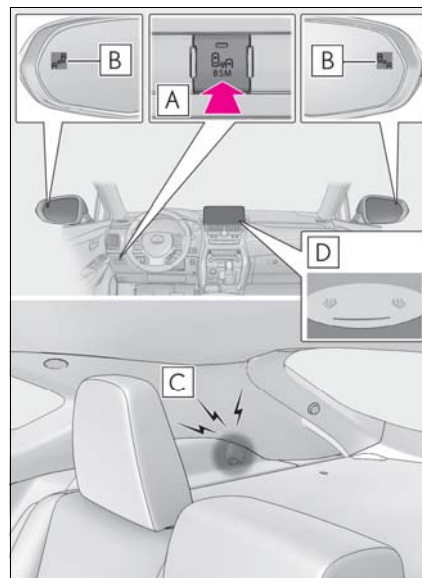
Assists the driver when backing up

These functions use the same sensors.

4

Driving

System components



A BSM main switch

Pressing the switch turns the system on or

off. When the switch is set to on, the switch's indicator illuminates and the buzzer sounds. This switch is for both Blind Spot Monitor function and Rear Cross Traffic Alert function.

B BSM outside rear view mirror indicators

Blind Spot Monitor function:

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 will flash.

Rear Cross Traffic Alert function:

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 Rear Cross Traffic Alert buzzer (Rear Cross Traffic Alert function only)

When a vehicle approaching from the right or left rear of the vehicle is detected, a buzzer sounds from behind the right-hand rear seat.

D Navigation/multimedia system screen (Rear Cross Traffic Alert function only)

If a vehicle approaching from the right or left at the rear of the vehicle is detected, the Rear Cross Traffic Alert icon (→P.254) for the detected side will be displayed.

■ The BSM outside rear view mirror indicators visibility

When under strong sunlight, the BSM outside rear view mirror indicator may be difficult to see.

■ Rear Cross Traffic Alert buzzer hearing

Rear Cross Traffic Alert function may be difficult to hear over loud noises such as high audio volume.

■ When "Blind Spot Monitor Unavailable" is shown on the multi-information display

Water, snow mud, etc., may be built up in the vicinity of the sensor area of bumper. (→P.252) Removing the water, snow, mud, etc., from the vicinity of the sensor area bumper should return it to normal. Also, the sensor may not function normally when used in extremely hot or cold weather.

■ When "Blind Spot Monitor System Malfunction Visit Your Dealer" is shown on the multi-information display

There may be a sensor malfunction or voltage abnormality. Have the vehicle inspected at a Lexus dealer.

■ Certification for the Blind Spot Monitor system

► For vehicles sold in the U.S.A.

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 Canada

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Radiofrequency radiation exposure information:

This equipment complies with radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Informations sur l'exposition aux rayonnements radiofréquences:

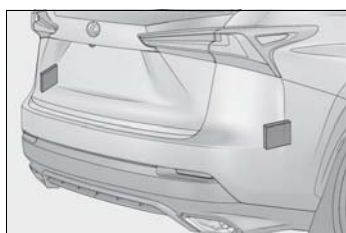
Cet équipement est conforme aux limites d'exposition aux rayonnements définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

**WARNING**

■ **Handling the radar sensor**

One Blind Spot Monitor sensor is installed inside the left and right side of the vehicle rear bumper respectively. Observe the following to ensure the Blind Spot Monitor system can function correctly.

- Keep the sensor and its surrounding area on the bumper clean at all times.



- Do not subject the sensor or surrounding area on the bumper to a strong impact. If the sensor moves even slightly off position, the system may malfunction and vehicles that enter the detection area may not be detected. If the sensor or surrounding area is subject to a strong impact, always have the area inspected by your Lexus dealer.
- Do not disassemble the sensor.
- Do not attach accessories or stickers to the sensor or surrounding area on the bumper.
- Do not modify the sensor or surrounding area on the bumper.
- Do not paint the rear bumper any color other than an official Lexus color.
- If the radar sensor needs to be replaced, contact your Lexus dealer.

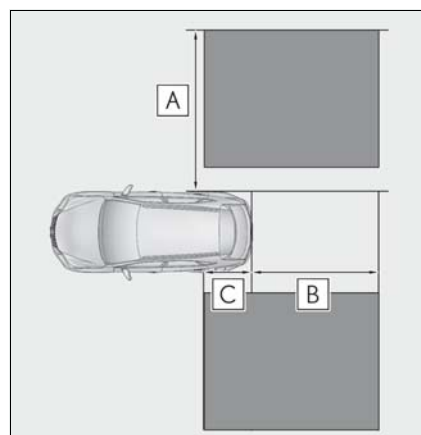
The Blind Spot Monitor function

The Blind Spot Monitor function uses radar sensors to detect vehicles that are traveling in an adjacent lane in the area that is not reflected in the outside

rear view mirror (the blind spot), and advises the driver of the vehicles existence via the BSM outside rear view mirror indicator.

■ **The Blind Spot Monitor function detection areas**

The areas that vehicles can be detected in are outlined below.



The range of the detection area extends to:

- A** Approximately 11.5 ft. (3.5 m) from the side of the vehicle

The first 1.6 ft. (0.5 m) from the side of the vehicle is not in the detection area

- B** Approximately 9.8 ft. (3 m) from the rear bumper

- C** Approximately 3.3 ft. (1 m) forward of the rear bumper

■ **The Blind Spot Monitor function is operational when**

- The BSM main switch is set to on
- Vehicle speed is greater than approximately 10 mph (16 km/h).

■ **The Blind Spot Monitor function will detect a vehicle when**

- A vehicle in an adjacent lane overtakes

your vehicle.

- Another vehicle enters the detection area when it changes lanes.
- You overtake a vehicle in adjacent lane slowly.

■ **Conditions under which the Blind Spot Monitor function will not detect a vehicle**

The Blind Spot Monitor function 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 driving 2 lanes across from your vehicle*
- Vehicles which are being overtaken rapidly by your vehicle*

*: Depending on conditions, detection of a vehicle and/or object may occur.

■ **Conditions under which the Blind Spot Monitor function may not function correctly**

- The Blind Spot Monitor function 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 towing a trailer (vehicles with towing package)
- When items such as a bicycle carrier are installed on 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 function is turned on
- Instances of the Blind Spot Monitor function 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 a bicycle carrier or other accessory is installed to the rear of the vehicle
 - When towing a trailer (vehicles with towing package)

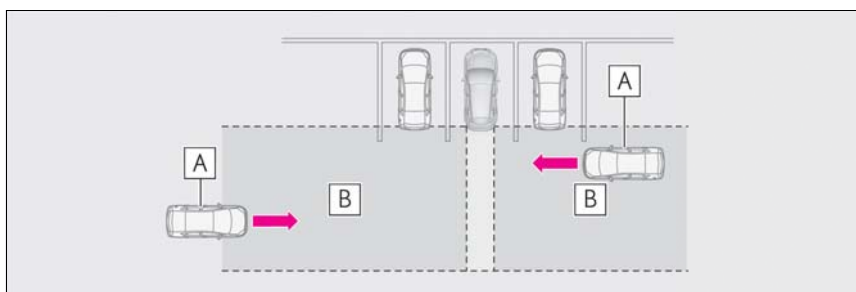
**WARNING**

■ **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 function is a supplementary function which alerts the driver that a vehicle is present in the blind spot. Do not overly rely on the Blind Spot Monitor function. The function cannot judge if it is safe to change lanes, therefore over reliance could cause an accident resulting in death or serious injury. According to conditions, the system may not function correctly. Therefore the driver's own visual confirmation of safety is necessary.

The Rear Cross Traffic Alert function

The Rear Cross Traffic Alert function operates when your vehicle is in reverse. It can detect other vehicles approaching from the right or left rear of the vehicle. It uses radar sensors to alert the driver of the other vehicle's existence through flashing the BSM outside rear view mirror indicators and sounding a buzzer.



A Approaching vehicles

B Detection areas

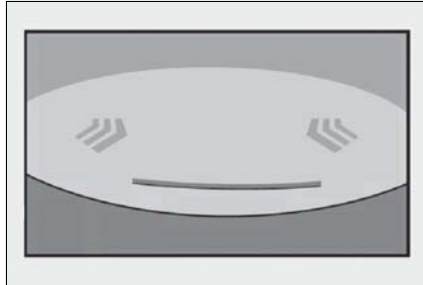
■ **Rear Cross Traffic Alert icon display (if equipped)**

When a vehicle approaching from the right or left at the rear of the vehicle is detected, the following will be displayed on the navigation/multimedia

system screen.

► Lexus parking assist monitor

A vehicle is approaching from the left or right at the rear of the vehicle

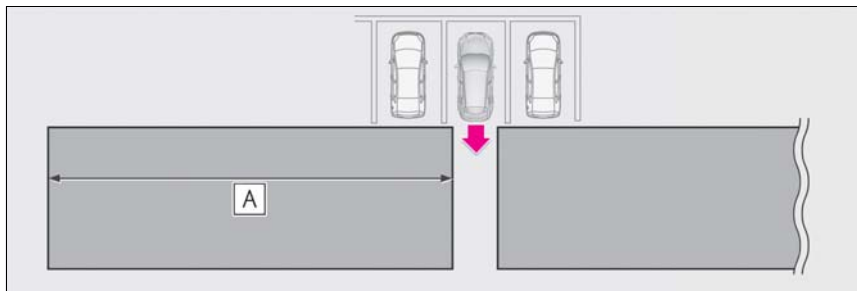


► Panoramic view monitor

A vehicle is approaching from the left

■ **The Rear Cross Traffic Alert function detection areas**

The areas that vehicles can be detected in are outlined below.



To give the driver a more consistent time to react, the buzzer can alert for faster vehicles from farther away.

Example:

Approaching vehicle	Speed	A Approximate alert distance
Fast	18 mph (28 km/h)	65 ft. (20 m)
Slow	5 mph (8 km/h)	18 ft. (5.5 m)

■ **The Rear Cross Traffic Alert function is operational when**

- The BSM main switch is set to on.
- The shift lever is in R.

or right at the rear of the vehicle



- Vehicle speed is less than approximately 5 mph (8 km/h).
- Approaching vehicle speed is between approximately 5 mph (8 km/h) and 18 mph (28 km/h).

■ **Conditions under which the Rear Cross Traffic Alert function will not detect a vehicle**

The Rear Cross Traffic Alert function is not designed to detect the following types of vehicles and/or objects.

- Small motorcycles, bicycles, pedestrians, etc.*
- Vehicles approaching from directly behind*
- Guardrails, walls, signs, parked vehicles and similar stationary objects*
- Vehicles moving away from your vehicle
- Vehicles approaching from the parking

spaces next to your vehicle *

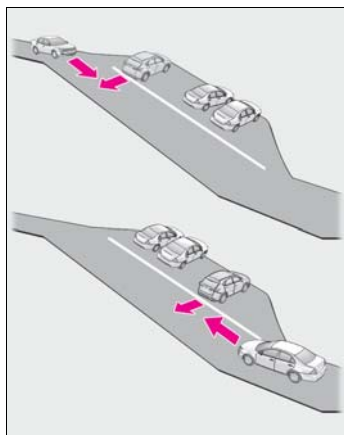
- Vehicles backing up in the parking space next to your vehicle *

* : Depending on conditions, detection of a vehicle and/or object may occur.

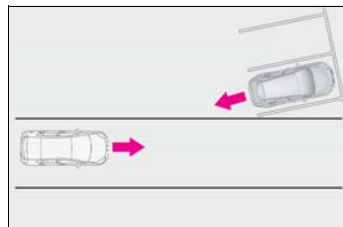
■ Conditions under which the Rear Cross Traffic Alert function may not function correctly

The Rear Cross Traffic Alert function may not detect vehicles correctly in the following conditions:

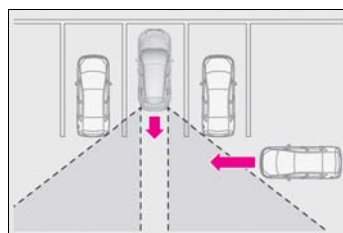
- During bad weather such as heavy rain, fog, snow, etc.
- When ice or mud, etc., is attached to the rear bumper
- When multiple vehicles approach continuously
- Shallow angle parking
- When a vehicle is approaching at high speed
- When backing up on a slope with a sharp change in grade



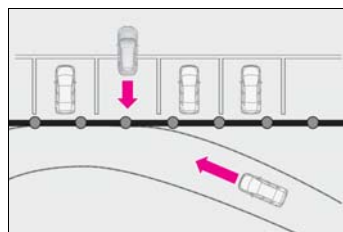
- When backing out of a sharp angle parking spot



- When parking on a steep incline, such as hills, a dip in the road, etc.
- Directly after the BSM main switch is set to on
- Directly after the engine is started with the BSM main switch on
- Vehicles that the sensors cannot detect because of obstacles



- Instances of the Rear Cross Traffic Alert 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

! WARNING**■ Cautions regarding the use of the system**

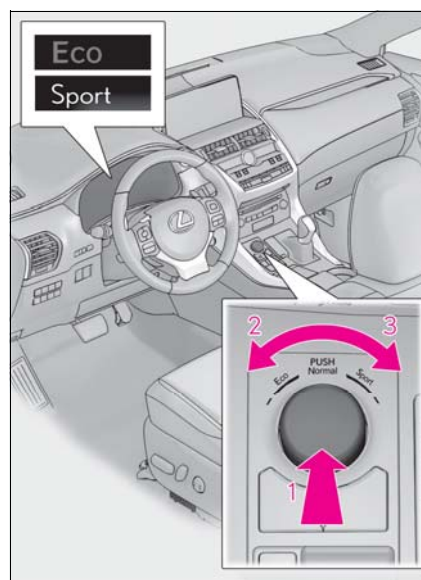
The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings. The Rear Cross Traffic Alert function is only an assist and is not a replacement for careful driving. Driver must be careful when backing up, even when using Rear Cross Traffic Alert function. The driver's own visual confirmation of behind you and your vehicle is necessary and be sure there are no pedestrians, other vehicles, etc., before backing up. Failure to do so could cause death or serious injury. According to conditions, the system may not function correctly. Therefore the driver's own visual confirmation of safety is necessary.

Driving mode select switch

The driving modes can be selected to suit driving condition.

Selecting a driving mode

- Vehicles without Adaptive Variable Suspension System

**1 Normal mode**

For normal driving.

Press the switch to change the driving mode to Normal mode when selected to Eco mode or Sport mode.

2 Eco mode

In contrast to Normal mode when stepping on the accelerator pedal, torque generation becomes slower, air conditioning operations (heating/cooling) are restrained, and driving is suited for improved fuel consumption.

When not in Eco mode and the driving mode select switch is turned to the left,

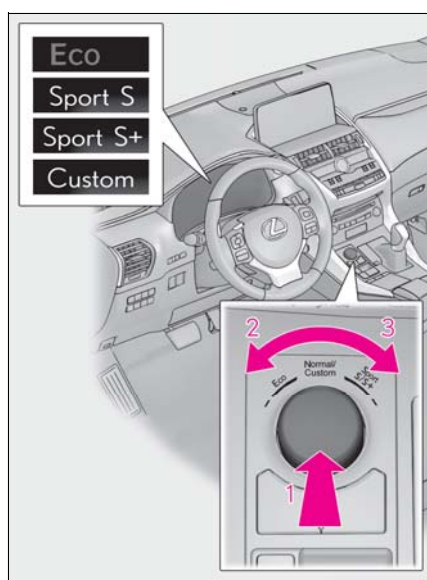
"Eco" indicator will be shown on the multi-information display.

3 Sport mode

Assists acceleration response by controlling the engine, transmission and steering. Suitable for when precise handling is desirable, for example when driving on mountain roads.

When not in Sport mode and the driving mode select switch is turned to the right, "Sport" indicator will be shown on the multi-information display.

► Vehicles with Adaptive Variable Suspension System



1 Normal/Custom mode

Press the switch and select Normal mode or Custom mode. Each time the switch is pressed, the system changes between Normal mode and Custom mode. When Custom mode is selected, the "Custom" indicator comes on.

When in Eco mode or Sport mode, when the switch is pressed, the system returns to Normal mode. Press the switch to change the driving mode to Normal mode when

selected to Eco mode or Sport mode.

Custom mode can be setup on the navigation system or multimedia system screen.

• Normal mode

Suitable when driving in the city, for good fuel consumption efficiency, silence, and drive-ability.

• Custom mode

Driving is possible by setting the desired function for power train control, chassis control or air conditioning operations.

Custom mode settings can only be changed using the Remote Touch. (→P.272)

2 Eco mode

In contrast to Normal mode when stepping on the accelerator pedal, torque generation becomes slower, air conditioning operations (heating/cooling) are restrained, and driving is suited for improved fuel consumption.

When not in Eco mode and the driving mode select switch is turned to the left, "Eco" indicator will be shown on the multi-information display.

3 Sport mode

• Sport S mode

Assists acceleration response by controlling the engine and transmission. Suitable for when powerful acceleration is desirable.

When not in Sport S mode and the driving mode select switch is turned to the right, "Sport S" indicator will be shown on the multi-information display.

• Sport S+ mode

Helps to ensure superior vehicle stability by simultaneously controlling the steering and suspension in addition to the engine and transmission. Suitable for sporty driving.

When in Sport S mode and the driving mode select switch is turned to the right,

"Sport S+" indicator will be shown on the multi-information display.

■ Operation of the air conditioning system in Eco mode

Eco mode controls the heating/cooling operations and fan speed of the air conditioning system to enhance fuel efficiency. To improve air conditioning performance, adjust the fan speed or turn off Eco mode.

■ When canceling Eco mode/Sport mode

- Select another driving mode. Also, Sport mode will be canceled automatically when the engine switch is turned off.
- Normal mode and Eco mode will not be canceled automatically until another driving mode is selected, even if the engine switch is turned off.

■ Operating the ASC (Active Sound Control)

If the ASC is ON, an electronic sound plays when the Sport S+ mode is selected.

■ Customization

The Custom mode can be changed. (Customizable features: →P.425)

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

■ 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.

■ Enhanced VSC (Enhanced Vehicle Stability Control)

Provides cooperative control of the ABS, TRAC, VSC and EPS.
Helps to maintain directional stability when swerving on slippery road surfaces by controlling steering performance.

■ Trailer Sway Control

Helps the driver to control trailer sway by selectively applying brake pressure for individual wheels and reducing driving torque when trailer sway is detected.

■ TRAC (Traction Control)

Helps to maintain drive power and prevent the drive wheels from spinning when starting the vehicle or accelerating on slippery roads

■ Active Cornering Assist (ACA)

Helps to prevent the vehicle from drifting to the outer side by performing inner wheel brake control when attempting to accelerate while turning

■ Hill-start assist control

Helps to reduce the backward movement of the vehicle when starting on an uphill

■ EPS (Electric Power Steering)

Employs an electric motor to reduce the amount of effort needed to turn the steering wheel

■ Dynamic Torque Control AWD system (if equipped)

Automatically switches from front-wheel drive to all-wheel drive (AWD) according to the driving conditions, helping to ensure reliable handling and stability. Examples of conditions where the system will switch to AWD are when cornering, going uphill, starting off or accelerating, and when the road surface is slippery due to snow, rain, etc.

■ 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. If Sport S+ mode is selected using the driving mode select switch, the damping force will become more suitable for sporty driving. (→P.257)

■ PCS (Pre-Collision System)

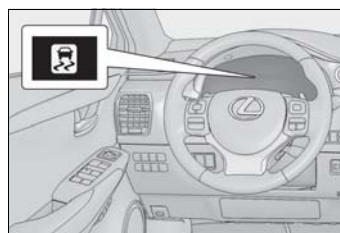
→P.198

■ BSM (Blind Spot Monitor) (if equipped)

→P.249

■ When the TRAC/VSC/Trailer Sway Control systems are operating

The slip indicator light will flash while the TRAC/VSC/Trailer Sway Control systems are operating.

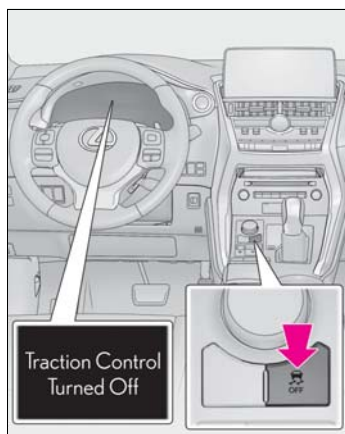


■ Disabling the TRAC system

If the vehicle gets stuck in mud, dirt or snow, the TRAC system may reduce power from the engine to the wheels. Pressing  to turn the system off may make it easier for you to rock the vehicle in order to free it. To turn the TRAC system off, quickly press and release .

The "Traction Control Turned Off" will be shown on the multi-information display.

Press  again to turn the system back on.



■ Turning off both TRAC, VSC and Trailer Sway Control systems

To turn the TRAC, VSC and Trailer Sway Control systems off, press and hold  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  again to turn the system back on.

*: On vehicles with pre-collision system, pre-collision brake assist and pre-collision braking will also be disabled. The PCS warning light will come on and the message will be shown on the multi-information display. (→P.204)

■ When the message is displayed on the multi-information display showing that TRAC has been disabled even if has not been pressed

TRAC is temporary deactivated. If the information continues to show, contact your Lexus dealer.

■ Sounds and vibrations caused by the ABS, brake assist, VSC, Trailer Sway Control, TRAC and hill-start assist control 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.
 - The brake pedal may pulsate slightly after the ABS is activated.
 - The brake pedal may move down slightly after the ABS is activated.

■ Active Cornering Assist operation sounds and vibrations

When the Active Cornering Assist is operated, operation sounds and vibrations may be generated from the brake system, but this is not a malfunction.

■ EPS operation sound

When the steering wheel is operated, a motor sound (whirring sound) may be heard. This does not indicate a malfunction.

■ Reduced effectiveness of the EPS system

The effectiveness of the EPS system is reduced to prevent the system from overheating 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.

■ Automatic reactivation of TRAC, Trailer Sway Control and VSC systems

After turning the TRAC, Trailer Sway Control 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 TRAC system is turned off, the TRAC will turn on when vehicle speed increases
If both the TRAC and VSC systems are turned off, automatic re-enabling will not occur when vehicle speed increases.

■ Operating conditions of Active Cornering Assist

The system operates when the following occurs.

- TRAC/VSC can operate
- The driver is attempting to accelerate while turning
- The system detects that the vehicle is drifting to the outer side
- The brake pedal is released

■ Operating conditions of hill-start assist control

When the following four conditions are met, the hill-start assist control will operate:

- The shift lever is in a position other than P or N (when starting off forward/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:

- The shift lever is shifted 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



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

■ TRAC/VSC may not operate effectively when

Directional control and power may not be achievable while driving on slippery road surfaces, even if the TRAC/VSC system is operating. Drive the vehicle carefully in conditions where stability and power may be lost.

■ Active Cornering Assist does not operate effectively when

- Do not overly rely on Active Cornering Assist. Active Cornering Assist may not operate effectively when accelerating down slopes or driving on slippery road surfaces.
- When Active Cornering Assist frequently operates, Active Cornering Assist may temporarily stop operating to ensure proper operation of the brakes, TRAC and VSC.

■ 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.

**WARNING**

- 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 TRAC/VSC/Trailer Sway Control is activated**

The slip indicator light flashes. Always drive carefully. Reckless driving may cause an accident. Exercise particular care when the indicator light flashes.

■ **When the TRAC/VSC/Trailer Sway Control 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 TRAC/VSC/Trailer Sway Control systems off unless necessary. Trailer Sway Control is part of the VSC system and will not operate if VSC is turned off or experiences a malfunction.

■ **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, TRAC, Trailer Sway Control 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.

■ **Trailer Sway Control precaution**

The Trailer Sway Control system is not able to reduce trailer sway in all situations. Depending on many factors such as the conditions of the vehicle, trailer, road surface and driving environment, the Trailer Sway Control system may not be effective. Refer to your trailer owner's manual for information on how to tow your trailer properly.

■ **If trailer sway occurs**

Observe the following precautions.

Failing to do so may cause death or serious injury.

- Firmly grip the steering wheel. Steer straight ahead. Do not try to control trailer sway by turning the steering wheel.
- Begin releasing the accelerator pedal immediately but very gradually to reduce speed. Do not increase speed. Do not apply vehicle brakes.

If you make no extreme correction with the steering or brakes, your vehicle and trailer should stabilize. (→P.260)

All-wheel drive lock switch (AWD models)

All-wheel drive lock mode can be used when a large amount of drive power needs to be applied to all the wheels, such as when the vehicle gets stuck in mud and you need to free it.

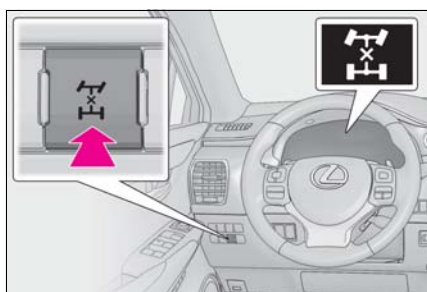
when the vehicle speed exceeds 25 mph (40 km/h).

Using All-wheel drive lock mode

Press the switch.

The torque of the engine is distributed to the rear wheels to the maximum extent possible in accordance with driving conditions.

Pressing the switch again cancels all-wheel drive lock mode and returns the Dynamic Torque Control AWD system to normal mode. (→P.260)



■ All-wheel drive lock mode can be operated when

The engine switch is in IGNITION ON mode.

■ Automatic release for the all-wheel drive lock mode

- All-wheel drive lock mode is canceled when the brakes are applied to ensure the ABS and VSC systems operate effectively.
- All-wheel drive lock mode is canceled

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 front tires*.

Ensure that all tires are the same size and brand, and that chains match the size of the tires.

* : Tire chains cannot be mounted on the 225/60R18 tires.
Snow tires should be used instead.

! 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 in excess of 75 mph (120 km/h), regardless of the type of snow tires being used.

- Use snow tires on all, not just some wheels.

■ 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 30 mph (50 km/h), 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 LDA (Lane Departure Alert with steering control) (if equipped).
- Do not use LTA (Lane Tracing Assist) (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 move the shift lever 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.

When the parking brake is in automatic mode, release the parking brake after shifting the shift lever to P. (→P.171)

- If the vehicle is left parked with the brakes damp in cold temperatures, there is a possibility of the brakes freezing.
- If the vehicle is parked without setting the parking brake, confirm that the shift lever cannot be moved out of P*.

*: The shift lever will be locked if it is attempted to be shifted from P to any other position without depressing the brake pedal. If the shift lever can be shifted from P, there may be a problem with the shift lock system. Have the vehicle inspected by your Lexus dealer immediately.



WARNING

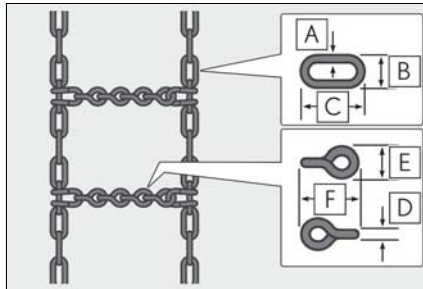
When parking the vehicle

When parking the vehicle without applying the parking brake, make sure to chock the wheels. If you do not chock the wheels, the vehicle may move unexpectedly, possibly resulting in an accident.

Selecting tire chains

Use the correct tire chain size when mounting the tire chains. Chain size is regulated for each tire size.

- Vehicles with 225/65R17 and 235/55R18 tires



Side chain:

- A** 0.12 in. (3 mm) in diameter
- B** 0.39 in. (10 mm) in width
- C** 0.98 in. (25 mm) in length

Cross chain:

- D** 0.16 in. (4 mm) in diameter
- E** 0.55 in. (14 mm) in width
- F** 0.98 in. (25 mm) in length

- Vehicles with 225/60R18 tires

Tire chains cannot be mounted on the 225/60R18 tires.

Snow tires should be used instead.

- Install tire chains on the front tires only. Do not install tire chains on the rear tires.
- Install tire chains on front tires as tightly as possible. Retighten chains after driving 1/4 - 1/2 mile (0.5 - 1.0 km).
- 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.

4

Driving

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.

Utility vehicle precautions

This vehicle belongs to the utility vehicle class, which has higher ground clearance and narrower tread in relation to the height of its center of gravity.

Utility vehicle feature

- Specific design characteristics give it a higher center of gravity than ordinary passenger cars. This vehicle design feature causes this type of vehicle to be more likely to roll-over. Utility vehicles have a significantly higher rollover rate than other types of vehicles.
- An advantage of the higher ground clearance is a better view of the road allowing you to anticipate problems.
- It is not designed for cornering at the same speeds as ordinary passenger cars any more than low-slung sports cars designed to perform satisfactorily under off-road conditions. Therefore, sharp turns at excessive speeds may cause roll-over.



WARNING

Utility vehicle precautions

Always observe the following precautions to minimize the risk of death or serious injury or damage to your vehicle:

- In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Therefore, the driver and all passengers should always fasten their seat belts.
- Avoid sharp turns or abrupt maneuvers, if at all possible. Failure to operate this vehicle correctly may result in loss of control or vehicle rollover causing death or serious injury.
- Loading cargo on the roof luggage carrier (if equipped) will make the center of the vehicle gravity higher. Avoid high speeds, sudden starts, sharp turns, sudden braking or abrupt maneuvers, otherwise it may result in loss of control or vehicle rollover due to failure to operate this vehicle correctly.
- Always slow down in gusty crosswinds. Because of its profile and higher center of gravity, your vehicle is more sensitive to side winds than an ordinary passenger car. Slowing down will allow you to have better control.
- Do not drive horizontally across steep slopes. Driving straight up or straight down is preferred. Your vehicle (or any similar off-road vehicle) can tip over sideways much more easily than forward or backward.

Off-road driving

Your vehicle is not designed to be driven off-road. However, in the event that off-road driving cannot be avoided, please observe the following precautions to help avoid the areas prohibited to vehicles.

- Drive your vehicle only in areas where off-road vehicles are permitted to travel.
- Respect private property. Get owner's permission before entering private property.
- Do not enter areas that are closed. Honor gates, barriers and signs that restrict travel.
- Stay on established roads. When conditions are wet, driving techniques should be changed or travel delayed to prevent damage to roads.

■ Additional information for off-road driving

- For owners in U.S. mainland, Hawaii and Puerto Rico:

To obtain additional information pertaining to driving your vehicle off-road, consult the following organizations.

- State and Local Parks and Recreation Departments
- State Motor Vehicle Bureau
- Recreational Vehicle Clubs
- U.S. Forest Service and Bureau of Land Management



WARNING

■ Off-road driving precautions

Always observe the following precautions to minimize the risk of death or serious injury or damage to your vehicle:

- Drive carefully when off the road. Do not take unnecessary risks by driving in dangerous places.
- Do not grip the steering wheel spokes when driving off-road. A bad bump could jerk the wheel and injure your hands. Keep both hands and especially your thumbs on the outside of the rim.

- Always check your brakes for effectiveness immediately after driving in sand, mud, water or snow.
- After driving through tall grass, mud, rock, sand, water, etc., check that there is no grass, bush, paper, rags, stone, sand, etc. adhering or trapped to the underbody. Clear off any such matter from the underbody. If the vehicle is used with these materials trapped or adhering to the underbody, a breakdown or fire could occur.
- When driving off-road or in rugged terrain, do not drive at excessive speeds, jump, make sharp turns, strike objects, etc. This may cause loss of control or vehicle rollover causing death or serious injury. You are also risking expensive damage to your vehicle's suspension and chassis.



NOTICE

■ To prevent water damage

Take all necessary safety measures to ensure that water damage to the engine or other components does not occur.

- Water entering the engine air intake will cause severe engine damage.
- Water entering the automatic transmission will cause deterioration in shift quality, locking up of your transmission accompanied by vibration, and ultimately damage.
- Water can wash the grease from wheel bearings, causing rusting and premature failure, and may also enter the differentials, transmission and transfer case, reducing the gear oil's lubricating qualities.

■ When you drive through water

If driving through water, such as when crossing shallow streams, first check the depth of the water and the bottom of the riverbed for firmness. Drive slowly and avoid deep water.



NOTICE

■ Inspection after off-road driving

- Sand and mud that has accumulated around brake discs may affect braking efficiency and may damage brake system components.
- Always perform a maintenance inspection after each day of off-road driving that has taken you through rough terrain, sand, mud, or water. For scheduled maintenance information, refer to the "Warranty and Services Guide/Owner's Manual Supplement/Scheduled Maintenance".

Interior features

5

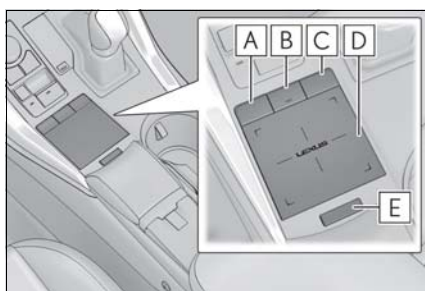
- 5-1. Remote Touch
 - Remote Touch..... 272
- 5-2. Using the air conditioning system and defogger
 - Automatic air conditioning system 277
 - Heated steering wheel/seat heaters/seat ventilators..... 285
- 5-3. Using the interior lights
 - Interior lights list..... 288
- 5-4. Using the storage features
 - List of storage features..... 291
 - Luggage compartment features 294
- 5-5. Using the other interior features
 - Other interior features 298
 - Garage door opener 308
 - Compass..... 314

Remote Touch

The Remote Touch can be used to operate the navigation/multimedia system display. Owners of models equipped with a navigation system should refer to the "NAVIGATION AND MULTIMEDIA SYSTEM OWNER'S MANUAL".

Remote Touch operation

■ Switches



► 10.3-inch display model

A "MAP" button

Press this button to display the vehicle's current position.

► 8-inch display model

A "HOME" button

Press this button to display the home screen.

B "MENU" button

Press this button to display the menu screen.

C Back button

Press this button to display the previous

D Touchpad

Slide your finger on the touchpad and

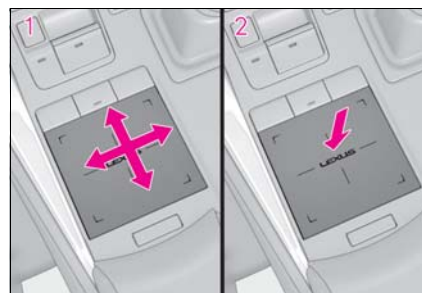
move the pointer to select a function, letter and screen button.

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 scalings and scrolling list screens.

E Sub function button

When  is displayed on the screen, a function screen assigned to the screen can be displayed.

■ Using the touchpad



1 Select: Touch the touchpad to select the desired button on the screen.

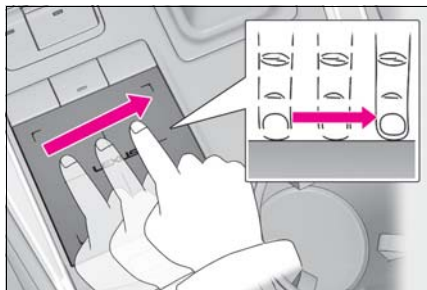
2 Enter: The buttons on the screen can be selected by either depressing or double tapping on the touchpad. Once a button has been selected, the screen will change.

■ Touch operation

Operations are performed by touching the touchpad with your finger.

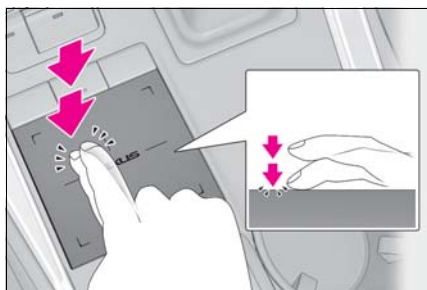
● Trace

Trace the pad surface while maintaining contact with the touchpad. Moving the cursor and the pointer.



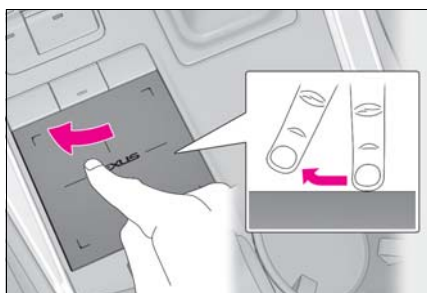
● Double tap

Tap the touchpad twice, quickly. Select the button on the screen.



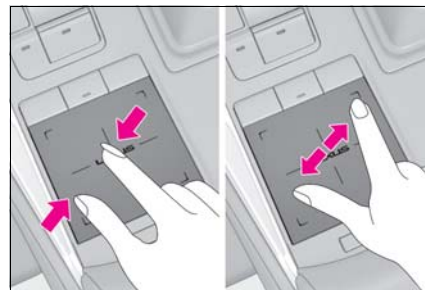
● Flick

Quick and long movement along the touchpad with your finger. Move the list screen or map screen.



● Pinch in/Pinch out

Slide fingers toward each other or apart on the touchpad. Change the scale of the map.



■ Apple CarPlay

The Apple CarPlay Maps app is not compatible with pinch multi-touch gestures.

⚠ 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 the Remote Touch to come into contact with food, liquid, stickers or lit cigarettes.
- 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.

Menu screen

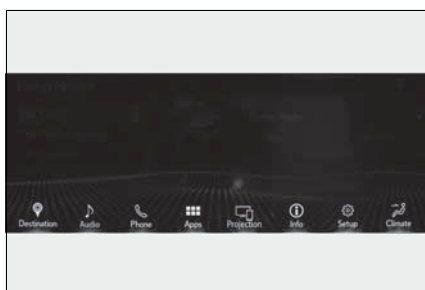
Press the "MENU" button on the Remote Touch to display the menu screen.

The display may differ depending on the type of the system.

▶ 8-inch display model



▶ 10.3-inch display model



Switch	Function
	Select to display the "Destination" screen. ^{*1}
	Select to display the audio control screen. ^{*1}
	Select to display the hands-free operation screen. ^{*1}

Switch	Function
	Select to display the "Apps" screen. ^{*1, 2}
	Select to display the Information screen. ^{*1} (→P.90)
	When an Apple CarPlay/Android Auto connection is established and this button displays "Apple CarPlay"/"Android Auto", select to display the home screen of Apple CarPlay/Android Auto. ^{*1, 2}
	Select to display the "Setup" screen.
	Select to display the air conditioning control screen. (→P.281)
	Select to adjust the contrast and brightness of the screens, turn the screen off, etc. ^{*1, 3}

^{*1}: Refer to the "NAVIGATION AND MULTIMEDIA SYSTEM OWNER'S MANUAL".

^{*2}: This function is not made available in some countries or areas.

^{*3}: This function is not made available on some models.

Display overview

▶ 8-inch display models

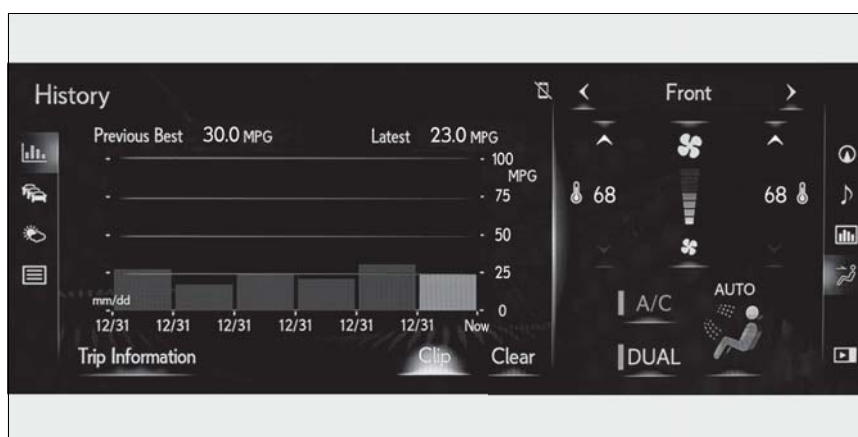
The home screen can be display multiple information screens. For details about the functions and operation of the display, refer to the respective section and "NAVI-

“NAVIGATION AND MULTIMEDIA SYSTEM OWNER’S MANUAL”

► 10.3-inch display models

● Split-screen display

Different information can be displayed on the left and right 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.



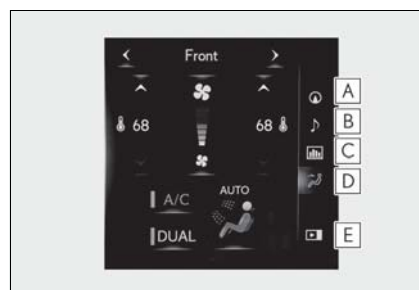
● Main display

For details about the functions and operation of the main display, refer to the respective section and “NAVIGATION AND MULTIMEDIA SYSTEM OWNER’S MANUAL”.

● 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
- D** Air conditioning system (→P.281)
- E** Show/hide the side display.*

*: Refer to the “NAVIGATION AND MULTIMEDIA SYSTEM 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.

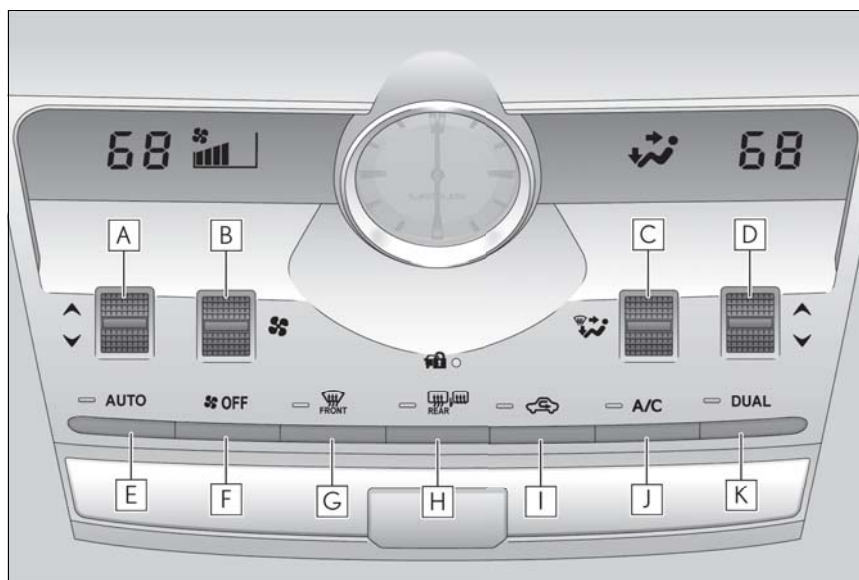
Automatic air conditioning system

Air outlets and fan speed are automatically adjusted according to the temperature setting.

Press the "MENU" button on the Remote Touch, then select  to display the air conditioning control screen.

The air conditioning system can be displayed and operated on the side display.

Air conditioning controls



- A** Left-hand side temperature control switch
- B** Fan speed control switch
- C** Airflow mode control switch
- D** Right-hand side temperature control switch
- E** Automatic mode switch
- F** Off switch
- G** Front windshield defogger switch
- H** Rear windshield and outside rear view mirror defogger switch

I Outside/recirculated air mode switch

J A/C switch

K DUAL switch

■ Adjusting the temperature setting

Operate the temperature control switch upwards to increase the temperature and downwards to decrease the temperature.

If "A/C" switch is not pressed, the system will blow ambient temperature air or heated air.

■ Adjusting the fan speed setting

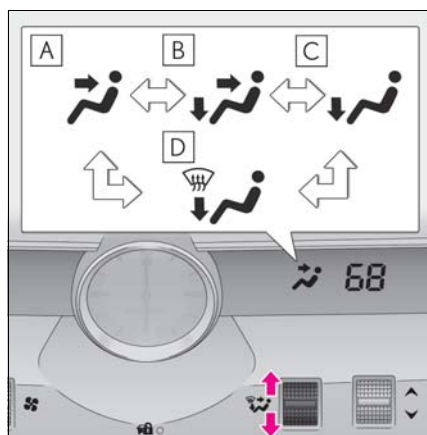
Operate the fan speed control switch upwards to increase the fan speed and downwards to decrease the fan speed.

Press the off switch to turn the fan off.

■ Change the airflow mode

Operate the airflow mode control switch upwards or downwards.

The mode changes as follows each time the switch is operated.



A Air flows to the upper body.

B Air flows to the upper body and

feet.

C Air flows to the feet.

D Air flows to the feet and the windshield defogger operates.

■ Switching between outside air and recirculated air modes

Press the outside/recirculated air mode switch.

The mode switches between outside air mode (the indicator is off) and recirculated air mode (the indicator is on) each time the button is pressed.

■ Defogging the windshield

Defoggers are used to defog the windshield and front side windows.

Press the front 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 early, turn the air flow and temperature up.

To return to the previous mode, press the front 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 windshield and outside rear view mirror defogger switch.

The defoggers will automatically turn off after a period of time.

■ Windshield wiper de-icer (if equipped)

→P.282

■ When the outside temperature exceeds 75°F (24°C) 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. Pressing "A/C" button or selecting "A/C" 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 (vehicles with driving position memory)

- 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 access system with push-button start is used to unlock a passenger door.
- The doors that can recall the air conditioning setting when unlocked using the smart access system with push-button start 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 mode

- In the Eco 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
 - Adjust the fan speed
 - Adjust the temperature setting
 - Turn off Eco mode

- Even when the driving mode is set to Eco mode, the air conditioning eco mode can be turned off by selecting the

ECO
HEAT/COOL

■ When the outside temperature is low

The dehumidification function may not operate even when "A/C" is pressed or "A/C" is selected.

■ Ventilation and air conditioning odors

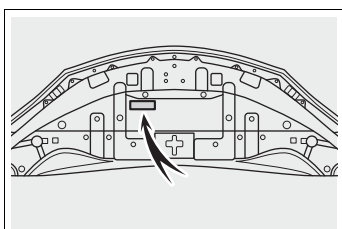
- To let fresh air in, set the air conditioning system to the outside air mode.
- During use, various odors from inside and outside the vehicle may enter into and accumulate in the air conditioning system. This may then cause odor to be emitted from the vents.
- To reduce potential odors from occurring:
 - 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.

■ Air conditioning filter

→P.352

■ Air conditioning system refrigerant

- A label regarding the refrigerant of the air conditioning system is attached to the hood at the location shown in the following illustration.



- The meaning of each symbol on the label are as follows:

	Caution
	Air conditioning system
	Air conditioning system lubricant type



Requires registered technician to service air conditioning system



Flammable refrigerant

■ Customization

Settings (e.g. A/C automatic mode switch operation) can be changed.
(Customizable features: →P.425)



WARNING

■ To prevent the windshield from fogging up

- Do not use the front 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.

■ To prevent burns

- Do not touch the rear view mirror surfaces when the outside rear view mirror defoggers are on.
- 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.



NOTICE

■ To prevent battery discharge

Do not leave the air conditioning system on longer than necessary when the engine is off.

■ When repairing/replacing parts of the air conditioning system

Have repair/replacement performed by your Lexus dealer. When a part of the air conditioning system, such as the evaporator, is to be replaced, it must be replaced with a new one.

Air conditioning control screen**Main control screen**

Using the touchpad of the Remote Touch (→P.272), select the button on the screen.

B to **E** can be adjusted by performing the following operations.

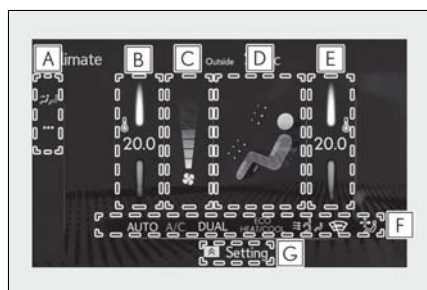
Flick operation: Move the pointer to the desired item and flick the touchpad up or down.

The item can be adjusted by one level.

Trace operation: After selecting the desired item, slide your finger up or down.

The item can be adjusted by the amount that you trace.

Trace operation cannot be used while driving.

**A** Sub menu

Selecting the sub menu item to switch the main screen.



Display the air conditioning control screen



Display the option control screen

B Adjust the left-hand side 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-hand side 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  button on the Remote Touch is pressed, the following functions can be switched on and off.

"AUTO": Set automatic mode on/off (→P.283)

"OFF": Turn the fan off

"A/C": Set cooling and dehumidification function

"DUAL": Adjust the temperature for driver and passenger seats separately ("DUAL" mode) (→P.284)



Set eco air conditioning mode

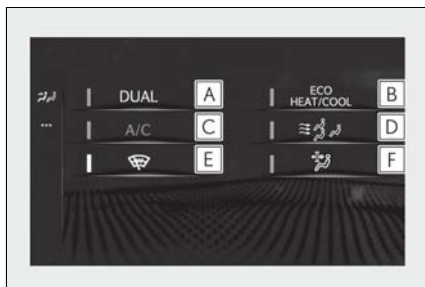
Option control screen

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 illu-

minates on the screen.



A Adjusting the temperature for driver and passenger seats separately ("DUAL" mode) (→P.284)

B Set eco air conditioning mode
Air conditioning and heater output is limited to prioritize fuel economy.

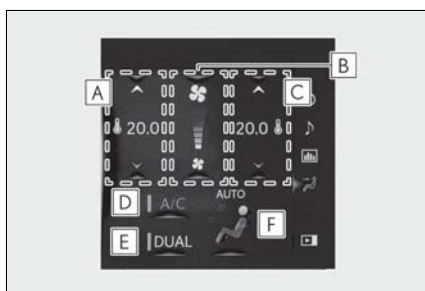
C Cooling and dehumidification function

D Select S-FLOW mode (→P.283)

E Prevent ice from building up on the windshield and wiper blades (Windshield wiper de-icer) (if equipped)

F Removing pollen from the air (Micro dust and pollen filter)

■ Side display (Vehicles with navigation system)



A Adjust the left-hand side temperature setting

B Adjust the fan speed setting

C Adjust the right-hand side temperature setting

D Set cooling and dehumidification function on/off

E Adjust the temperature for the driver's and front passenger's seats separately ("DUAL" mode) (→P.284)

F Select the air flow mode

■ Fogging up of the windows

● The windows will easily fog up when the humidity in the vehicle is high. Pressing "A/C" button or selecting "A/C" 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.

■ Windshield wiper de-icer (if equipped)

This feature is used to prevent ice from building up on the windshield and wiper blades.

Select  on the option control screen.

When the windshield wiper de-icer is on,

 is displayed on the air conditioning control screen.

The windshield wiper de-icer will automatically turn off after a period of time.

■ Eco air conditioning mode

When Eco mode is selected using the driving mode select switch, eco air conditioning mode turns on.

When a driving mode other than Eco mode is selected, eco air conditioning mode may turn off.

■ S-FLOW mode

Priority for airflow is given to the front seats, and the airflow and air conditioning for the rear seats is effectively controlled.

Select  on the option control screen.

The indicator comes on when S-FLOW mode is on.

Select  again to return to the previous mode.

■ Micro dust and pollen filter

Pollen is removed from the air and the air flows to the upper part of the body.

Select  on the option control screen.

When the micro dust and pollen filter is on,



 is displayed on the air conditioning control screen.

In order to prevent the windshield from fogging up when the outside air is cold, the dehumidification function may operate.

The pollens are filtered out even if the micro dust and pollen filter is turned off.



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.

Using automatic mode

- 1 Press the "AUTO" button.
- 2 Adjust the temperature setting.
- 3 To stop the operation, press the "OFF" button.

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 "AUTO" button is pressed or "AUTO" is selected.

■ Windshield fog detection function (vehicles with humidity sensor)

When automatic mode is set, the humidity sensor (→P.283) detects fog on the windshield and controls the air conditioning system to prevent fog.

■ Air conditioning filter

→P.352

■ Customization

Settings (e.g. A/C automatic mode switch operation) can be changed.
(Customizable features: →P.425)

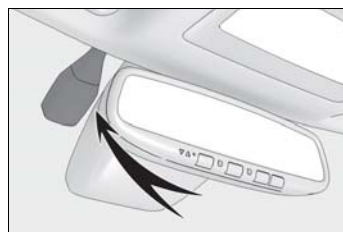


NOTICE

■ Humidity sensor (if equipped)

In order to detect fog on the windshield, a sensor which monitors the temperature of the windshield, the surround humidity, etc., is installed.

Follow these points to avoid damaging the sensor:



- Do not disassemble the sensor
- Do not spray the glass cleaner on the sensor or subject it to strong impacts
- Do not stick anything on the sensor

Adjusting the temperature for driver and passenger seats separately ("DUAL" mode)

To turn on the "DUAL" mode, perform any of the following procedures:

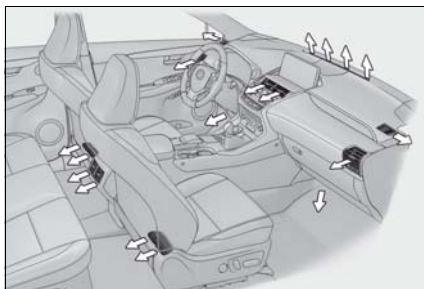
- Press the "DUAL" button.
- Select "DUAL" on the option control screen.
- Adjust the temperature setting of the passenger side with the passenger side temperature adjustment button.

The indicator comes on when the "DUAL" mode is on.

Air outlet layout and operations

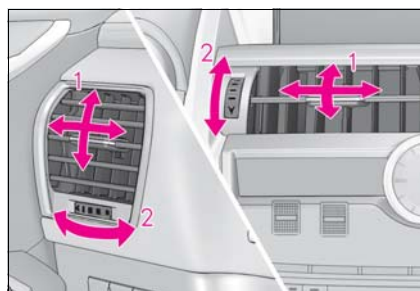
Location of air outlets

The air outlets and air volume changes according to the selected air flow mode.



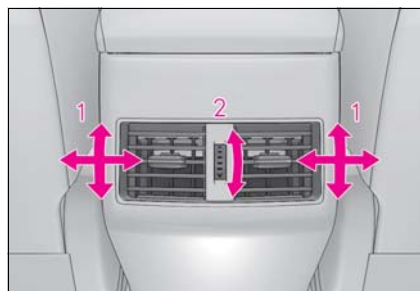
Adjusting the position of and opening and closing the air outlets

► Front



- 1 Direct air flow to the left or right, up or down
- 2 Turn the knob to open or close the vent

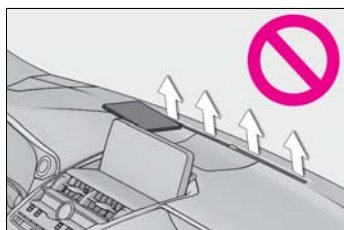
► Rear



- 1 Direct air flow to the left or right, up or down
- 2 Turn the knob to open or close the vent

! WARNING**■ To not interrupt the windshield defogger from operating**

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.

**Heated steering wheel*/seat heaters*/seat ventilators***

* : If equipped

● Heated steering wheel

Warm up the side grips of the steering wheel

● Seat heaters

Warm up the seat upholstery

● Seat ventilators

Maintain good airflow on the seat upholstery by blowing air from the seats

! 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.

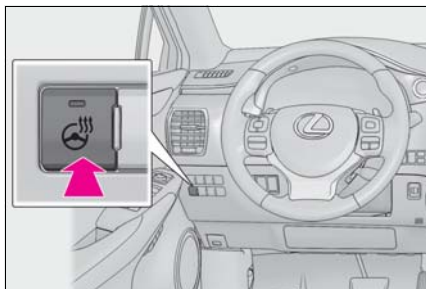
■ To prevent battery discharge

Do not use the functions when the engine is off.

Heated steering wheel

Turns the heated steering wheel on/off

The indicator light comes on when the heated steering wheel is operating.



■ Operation condition

The engine switch is in IGNITION ON mode.

■ Timer function

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

Seat heaters

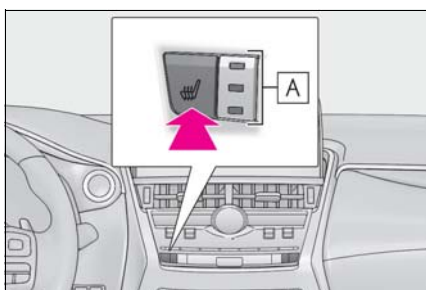
■ Front

► Vehicles with out seat ventilators

Each time the switch is pressed, the operation condition changes as follows.

Hi (3 segments lit) → Mid (2 segments lit) → Lo (1 segment lit) → Off

The level indicator (amber) **A** lights up during operation.

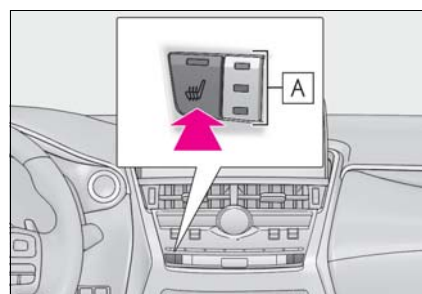


► Vehicles with seat ventilators

Each time the switch is pressed, the operation condition changes as follows.

Hi (3 segments lit) → Mid (2 segments lit) → Lo (1 segment lit) → Off

The indicator (amber) and level indicator (green) **A** light up during operation.

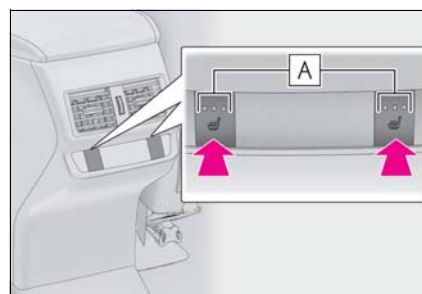


■ Rear

Each time the switch is pressed, the operation condition changes as follows.

Hi (3 segments lit) → Mid (2 segments lit) → Lo (1 segment lit) → Off

The level indicator (amber) **A** lights up during operation.



■ Operation condition

The seat heaters can be used when the engine switch is in IGNITION ON mode.

**WARNING**

■ **To prevent causes of overheating and minor burn injuries**

Observe the following precautions when using a seat heater

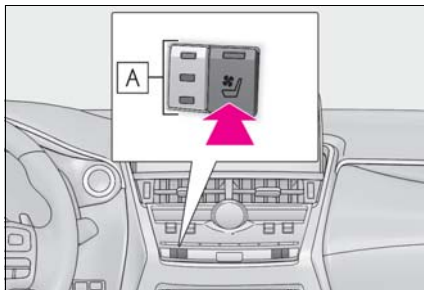
- Do not cover the seat with a blanket or cushion when using the seat heater.
- Do not use seat heater more than necessary.

Seat ventilators (front)

Each time the switch is pressed, the operation condition changes as follows.

Hi (3 segments lit) → Mid (2 segments lit) → Lo (1 segment lit) → Off

The indicator (green) and level indicator (green) **A** light up during operation.

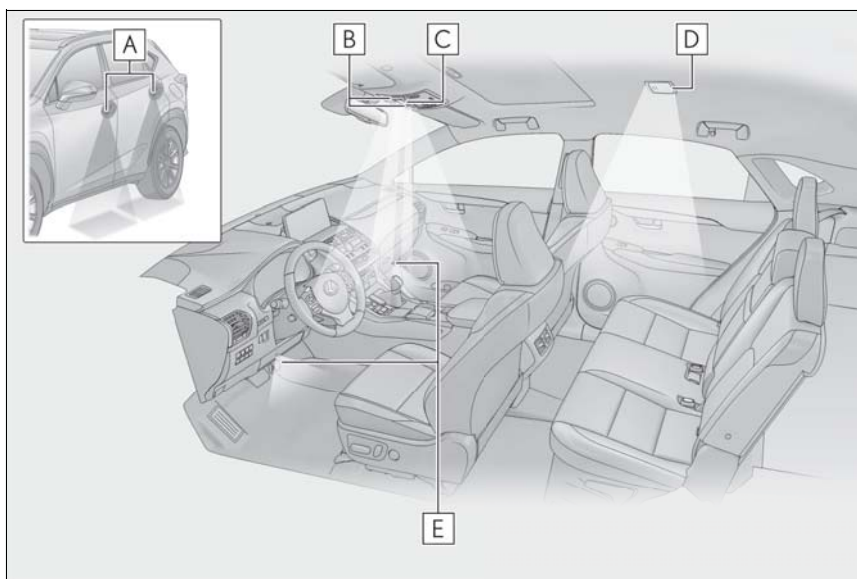


■ **Operation condition**

The engine switch is in IGNITION ON mode.

Interior lights list

Location of the interior lights



A Outer foot lights

B Personal lights (→P.290)

C Front interior light (→P.289)

D Rear interior light (→P.289)

E Footwell lights

- When the engine switch is in IGNITION ON mode, the footwell lights will turn on. However, if the instrument panel light control switch is turned to minimum, the footwell lights will turn off. (→P.79)
- When the shift lever is in a position other than P, the brightness of the footwell light will reduce intensity.

■ Personal lights automatic on/off

- Illuminated entry system: The lights automatically turn on/off according to engine switch mode, the presence of the electronic key, whether the doors are locked/unlocked, and whether the doors are opened/closed.
- 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 lights and 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.

■ Customization

Setting (e.g. the time elapsed before lights turn off) can be changed. (Customizable features: →P.425)



NOTICE

■ Removing light lenses

Never remove the lens for the front interior light and personal lights. Otherwise, the lights will be damaged. If the lens need to remove, contact your Lexus dealer.

■ To prevent battery discharge

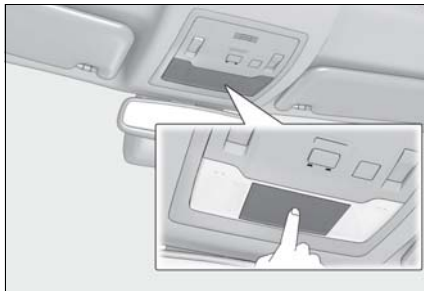
Do not leave the lights on longer than necessary when the engine is off.

Operating interior lights

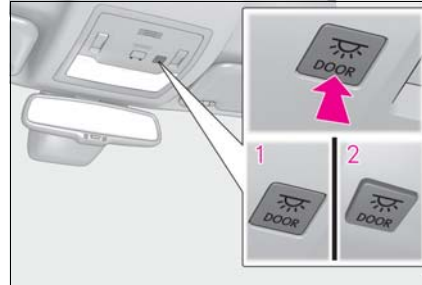
■ Front interior light

Turns the light on/off (touch the light)

The rear interior light also turns on/off. However, when the rear interior light has already been turned on, it will not be controlled by front interior light operations.



Turns the door position on/off



1 On

The front and rear interior lights turn on/off when a door is opened/closed.

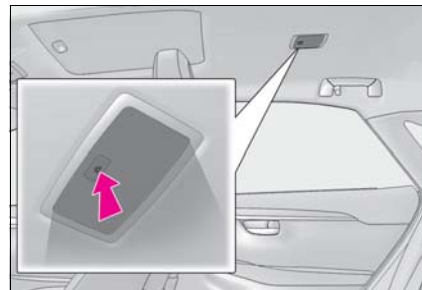
2 Off

■ Rear interior light

Turns the light on/off

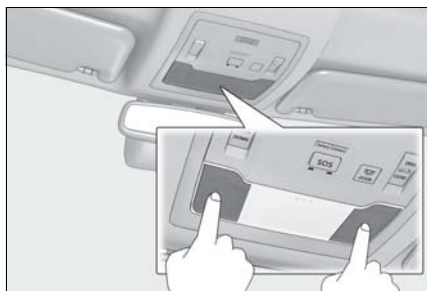
The rear interior light is also turned on/ off by the front interior light operations.

If the light is turned on by front interior light operation, the rear interior light cannot turn off by pressing the switch.



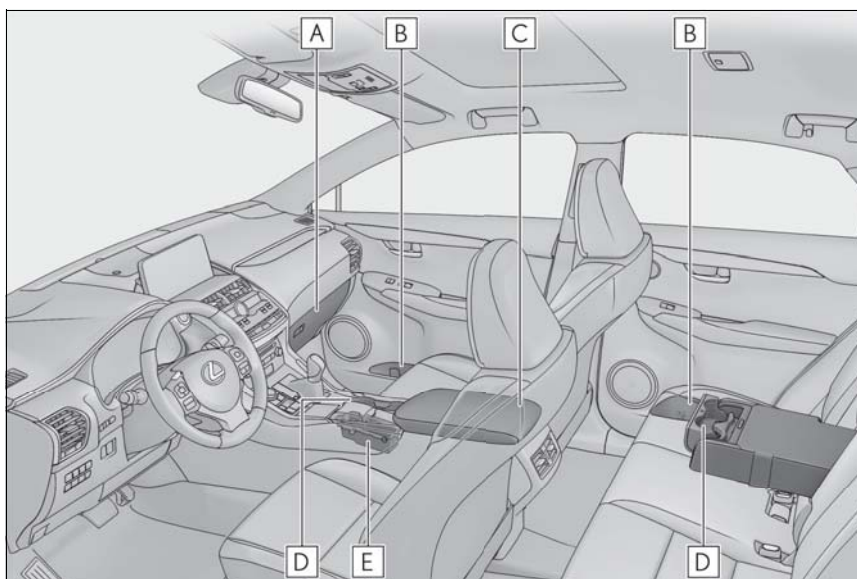
Operating personal lights

Turns the lights on/off (touch the lights)



List of storage features

Location of the storage features



- A** Glove box (→P.292)
- B** Bottle holders (→P.292)
- C** Console box (→P.292)
- D** Cup holders (→P.292)
- E** Auxiliary box (→P.293)



WARNING

■ Items that should not be left in the vehicle

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.

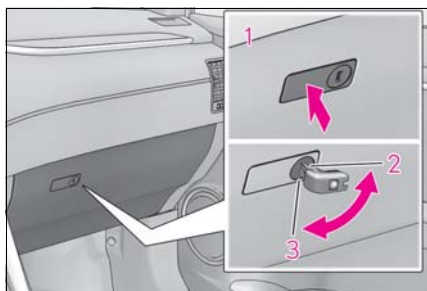
- Lighters or spray cans may explode. If they come into contact with other stored items, the lighter may catch fire or the spray can may release gas, causing a fire hazard.

■ When storage compartments are not in use

When driving or when the glove box and the console box are not in use, keep it closed.

In the event of sudden braking or sudden swerving, an accident may occur due to an occupant being struck by an open lid or the items stored inside.

Glove box



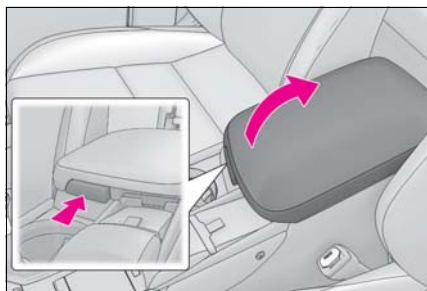
- 1** Open (press the button)
- 2** Unlock with the mechanical key
- 3** Lock with the mechanical key

■ Glove box light

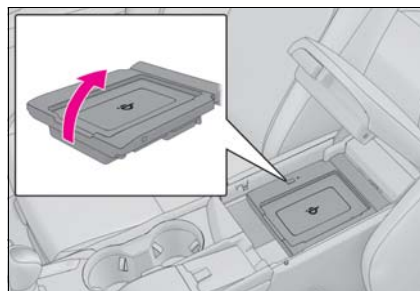
The glove box light turns on when the tail lights are on.

Console box

- 1** Lift the lid while pushing the button to release the lock.

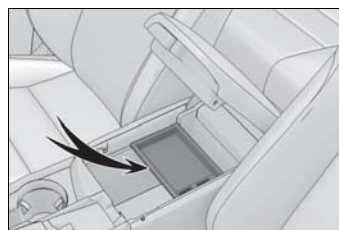


- 2** Vehicles with wireless charger: Lift the wireless charger.



■ Console box tray (vehicles without wireless charger)

The tray slides forward/backward and can be removed.



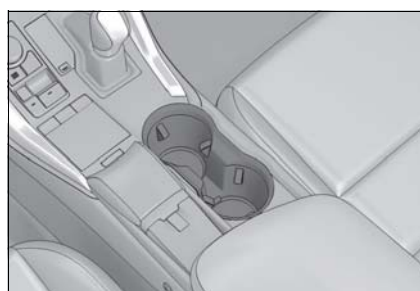
■ Console box light

The console box light turns on when the tail lights are on.

Cup holders/bottle holders

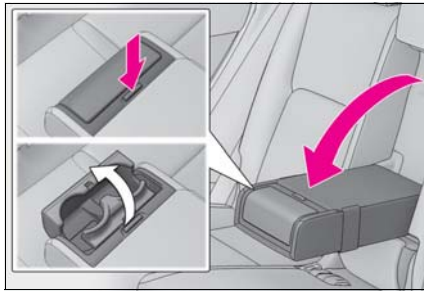
■ Cup holders

► Front



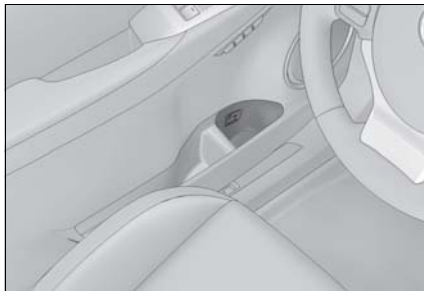
► Rear

Pull down the armrest and push the release button.

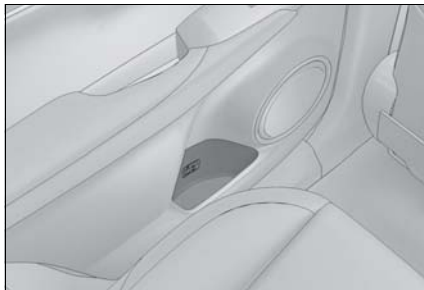


■ Bottle holders

► Front



► Rear



■ Cup holders/bottle holders

- When storing a bottle, close the cap.
- The bottle may not be stored depending on its size or shape.

⚠ WARNING

■ Items unsuitable for the cup holders/bottle holders

Do not place anything other than cups or aluminum cans in the cup holders. Other items may be thrown out of the holders in the event of an accident or sudden braking, causing injury. If possible, cover hot drinks to prevent burns.

⚠ NOTICE

■ To prevent damage to the rear cup holder

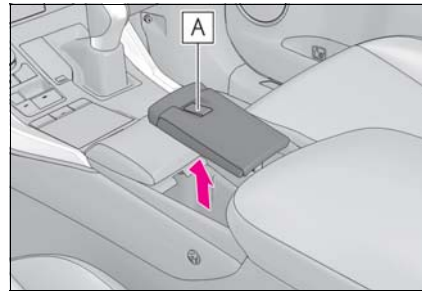
Stow the cup holder before stowing the armrest.

■ Bottle holders

Do not place open bottles or glass and paper cups containing liquid in the bottle holders. The contents may spill and glasses may break.

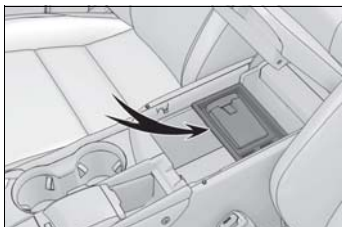
Auxiliary box

Remove the lid using the strap **A**.



■ Auxiliary box lid

- The removed auxiliary box lid can be stored on the tray in the console box.



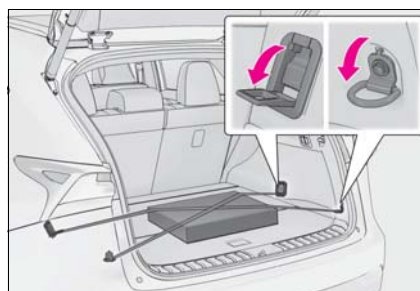
- The back side of the auxiliary box lid can be used as a vanity mirror.

Luggage compartment features

Cargo hooks

Raise the hook to use.

The cargo hooks are provided for securing loose items.



⚠ WARNING

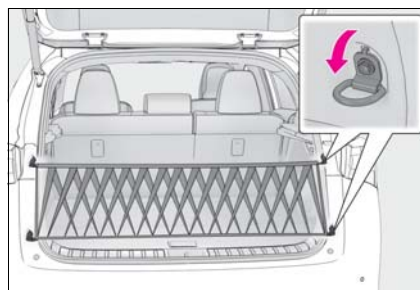
■ When cargo hooks are not in use

To avoid injury, always return the hooks to their stowed positions when not in use.

Cargo net hooks

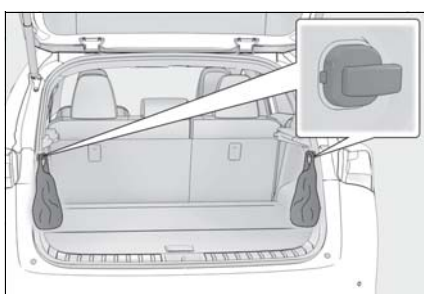
Raise the hook to use.

The cargo net can be hanged, using the hook.



⚠ WARNING**■ When cargo net hooks are not in use**

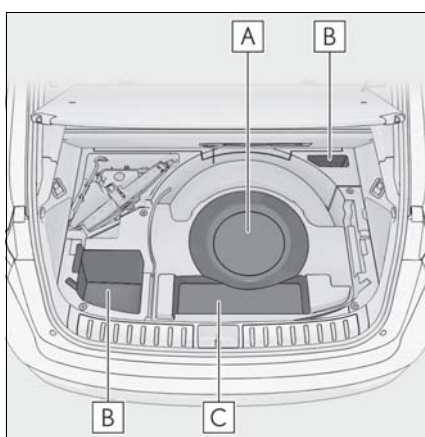
To avoid injury, always return the hooks to their stowed positions when not in use.

Grocery bag hooks**⚠ NOTICE****■ To prevent damage to the grocery bag hooks**

Do not hang any object heavier than 11 lb. (5 kg) on the grocery bag hooks.

Deck under tray

Lift the deck board and attach the hook. (→P.295) The following item can be stowed.



A First-aid kit and other items

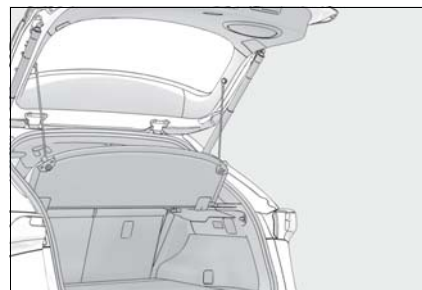
B Accessories

C Warning reflector*

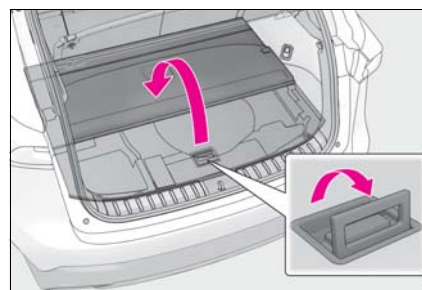
*: The warning reflector itself is not included as an original equipment.

Deck board

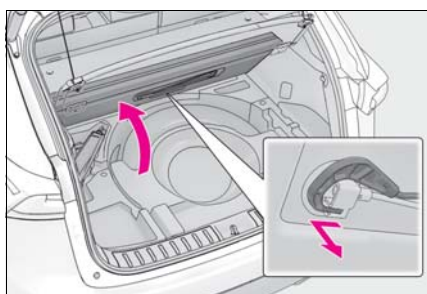
1 Open the back door.



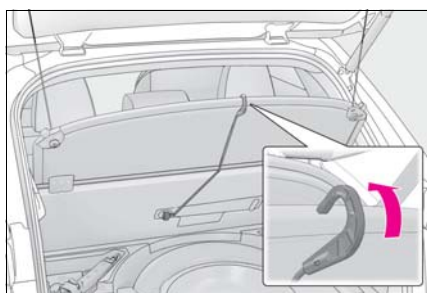
2 Pull the lever upwards and open the deck board.



- 3** Lift the deck board and remove the hook on the backside of the deck board.

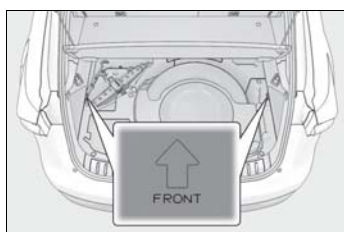


- 4** Use the hook to secure the deck board as shown in the illustration.



■ **When attaching the side deck board**

When attaching the side deck board, attach it so that the "↑ FRONT" mark points to the front side of the vehicle.



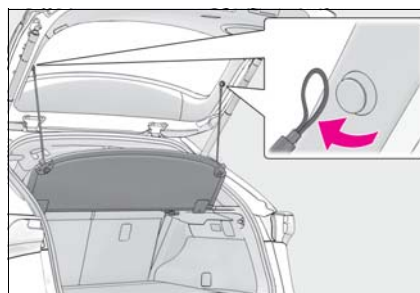
! WARNING

■ **If the deck boards are opened or removed**

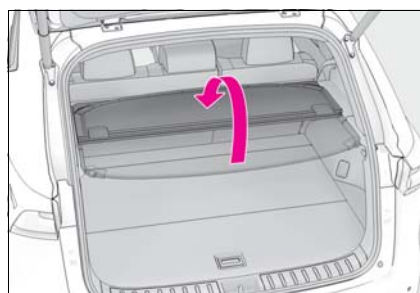
Return them to their original positions before driving. In the event of sudden braking, an accident may occur due to an occupant being struck by the deck boards or the items stored in the deck under tray.

Stowing the luggage cover

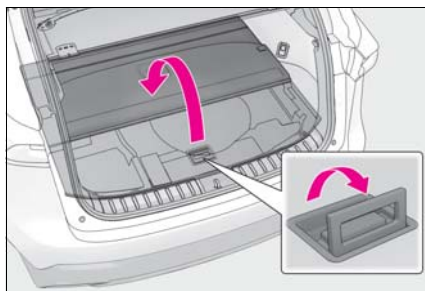
- 1** Unhook the cords.



- 2** Fold up the luggage cover.

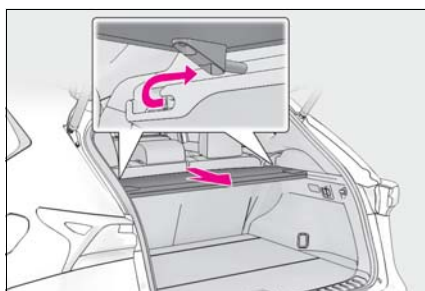


- 3** Pull the lever upwards and open the deck board.

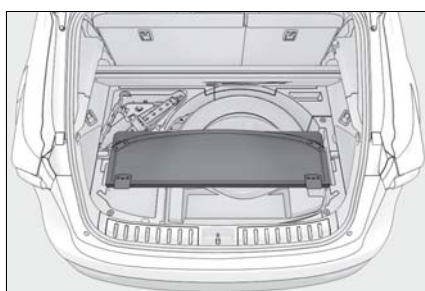


- 4** Remove the luggage cover.

When the seatback for the rear seat is collapsed to the rear, remove the cover after the cover most upright position. (→P.121)



- 5** Stow the luggage cover in the deck under tray while lifting the deck board.



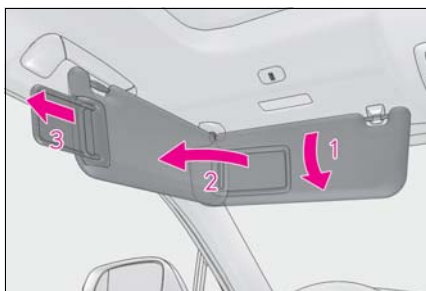
! WARNING

Luggage cover

- Do not place anything on the luggage cover. In the event of sudden braking or turning, the item may go flying and strike an occupant. This could lead to an unexpected accident, resulting in death or serious injury.
- Do not allow children to climb on the luggage cover. Climbing on the luggage cover could result in damage to the luggage cover, possibly causing death or serious injury to the child.

Other interior features

Sun visors



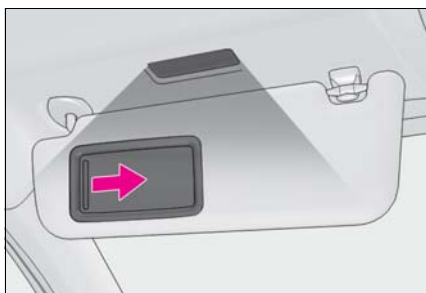
- 1** To set the visor in the forward position, flip it down.
- 2** To set the visor in the side position, flip down, unhook, and swing it to the side.
- 3** To use the side extender, place the visor in the side position, then slide it backward.

Vanity mirrors

■ Sun visors

Slide the cover to open.

The light turns on when the cover is opened.

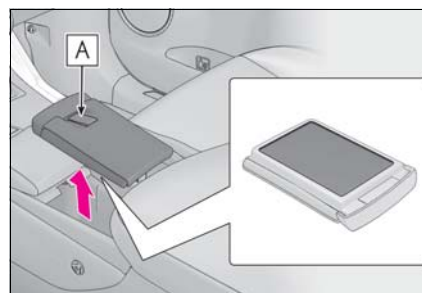


■ Auxiliary box

Remove the lid of auxiliary box using

the strap **A**. (→P.293)

There is a vanity mirror on the back side of the lid.



■ Automatic light off 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

■ To prevent damage to the vanity mirror

When the lid of auxiliary box is removed, do not subject it to strong impacts or set heavy objects on top of it.

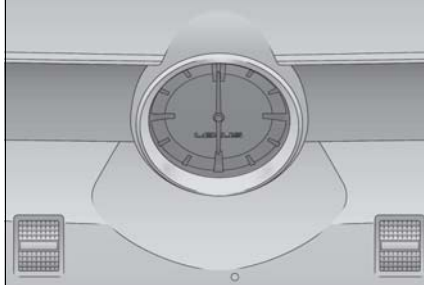
■ To prevent battery discharge

Do not leave the vanity lights on for extended periods while the engine is off.

Clock

The GPS clock's time is automatically adjusted by utilizing GPS time information.

For details, refer to the "NAVIGATION AND MULTIMEDIA SYSTEM OWNER'S MANUAL".



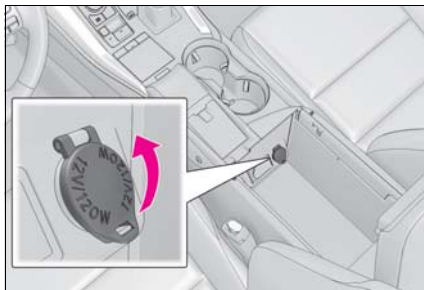
Power outlet (12 VDC)

Please use a power supply for electronic goods that use less than 12 VDC/10 A (power consumption of 120 W).

When using electronic goods, make sure that the power consumption of all the connected power outlets is less than 120 W.

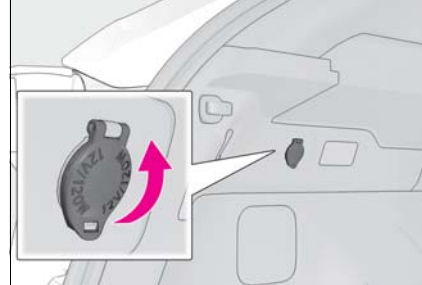
■ Console box

Open the lid.



■ Luggage compartment

Open the lid.



■ The power outlet can be used when

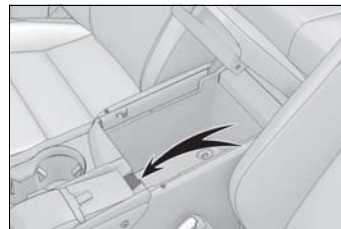
The engine switch is in ACCESSORY or IGNITION ON mode.

■ When turning the engine switch off

Disconnect electrical devices with charging functions, such as mobile battery packs. If such devices are left connected, the engine switch may not be turned off normally.

■ Using power outlet

The notch in console box allows power cables to be passed through even when the console box is closed.



⚠ NOTICE

■ When power outlet is not in use

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.

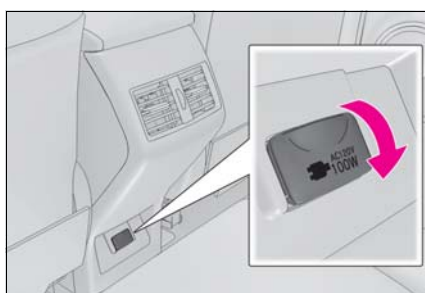
■ To prevent battery discharge

Do not use the power outlet longer than necessary when the engine is off.

Power outlet (120 VAC) (if equipped)

Please use a power supply for electronic goods that use less than 120 VAC (power consumption of 100 W).

Open the lid.



■ The power outlet can be used when

The engine switch is in IGNITION ON mode.



NOTICE

■ When power outlet is not in use

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 blown fuse

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 battery discharge

Do not use the power outlet longer than necessary when the engine is off.

■ Appliances that may not operate properly

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

Wireless charger (if equipped)

A portable device can be charged by just placing Qi standard wireless charge compatible portable devices according to the Wireless Power Consortium, such as smart phones and mobile batteries, etc., on the charge area.

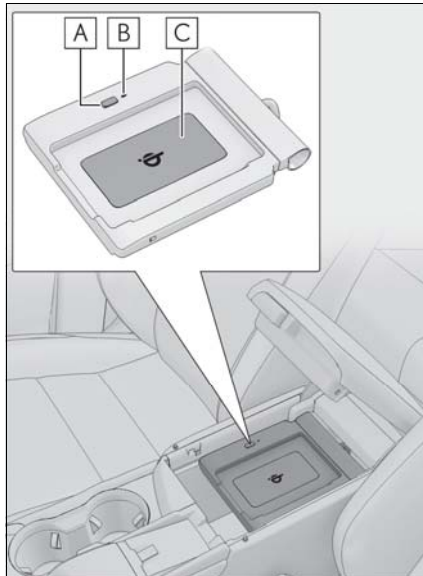
This function cannot be used with portable devices that are larger than the charging area. Also, depending on the portable device, it may not operate as normal. Please read the operation manual for portable devices to be used.

■ The “Qi” symbol

The “Qi” symbol is a trademark of the Wireless Power Consortium.



■ **Name for all parts**

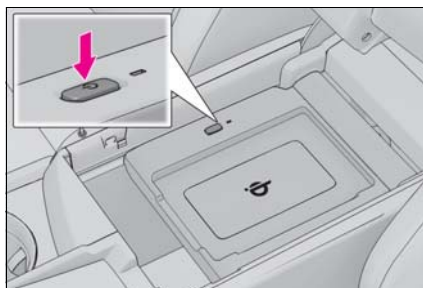


- A** Power supply switch
- B** Operation indicator light
- C** Charge area

■ **Using the wireless charger**

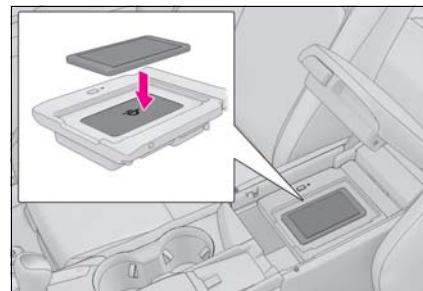
- 1** Open the console box. (→P.292)
- 2** Press the power supply switch of the wireless charger.

Switches on and off with each press of the power supply switch.
When turned on, the operation indicator light (green) comes on.
Even with the engine off, the on/off state of the power supply switch is memorized.



- 3** Place the charging side of the portable device down.

When charging, the operation indicator light (orange) comes on.
If charging is not occurring, try placing the portable device as close to the center of the charging area as possible.
When charging is complete, the operation indicator light (green) comes on.



■ **Recharging function**

- When charging is complete and after a fixed time in the charge suspension state, charging restarts.
- When the portable device is moved, charging is stopped for a moment and then it restarts.

■ **Lighting conditions of operation indicator light**

Operation indicator light	Conditions
Turning off	When the Wireless charger power supply is off
Green (comes on)	On Standby (charging possible state)
	When charging is complete*
Orange (comes on)	When placing the portable device on the charging area (detecting the portable device)
	Charging

*: Depending on the portable device, there are cases where the operation indicator light will continue being lit up orange even after the charging is complete.

- When the operation indicator light flashes

When an error occurs, the operation indicator light flashes an orange color. Handle the error based on the following tables.

- Flashing repeatedly once every second (Orange)

Suspected cause	Handling method
Vehicle to charger communication failure.	Contact your Lexus dealer.

- Repeatedly flashes 3 times continuously (Orange)

Suspected causes	Handling method
A foreign substance is between the portable device and charge area.	Remove the foreign substance from between portable device and the charge area.
The portable device is out of sync due to the device being shifted from the center of the charge area.	Place the portable device near the center of the charge area.

- Repeatedly flashes 4 times continuously (Orange)

Suspected cause	Handling method
Temperature rising within the wireless charger.	Stop charging at once and start charging again after for a while.

■ The wireless charger can be operated when

The engine switch is in ACCESSORY or IGNITION ON mode.

■ Usable portable devices

- Qi standard wireless charge standard can be used on compatible devices. However, not all Qi standard devices and compatibility are guaranteed.
- Starting with mobile phones and smart phones, it is aimed for low power electrically supplied portable devices of no more than 5W.

■ When covers and accessories are attached to portable devices

Do not charge in situations where cover and accessories not able to handle Qi are attached to the portable device. Depending on the type of cover and accessory, it may not be possible to charge. When charging is not performed even with the portable device placed on the charge area, remove the cover and accessories.

■ While charging, noise enters the AM radio

Turn off the wireless charger and confirm that the noise has decreased. If the noise decreases, continuously pushing the power supply switch of the wireless charger for 2 seconds, the frequency of the charger can be changed and the noise can be reduced. Also, on that occasion, the operation indicator light will flash orange 2 times.

■ Important points of the wireless charger

- If the electronic key cannot be detected within the vehicle interior, charging cannot be done. When the door is opened and closed, charging may be temporarily suspended.
- When charging, the wireless charging device and portable device will get warmer, however this is not a malfunction. When a portable device gets warm while charging, charging may stop due to the protection function on the portable device side. In this case, when the temperature of the portable device drops significantly, charge again.

■ Operation sounds

When the power supply is turned on, while searching for the portable device a sound will be produced, however this is not a malfunction.

■ Certification for the wireless charger

FCC Note: This equipment has been tested and found to comply with Part 18 of the

FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

FCC Provided Information:

This equipment has been tested and found to comply with Part 18 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 18 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.

Declaration of Conformity

Trade Name: Panasonic
Model Numbers: AT1701 contains CA-QS03J1AJ
Responsible Party: Panasonic Corporation of North America
Two Riverfront Plaza, Newark, NJ 07102-5490
Support Contact: <http://shop.panasonic.com/support>

Panasonic

PRODUCT SAFETY AND COMPLIANCE DEPARTMENT, PANASONIC CORPORATION OF NORTH AMERICA, TWO RIVERFRONT PLAZA, 5TH FLOOR, NEWARK, NJ 07102-5490

FCC Declaration of Conformity

Summary

Product Name	In-Vehicle Wireless Charger
Model Number	AT1701
Brand Name	Panasonic
Size and Mass	• 245mm (w), 136mm (l) and 48mm (h) and mass is 515grams
Purpose Updated DoC	Added similarity variant model/ AT1701 contains CA-QS03J1AJ
Compliance Information	• 47 CFR, FCC Part 18, Subpart C for ISM Equipment • FCC's KDB 680106 D01 RF Exposure Wireless Charging Apps v02 • Industry Canada RSS-216, Issue 1, dated August 2014 For Wireless Power Transfer Devices (Wireless Chargers)
Responsible Applicant	Panasonic Corporation Automotive & Industrial Systems Company Automotive Infotainment Systems Business Division 4261, Ikonobe-cho, Tsuzuki-ku, Yokohama-shi, 224-8520, Japan
Responsible Factories	• Panasonic Corporation, Automotive & Industrial Systems Company Automotive Infotainment / Systems Business Division Global Manufacturing Innovation Center, Matsumoto Factory 5652 Sasaga, Matsumoto city, Nagano 399-8730, Japan • Panasonic Automotive Systems Czech, s.r.o. U Panasonicu 266, 530 06 Pardubice-Stare Cvice, Czech Republic • Panasonic Automotive Systems Asia Pacific (Thailand) Co., Ltd. 101 Moo 2 Teparak Road, T.Bangsaothong Ging A.Bangsaothong Samutprakarn 10540 Thailand • Panasonic Automotive Systems Dalian Co., Ltd. No.300, HongGang Road, GanJingZi District, Dalian, Liaoning Province, 116033 China
Responsible Sales Company	Panasonic Consumer Electronics Company Division of Panasonic Corporation of North America Two Riverfront Plaza, Newark, NJ 07102-5490 General Contact: http://shop.panasonic.com/support
Special Conditions For Compliance	In-Vehicle Wireless Charger will be installed and used exclusively within transportation vehicle and as such, it is exempt from the following requirements: (1) Part 15 digital device technical rules in accordance with §15.103(a); and (2) §15.105(b) full text information to user to appear in User Manual in accordance with §18.213.
EMI Test Report	TCB
	UL Japan
	Test Report 10120384-R2
	Model Tested AT1701 contains CA-QS03J1AJ
	Date Issued 12/14/2015
	Methodology FCC-OET MP-4



PRODUCT SAFETY AND COMPLIANCE DEPARTMENT, PANASONIC CORPORATION OF NORTH AMERICA, TWO RIVERFRONT PLAZA, 5TH FLOOR, NEWARK, NJ 07102-5490

Panasonic

PRODUCT SAFETY AND COMPLIANCE DEPARTMENT - PANASONIC CORPORATION OF NORTH AMERICA - TWO RIVERFRONT PLAZA, 9TH FLOOR, NEWARK, NJ 07102-5490

FCC Declaration of Conformity Summary

RF Exposure Evaluation	TCB	UL Japan
	MPE	10197157S-E-R1
	Test Report	
	Model Tested	AT1701 contains CA-QS03H1AJ
	Date Issued	12/14/2015
	Methodology	KDB 680106 D01 RF Exposure Wireless Charging Apps v02
Importation	The subject In-Vehicle Wireless Charger can be imported on behalf of Panasonic affiliated sales companies by PNA's Logistics Import Customs, or their authorized brokers, by electrically filing FCC Form 740 while declaring Box 2 with no reference to any FCC ID.	

This DoC is granted for the subject In-Vehicle Wireless Charger on the basis of the manufacturer's attested compliance with the above described conditions and in accordance with FCC Part 18 and FCC's KDB 0680106 D01 RF Exposure Wireless Charging Apps v02.

Certificate Number: DoC 2014-008C
Applicant Ref No.: PAS-16-P001

Issued by: 
Issue Date: January 14, 2016

PRODUCT SAFETY AND COMPLIANCE DEPARTMENT - PANASONIC CORPORATION OF NORTH AMERICA - TWO RIVERFRONT PLAZA, 9TH FLOOR, NEWARK, NJ 07102-5490

**WARNING****■ Caution while driving**

When charging a portable device, for safety reasons, the driver should not operate the main the part of the portable device while driving.

■ Caution regarding interference with electronic devices

People with implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators, as well as any other electrical medical device, should consult their physician about the usage of the wireless charger.

The operations of the wireless charger may have an affect on medical devices.

■ To prevent damage or burns

Observe the following precautions. Failure to do so may result in a possibility of equipment failure and damage, catch fire, burns due to overheat.

- Do not insert any metallic objects between the charging area and the portable device while charging
- Do not attach stickers, metallic objects, etc., to the charger area or portable device
- Do not cover with cloth, etc., and charge
- Do not charge portable devices other than designated
- Do not attempt to dismantle for disassembly or modifications
- Do not hit or apply a strong force

**NOTICE****■ Conditions in which the function may not operate correctly**

In the following conditions, it may not operate correctly

- The portable device is fully charged

- There is foreign matter between the charge area and portable device

- The temperature of the portable device gets higher from charging

- The charging surface of the portable device is facing up

- The placement of the portable device is out of alignment with the charge area

- 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 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

In addition, excluding the above-mentioned, when the charger does not perform normally or the operation display lamp is flashing continuously, it is considered that the wireless charger is malfunctioning. Contact your Lexus dealer.

■ To prevent failure or damage to data

- Do not bring magnetic cards, such as credit cards, or magnetic recording media, etc., close to the charger while charging, otherwise, data may disappear under the influence of magnetism. Also, do not bring precision instruments such as wrist watches, etc., close to the charger, as such objects may break.

**NOTICE**

- Do not leave portable devices in the cabin. The temperature inside the cabin may become high, when under the sun, and cause damage to the device.

- **To prevent battery discharge**

When the engine is stopped, do not use the wireless charger for a long time.

**WARNING**

- **Assist grips**

Do not use the assist grip when getting in or out of the vehicle or rising from your seat.

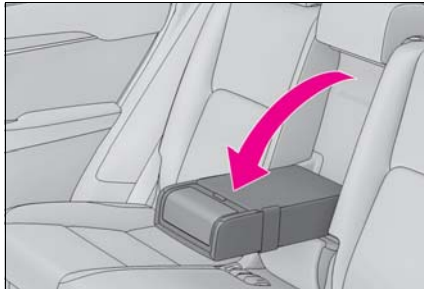
**NOTICE**

- **To prevent damage to the assist grip**

Do not hang any heavy object or put a heavy load on the assist grip.

Armrest

Fold down the armrest for use.

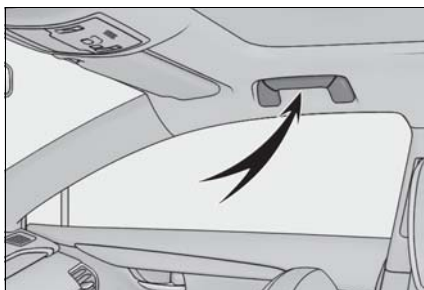
**NOTICE**

- **To prevent damage to the armrest**

Do not apply too much load on the armrest.

Assist grips

An assist grip installed on the ceiling can be used to support your body while sitting on the seat.



Garage door opener*

*: If equipped

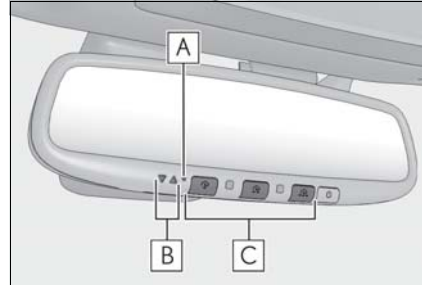
The garage door opener can be programmed using the HomeLink® to operate garage doors, gates, entry doors, door locks, home lighting systems, security systems, and other devices.

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.

■ Certification for the garage door opener

► For vehicles sold in the U.S.A.



A HomeLink® indicator light

B Garage door operation indicators

C 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.

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 ISCED 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 ISCED 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 the 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 ISDE 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 ISDE 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 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® 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®

Never allow a child to operate or play with the HomeLink® buttons.

Programming the HomeLink®

■ Before programming the HomeLink®

- 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 protection. 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.

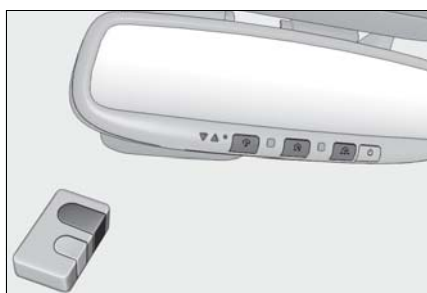
■ Programming the HomeLink®

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, 1 to 3 in. (25 to 75 mm) from the HomeLink® buttons.

Keep the HomeLink® indicator light in view while programming.

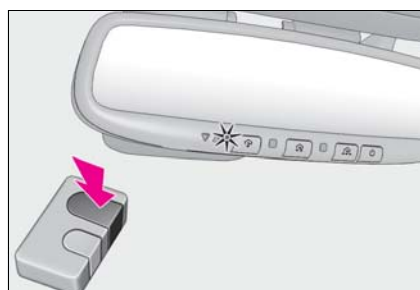
- 3** Program a device.



- Programming a device other than an entry gate (for U.S.A. owners)

Press and hold the remote control 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® button for 2 seconds then release it.
 - If the garage door or other device does not operate, proceed to “Programming a rolling code system”.

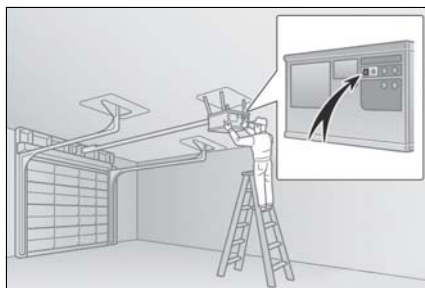
- 5** Repeat the steps above to program another device for any of the remaining HomeLink® buttons.

■ **Programming a rolling code system**

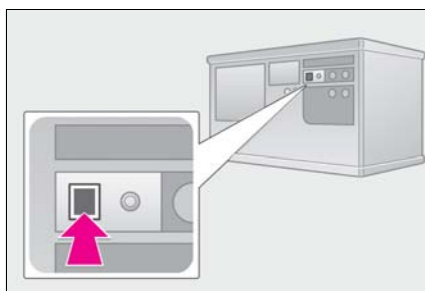
2 or more people may be necessary to complete rolling code programming.

- 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.



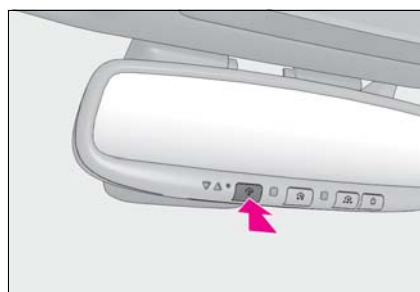
- 2** Press and release the “Learn” or “Smart” button. Perform **3** within 30 seconds after performing **2**.



- 3** Press and hold the desired HomeLink® 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® button is pressed, the garage door opener motor recognizes the HomeLink® 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.)

- 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, indi-

cating that 2-way communication is enabled.

If the indicators do not flash, perform and 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 performed, 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).

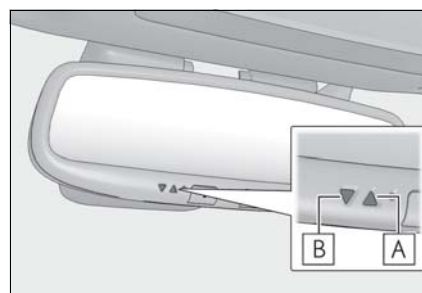
■ Before programming

- Install a new battery in the transmitter.
- The battery side of the transmitter must be pointed away from the HomeLink[®].

Operating the 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.)

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 820 ft. (250 m) 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.

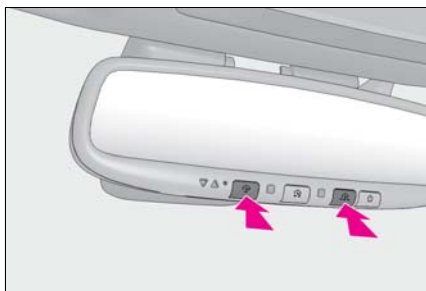
To recall the previous door operation status, press and release either HomeLink[®] buttons  and  or  and  simultaneously.

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.



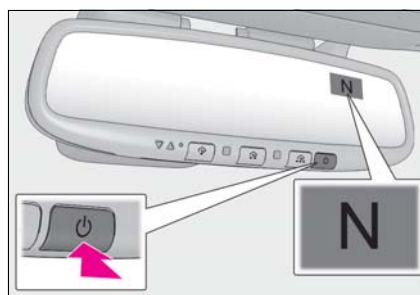
Compass^{*}

^{*}: If equipped

The compass on the inside rear view mirror indicates the direction in which the vehicle is heading.

Operation and displays

To turn the compass on or off, press the button for more than 3 seconds.



Directions are displayed as follows:

Display	Direction
"N"	North
"NE"	Northeast
"E"	East
"SE"	Southeast
"S"	South
"SW"	Southwest
"W"	West
"NW"	Northwest

■ Conditions unfavorable to correct operation

The compass may not show the correct direction in the following conditions:

- The vehicle is stopped immediately after turning.

- The vehicle is on an inclined surface.
- The vehicle is in a place where the earth's magnetic field is subject to interference by artificial magnetic fields (underground car park/parking lot, under a steel tower, between buildings, roof car park/parking lot, near an intersection, near a large vehicle, etc.).
- The vehicle has become magnetized. (There is a magnet or metal object near the inside rear view mirror.)
- The battery has been disconnected.
- A door is open.

**WARNING**

■ **While driving the vehicle**

Do not adjust the display. Adjust the display only when the vehicle is stopped.

**NOTICE**

■ **To avoid compass malfunctions**

Do not place magnets or any metal objects near the inside rear view mirror. Doing this may cause the compass sensor to malfunction.

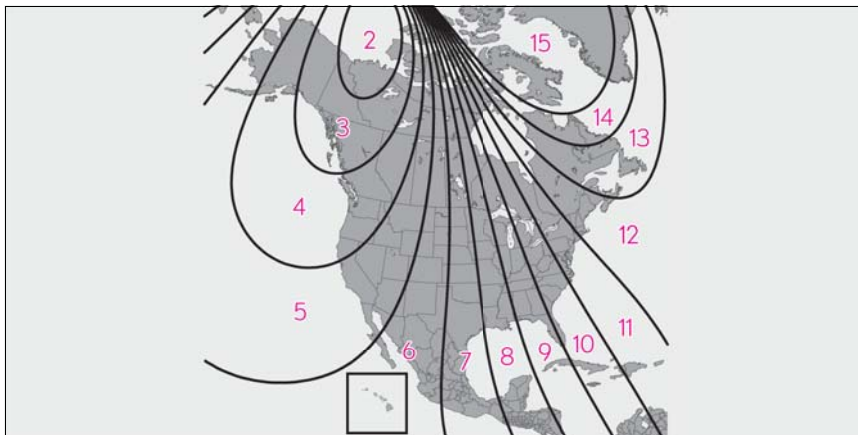
■ **To ensure normal operation of the compass**

- Do not perform a circling calibration of the compass in a place where the earth's magnetic field is subject to interference by artificial magnetic fields.

- During calibration, do not operate electric systems (moon roof, power windows, etc.) as they may interfere with the calibration.

Calibrating the compass

■ Deviation



The direction display deviates from the true direction determined by the earth's magnetic field. The amount of deviation varies depending on the geographic position of the vehicle.

If you cross over one of the map boundaries shown in illustration, the compass will

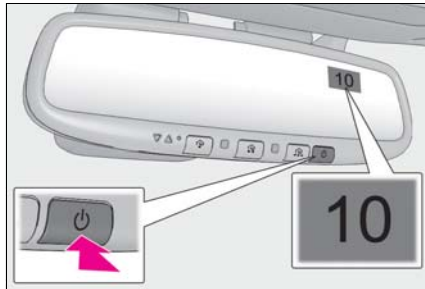
deviate.

To obtain higher precision or perfect calibration, refer to "Deviation calibration".

■ Deviation calibration

- 1 Stop the vehicle.

- 2** Press and hold the button for 6 seconds. A number (1 to 15) appears on the compass display.



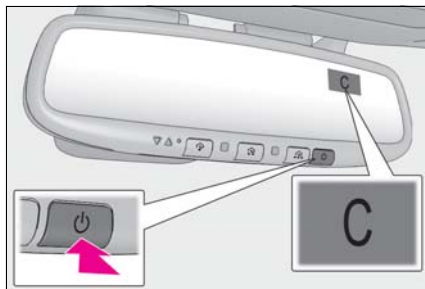
- 3** Referring to the map above, press the button to select the number of the zone you are in.

If the direction is displayed several seconds after adjustment, the calibration is complete.

■ Circling calibration

- 1** Stop the vehicle in a place where it is safe to drive in a circle.
- 2** Press and hold the button for 9 seconds.

"C" appears on the compass display.



- 3** Drive the vehicle at 5 mph (8 km/h) or less in a circle until a direction is displayed.

If there is not enough space to drive in a circle, drive around the block until a direc-

tion is displayed.



⚠ WARNING

■ When doing the circling calibration

Secure a wide space, and watch out for people and vehicles in the vicinity. Do not violate any local traffic rules while performing circling calibration.

Maintenance and care

6

6-1. Maintenance and care

Cleaning and protecting the vehicle exterior **318**

Cleaning and protecting the vehicle interior **321**

6-2. Maintenance

Maintenance requirements .. **324**

General maintenance **325**

Emission inspection and maintenance (I/M) programs **328**

6-3. Do-it-yourself maintenance

Do-it-yourself service precautions **329**

Hood..... **331**

Positioning a floor jack..... **331**

Engine compartment..... **333**

Tires **341**

Tire inflation pressure..... **349**

Wheels..... **351**

Air conditioning filter..... **352**

Electronic key battery **353**

Checking and replacing fuses **355**

Headlight aim..... **357**

Light bulbs..... **358**

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 contain abrasives.

■ Automatic car washes

- Before washing the vehicle:
 - Fold the mirrors
 - Turn off the power back door (if equipped)

Start washing from the front of the vehicle. Extend the mirrors before driving.

- Brushes used in automatic car washes may scratch the vehicle surface, parts (wheel, etc.) and harm your vehicle's paint.
- Rear spoiler may not be washable in some automatic car washes. There may also be an increased risk of damage to vehicle.

■ 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.

■ Note for a smart access system with push-button start

- 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 electronic key in a location 6 ft. (2 m) 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 access system with push-button start. (→P.115)

■ Wheels and wheel ornaments

- 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 park-

ing in hot weather

■ Bumpers

Do not scrub with abrasive cleaners.

■ Front side windows water-repellent coating (vehicles with water-repellent coating)

- 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

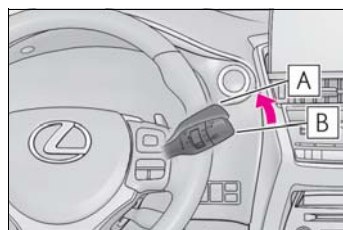
■ When washing the vehicle

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 (vehicles with rain-sensing windshield wipers)

Set the wiper switch to off.

If the 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 pipe

Exhaust gasses cause the exhaust pipe to become quite hot.

When washing the vehicle, be careful not to touch the pipe until it has cooled sufficiently, as touching a hot exhaust pipe can cause burns.

■ Precautions regarding the rear bumper with Blind Spot Monitor (if equipped)

If the paint of the rear bumper is chipped or scratched, the system may malfunction. If this occurs, consult your Lexus dealer.



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.

■ **To prevent damage to the windshield wiper arms**

When lifting the wiper arms away from the windshield, pull the driver side wiper arm upward first, and repeat for the passenger side. When returning the wipers to their original position, do so from the passenger side first.

■ **When using an automatic car wash (vehicles with rain-sensing windshield wipers)**

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.

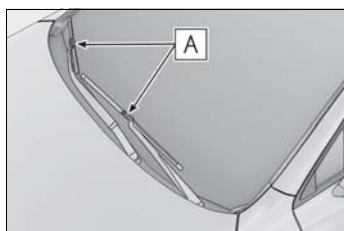
■ **When using a high pressure car wash**

- When washing the vehicle, do not let water of the high pressure washer hit directly or the vicinity of the camera. Due to the shock from the high pressure water, it is possible the device may not operate as normal.
- 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
- Keep the cleaning nozzle at least 11.9 in. (30 cm) 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.
- Do not wash the underside of the vehicle using a high pressure car washer.

**NOTICE**

■ **When raising the windshield wiper arms**

Make sure to hold the hook parts **A** of the wiper arms to raise them. Do not hold only the wiper blades when raising them, or it may cause deformation of the wiper blades.



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.

■ Front side windows with UV protective coating (vehicles with UV protective coating)

The front side windows have UV protective coating. To prevent any damage to the UV protective coating, observe the following:

- If the windows are dirty, gently wipe them with a cloth soaked in water or lukewarm water as soon as possible.

- If the windows are very dirty, do not open and close them repeatedly.

**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.32)
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:
 - Non-seat portions: 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
- 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**

Do not allow glass cleaner to contact the lens. Also, do not touch the lens. (→P.192)

■ **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.

**NOTICE****■ Cleaning the front side windows**

Do not use any compound or abrasive product (e.g., glass cleaner, detergent, wax) to clean the windows. It may damage the coating.

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.

Maintenance requirements

To ensure safe and economical driving, day-to-day care and regular maintenance are essential. It is the owner's responsibility to perform regular checks. Lexus recommends the following maintenance:

■ Repair and replacement

It is recommended that genuine Lexus parts be used for repairs to ensure performance of each system. If non-Lexus parts are used in replacement or if a repair shop other than a Lexus dealer performs repairs, confirm the warranty coverage.

■ Allow inspection and repairs to be performed by a Lexus dealer

- Lexus technicians are well-trained specialists and are kept up to date with the latest service information. They are well informed about the operation of all systems on your vehicle.
- Keep a copy of the repair order. It proves that the maintenance that has been performed is under warranty coverage. If any problem should arise while your vehicle is under warranty, your Lexus dealer will promptly take care of it.



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

- Engine exhaust, some of its constituents, and a wide variety of automobile components contain or emit chemicals known to the State of California to cause cancer and birth defects and other reproductive harm. Work in a well ventilated area.

- Oils, fuels and fluids contained in vehicles as well as waste produced by component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Avoid exposure and wash any affected area immediately.

- Battery posts, terminals and related accessories contain lead and lead compounds which are known to cause brain damage. Wash your hands after handling. (→P.338)

General maintenance

General maintenance should be performed on a daily basis. This can be done by yourself or by a Lexus dealer.

Scheduled maintenance

Scheduled maintenance should be performed at specified intervals according to the maintenance schedule.

For details about maintenance items and schedules, refer to the "Warranty and Service Guide", "Owner's Manual Supplement" or "Scheduled Maintenance".

■ Resetting the message indicating maintenance is required (Except for Canada)

After the required maintenance is performed according to the maintenance schedule, please reset the message. To reset the message, follow the procedures described below:

- 1 Press or of the meter control switches and select



- 2 Press or of the meter control switches, select the "Vehicle Settings" and then press .
- 3 Press or of the meter control switches, select the "Scheduled Maintenance" and then press and hold the .
- 4 Select the "Yes" and push . "The Data Has Been Reset" is displayed on the multi-information display.

Do-it-yourself maintenance

You can perform some maintenance procedures by yourself. Please be aware that do-it-yourself maintenance may affect warranty coverage.

The use of Lexus repair manuals is recommended. For details about warranty coverage, refer to the separate "Owner's Guide", "Warranty and Service Guide", "Owner's Manual Supplement" or "Warranty Booklet".

General maintenance

Listed below are the general maintenance items that should be performed at the intervals specified in the "Warranty and Service Guide" or "Owner's Manual Supplement". It is recommended that any problem you notice should be brought to the attention of your Lexus dealer or qualified service shop for advice.

WARNING

If the engine is running

Turn the engine off and ensure that there is adequate ventilation before performing maintenance checks.

Engine compartment

Items	Check points
Battery	Check the connections. (→P.338)
Brake fluid	Is the brake fluid at the correct level? (→P.338)
Engine/inter-cooler coolant	Is the engine/intercooler coolant at the correct level? (→P.336)
Engine oil	Is the engine oil at the correct level? (→P.334)
Exhaust system	There should not be any fumes or strange sounds.

Items	Check points
Radiator/con- denser	The radiator and con- denser should be free from foreign objects. (→P.337)
Washer fluid	Is there sufficient washer fluid? (→P.340)

Vehicle interior

Items	Check points
Accelerator pedal	The accelerator pedal should move smoothly (without uneven pedal effort or catching).
Automatic transmission "Park" mecha- nism	When parked on a slope and the shift lever is in P, is the vehicle securely stopped?
Brake pedal	- Does the brake pedal move smoothly? - Does the brake pedal have appropriate clearance from the floor? - Does the brake pedal have the correct amount of free play?

Items	Check points
Brakes	- The vehicle should not pull to one side when the brakes are applied. - The brakes should work effectively. - The brake pedal should not feel spongy. - The brake pedal should not get too close to the floor when the brakes are applied.
Head restraints	Do the head restraints move smoothly and lock securely?
Indica- tors/buzzers	Do the indicators and buzzers function prop- erly?
Lights	Do all the lights come on?
Parking brake	- Does the parking brake switch operate normally? - When parked on a slope and the parking brake is on, is the vehi- cle securely stopped?
Seat belts	- Do the seat belts operate smoothly? - The seat belts should not be damaged.

Items	Check points
Seats	Do the seat controls operate properly?
Steering wheel	• Does the steering wheel rotate smoothly? • Does the steering wheel have the correct amount of free play? • There should not be any strange sounds coming from the steering wheel.

Vehicle exterior

Items	Check points
Doors	Do the doors operate smoothly?
Engine hood	Does the engine hood lock system work properly?
Fluid leaks	There should not be any signs of fluid leakage after the vehicle has been parked.

Items	Check points
Tires	• Is the tire inflation pressure correct? • The tires should not be damaged or excessively worn. • Have the tires been rotated according to the maintenance schedule? • The wheel nuts should not be loose.
Windshield wipers/rear window wiper	• The wiper blades should not show any signs of cracking, splitting, wear, contamination or deformation. • The wiper blades should clear the windshield/rear window without streaking or skipping.

Emission inspection and maintenance (I/M) programs

Some states have vehicle emission inspection programs which include OBD (On Board Diagnostics) checks. The OBD system monitors the operation of the emission control system.

If the malfunction indicator lamp comes on

The OBD system determines that a problem exists somewhere in the emission control system. Your vehicle may not pass the I/M test and may need to be repaired. Contact your Lexus dealer to service the vehicle.

Your vehicle may not pass the I/M test in the following situations:

- When the battery is disconnected or discharged
Readiness codes that are set during ordinary driving are erased.
Also, depending on your driving habits, the readiness codes may not be completely set.
- When the fuel tank cap is loose
The malfunction indicator lamp comes on indicating a temporary malfunction and your vehicle may not pass the I/M test.

When the malfunction indicator lamp still remains on after several driving trips

The error code in the OBD system will not be cleared unless the vehicle is driven 40 or more times.

If your vehicle does not pass the I/M test

Contact your Lexus dealer to prepare the vehicle for re-testing.

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.338)	• Warm water • Baking soda • Grease • Conventional wrench (for terminal clamp bolts)
Brake fluid level (→P.338)	• FMVSS No.116 DOT 3 or SAE J1703; FMVSS No.116 DOT 4 or SAE J1704 brake fluid • Rag or paper towel • Funnel (used only for adding brake fluid)

Items	Parts and tools
Engine/inter-cooler coolant level (→P.336)	• "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 - For the U.S.A.: "Toyota Super Long Life Coolant" is premixed with 50% coolant and 50% deionized water. - For Canada: "Toyota Super Long Life Coolant" is premixed with 55% coolant and 45% deionized water. • Funnel (used only for adding coolant)
Engine oil level (→P.334)	• "Toyota Genuine Motor Oil" or equivalent • Rag or paper towel • Funnel (used only for adding engine oil)
Fuses(→P.355)	Fuse with same amperage rating as original
Light bulbs (→P.358)	Bulb with same number and wattage rating as original
Headlight aim	Phillips-head screwdriver
Radiator and condenser (→P.337)	—

Items	Parts and tools
Tire inflation pressure (→P.349)	• Tire pressure gauge • Compressed air source
Washer fluid (→P.340)	• Water or washer fluid containing antifreeze (for winter use) • Funnel (used only for adding water or washer fluid)

**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.
- Do not smoke, cause sparks or expose an open flame to fuel or the battery. Fuel and battery fumes are flammable.
- Be extremely cautious when working on the battery. It contains poisonous and corrosive sulfuric acid.

■ **When working near the electric cooling fans or radiator grille**

Be sure the engine switch is off. With the engine switch in IGNITION ON mode, the electric cooling fans may automatically start to run if the air conditioning is on and/or the coolant temperature is high. (→P.337)

■ **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**

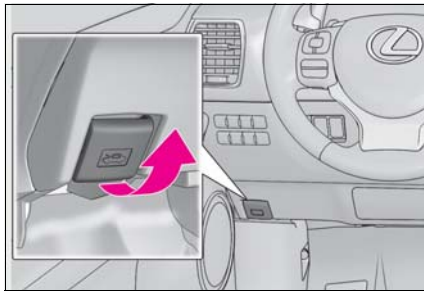
Driving with the air cleaner filter removed may cause excessive engine wear due to dirt in the air.

Hood

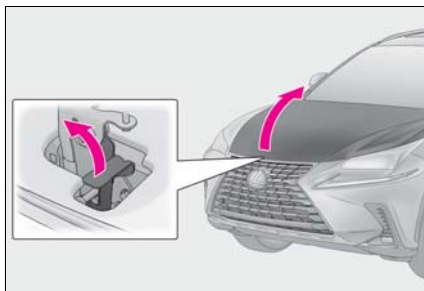
Opening the hood

- 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

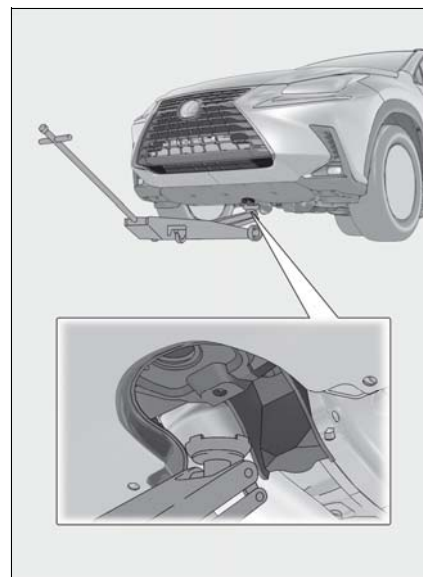
When using a floor jack, follow the instructions in the manual provided with the jack and perform the operation safely.

When raising your vehicle with a floor jack, position the jack correctly.

Improper placement may damage your vehicle or cause injury.

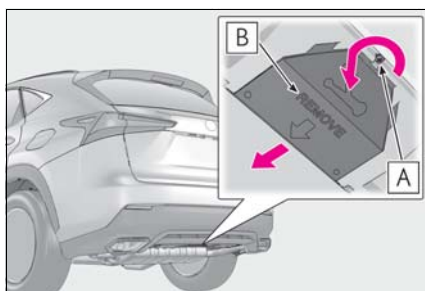
Location of the jack point

■ Front

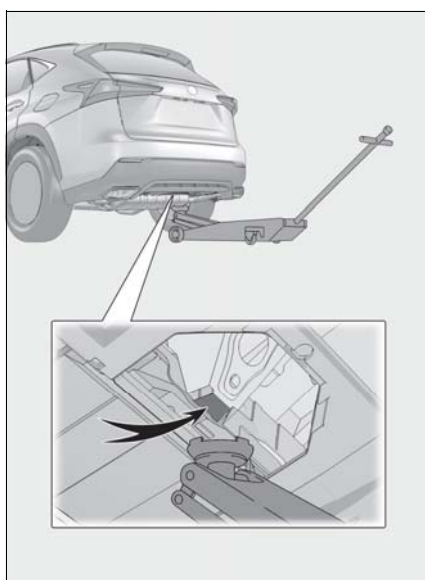


■ **Rear**

- 1** Remove the bolt **A** and then remove the cover **B**.

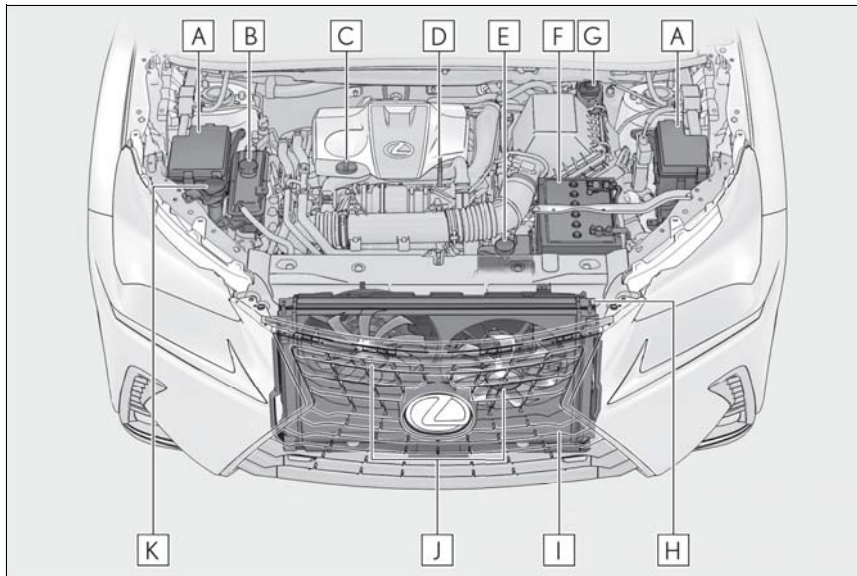


- 2** Raise your vehicle with a floor jack.



Engine compartment

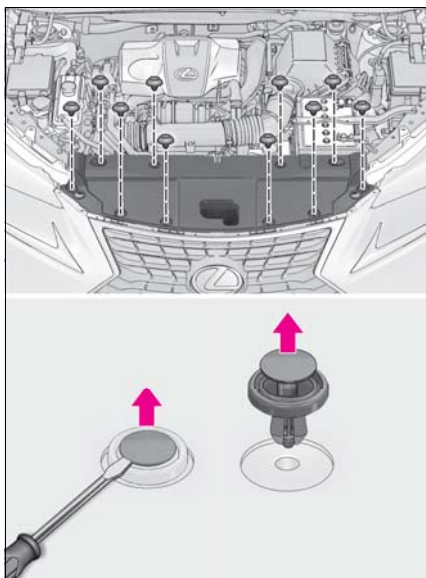
Components



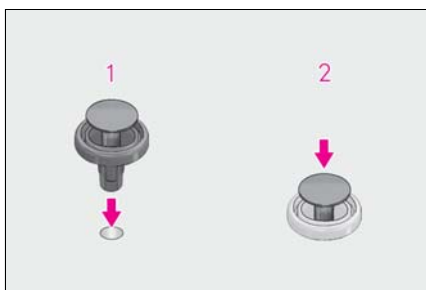
- A** Fuse box (→P.355)
- B** Engine coolant reservoir (→P.336)
- C** Engine oil filler cap (→P.334)
- D** Engine oil level dipstick (→P.334)
- E** Intercooler coolant reservoir (→P.336)
- F** Battery (→P.338)
- G** Brake fluid reservoir (→P.338)
- H** Radiator (→P.337)
- I** Condenser (→P.337)
- J** Electric cooling fans
- K** Washer fluid tank (→P.340)

Engine compartment cover

■ Removing the engine compartment cover



■ Installing the clips



1 Insert

2 Press



NOTICE

■ After installing an engine compartment cover

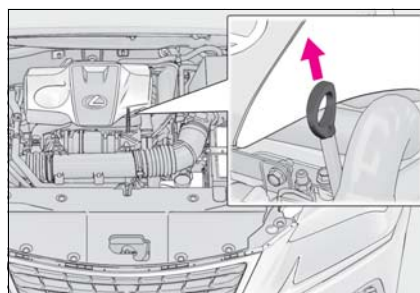
Make sure that the cover is securely installed in its original position.

Checking and adding the engine oil

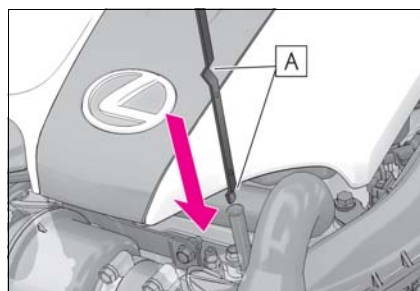
With the engine at operating temperature and turned off, check the oil level on the dipstick.

■ Checking the engine oil

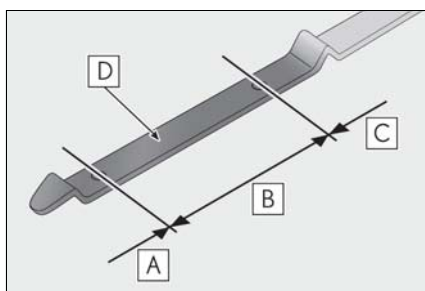
- 1** Park the vehicle on level ground. After warming up the engine and turning off the engine, wait more than 5 minutes for the oil to drain back into the bottom of the engine.
- 2** Holding a rag under the end, pull the dipstick out.



- 3** Wipe the dipstick clean.
- 4** Reinsert the dipstick fully with its protruding areas (A in the illustration) pointing towards engine.



- 5 Holding a rag under the end, pull the dipstick out and check the oil level.



- A** Low
B Normal
C Excessive
D Measuring side

- 6 Wipe the dipstick and reinsert it fully.

■ Checking the oil type and preparing the items needed

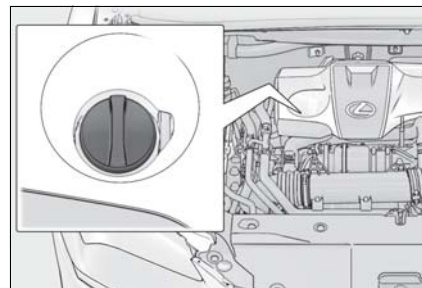
Make sure to check the oil type and prepare the items needed before adding oil.

- Engine oil selection
→P.408
- Oil quantity (Low → Full)
1.6 qt. (1.5 L, 1.3 Imp.qt.)
- Items

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.



- 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

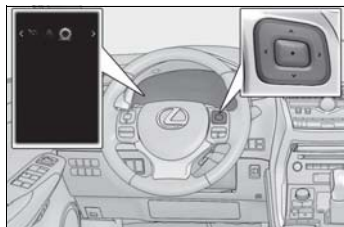
A certain amount of engine oil will be consumed while driving. In the following situations, oil consumption may increase, and engine oil may need to be refilled in between oil maintenance intervals.

- 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, when towing, 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 switches and select .



- 2 Press or of the meter control switches, select the "Vehicle Settings" and then press .
- 3 Press or of the meter control switches, select the "Oil Maintenance" and then press and hold the .
- 4 Select the "Yes" and push .
"The Data Has Been Reset" is displayed on the multi-information display.

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.
- 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.

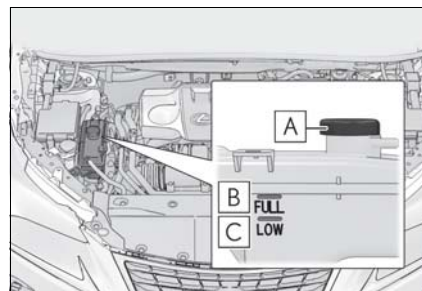
■ When replacing the engine oil

- 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 engine coolant

The coolant level is satisfactory if it is between the "FULL" and "LOW" lines on the reservoir when the engine is cold.

■ Engine coolant reservoir



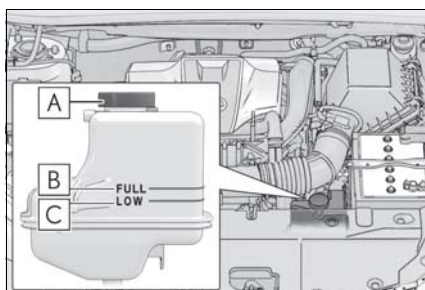
A Reservoir cap

B "FULL" line

C "LOW" line

If the level is on or below the "LOW" line, add coolant up to the "FULL" line.
(→P.401)

■ Intercooler coolant reservoir



A Reservoir cap

B "FULL" line

C "LOW" line

If the level is on or below the "LOW" line, add coolant up to the "FULL" line.

■ 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.

U.S.A.:

"Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water.

(Minimum temperature: -31°F [-35°C])

Canada:

"Toyota Super Long Life Coolant" is a mixture of 55% coolant and 45% deionized water.

(Minimum temperature: -44°F [-42°C])

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 cap, 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

Do not remove the engine coolant reservoir and the intercooler coolant reservoir cap.

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 and condenser

Check the radiator and condenser 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

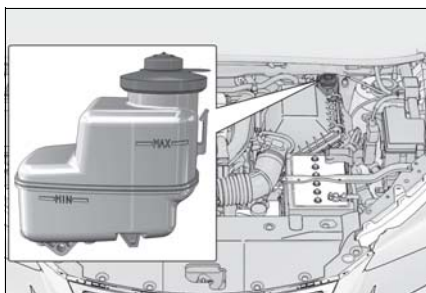
Do not touch the radiator or condenser as they may be hot and cause serious injuries, such as burns.

⚠ WARNING**■ When the electric cooling fans are operating**

Do not touch the engine compartment. With the engine switch in IGNITION ON mode, the electric cooling fans may automatically start to run if the air conditioning is on and/or the coolant temperature is high. Be sure the engine switch is off when working near the electric cooling fans or radiator grille.

Checking and adding the brake fluid**■ Checking fluid level**

The brake fluid level should be between the "MAX" and "MIN" lines on the tank.

**■ Adding fluid**

Make sure to check the fluid type and prepare the necessary item.

● Fluid type

FMVSS No.116 DOT 3 or SAE J1703;
FMVSS No.116 DOT 4 or SAE J1704
brake fluid

● Items

Clean funnel

■ Brake fluid can absorb moisture from the air

Excess moisture in the brake fluid can cause

a dangerous loss of braking efficiency. Use only newly opened brake fluid.

⚠ WARNING**■ When filling the reservoir**

Take care as brake fluid can harm your hands and 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, see a doctor.

⚠ NOTICE**■ 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 out or when the fluid level in the accumulator is high.

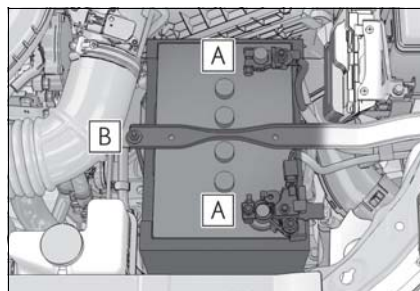
If the reservoir needs frequent refilling, there may be a serious problem.

Checking the battery

Check the battery as follows.

■ Battery 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

■ 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 power switch on the charger is off when connecting and disconnecting the charger cables to the battery.

■ After recharging/reconnecting the battery

- The engine may not start. Follow the procedure below to initialize the system.
 - 1 Shift the shift lever to P.
 - 2 Open and close any of the doors.
 - 3 Restart the engine.
- Unlocking the doors using the smart access system with push-button start 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 power 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 at all methods above, contact your Lexus dealer.

**WARNING****■ Chemicals in the battery**

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.

■ 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.

■ 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.

⚠ WARNING

- If you accidentally swallow electrolyte. Drink a large quantity of water or milk. Follow with milk of magnesia, beaten raw egg or vegetable oil. Get emergency medical attention immediately.

■ **When there is insufficient battery fluid**

Do not use if there is insufficient fluid in the battery. There is a possible danger that the battery may explode.

⚠ NOTICE

■ **When recharging the battery**

Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.

■ **When adding distilled water**

Avoid overfilling. Water spilled during battery recharging may cause corrosion.

⚠ WARNING

■ **When adding washer fluid**

Do not add washer fluid when the engine is hot or operating 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**

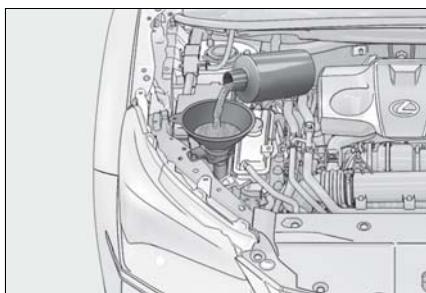
Do not use soapy water or engine anti-freeze instead of washer fluid. Doing so may cause streaking on the vehicle's painted surfaces, as well as damaging the pump leading to problems of the washer fluid not spraying.

■ **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 and adding the washer fluid

If none of the washer does not work or the "Windshield Washer Fluid Low" appears on the multi-information display, the washer tank may be empty. Add washer fluid.



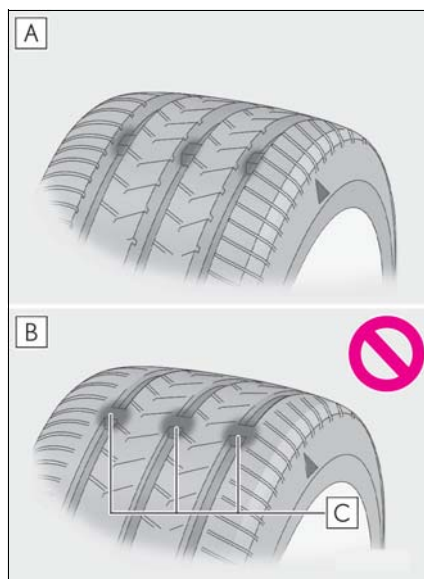
Tires

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.

Check the spare tire condition and pressure if not rotated.



A New tread

B Worn tread

C Treadwear indicator

The location of treadwear indicators is shown by a "TWI" or $\triangle$ mark, etc., molded into the sidewall of each tire. Replace the tires if the treadwear indica-

tors 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.

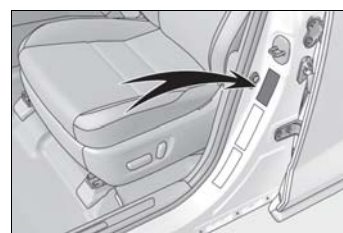
■ Tire life

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.

■ Maximum load of tire

Check that the maximum load of the replacement tire is greater than 1/2 of the Gross Axle Weight Ratings (GAWR) of either the front axle or the rear axle, whichever is greater.

For the GAWR, see the Certification Label. For the maximum load of the tire, see the load limit at maximum cold tire inflation pressure mentioned on the sidewall of the tire. (→P.416)



■ Tire types

● Summer tires

Summer tires are high-speed performance tires best suited to highway driving under dry conditions. Since summer tires do not have the same traction performance as snow tires, summer tires are inadequate for driving on snow-covered or icy roads. For driving on snow-covered

roads or icy roads, the use of snow tires is recommended. When installing snow tires, be sure to replace all four tires.

● **All season tires**

All season tires are designed to provide better traction in snow and to be adequate for driving in most winter conditions as well as for use year-round. All season tires, however, do not have adequate traction performance compared with snow tires in heavy or loose snow. Also, all season tires fall short in acceleration and handling performance compared with summer tires in highway driving.

● **Snow tires**

For driving on snow-covered roads or icy roads, we recommend using snow tires. If you need snow tires, select tires of the same size, construction and load capacity as the originally installed tires. Since your vehicle has radial tires as original equipment, make sure your snow tires also have radial construction. Do not install studded tires without first checking local regulations for possible restrictions. Snow tires should be installed on all wheels. (→P.265)

■ **If the tread on snow tires wears down below 0.16 in. (4 mm)**

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.
- 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.
- Do not tow if your vehicle has a compact spare tire installed.



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.

■ **If tire inflation pressure of each tire becomes low while driving**

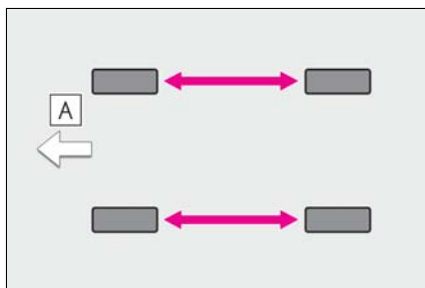
Do not continue driving, or your tires and/or wheels may be ruined.

Tire rotation

Rotate the tires in the order shown.

To equalize tire wear and extend tire life, Lexus recommends that tire rotation is carried out at the same interval as tire inspection.

Do not fail to initialize the tire pressure warning system after tire rotation.



A Front

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.

- If the tire pressure drops below a predetermined level, the driver is warned by a warning light. (→P.378)
- The tire pressure detected by the tire pressure warning system can be displayed on the multi-information display.



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.

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.
 - A tire has been replaced with a tire that is not an OE (Original Equipment) tire.
 - A tire has been replaced with a tire that is not of the specified size.
 - Tire chains, etc. are equipped.
 - 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 extremely higher than the specified level.
 - If wheel without the tire pressure warning valve and transmitter is 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.
 - 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 vehicle is parked, the time taken for the warning to start or go off could be extended.
- When tire inflation pressure declines rapidly for example when a tire has burst, the warning may not function.

■ Certification for tire pressure warning system

► For vehicles sold in the U.S.A.

FCC ID: PAXPMVC010

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.

FCC ID:HYQ22AAA

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 vehicles sold in Canada

NOTE

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

NOTE

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

NOTE:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

NOTE:

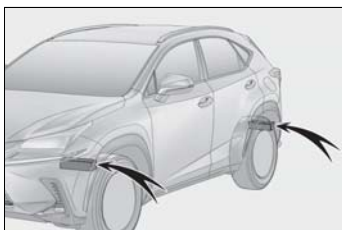
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

- (1) L'appareil ne doit pas produire de brouillage;
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

⚠ WARNING**■ Caution regarding interference with electronic devices**

- People with implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should not come within 17.7 in. (450 mm) of the tire pressure warning system initiators. The radio waves may affect the operation of such devices.



- 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.

Installing tire pressure warning valves and transmitters

When replacing tires or wheels, tire pressure warning valves and transmitters must also be installed.

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. Have tire pressure warning valve and transmitter ID codes registered by your Lexus dealer.

(→P.348)

■ When replacing the tires and wheels

If the ID code of the tire pressure warning valve and transmitter is not registered, the tire pressure warning system will not work properly. After driving for about 20 minutes, the tire pressure warning light blinks for 1 minute and stays on 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 could enter the tire pressure warning valves and the tire pressure warning valves could be bound.
- When replacing tire valve caps, do not use tire valve caps other than those specified. The cap may become stuck.

■ 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. After use of liquid sealant, make sure to replace the tire pressure warning valve and transmitter when repairing or replacing the tire. (→P.343, 351)

Initializing the tire pressure warning system

■ **The tire pressure warning system must be initialized in the following circumstances:**

- When adjusting the tire inflation pressure.
- When the tire inflation pressure is changed such as when changing traveling speed.
- When rotating the tires.
- When changing the tire.

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 and turn the engine switch off.

Initialization cannot be performed 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 Turn the engine switch to IGNITION ON mode.

- 4 Press  or  of the meter control switches and select .



- 5 Press  or  of the meter control switches, select the "Vehicle Settings" and then press .
- 6 Press  or  of the meter control switches, select the "TPMS" and then press and hold the .

The "Tire Pressure Recalibrating. Please Wait Until Complete" will be displayed on the multi-information display and the tire pressure warning light will blink slowly 3 times.

When the message disappears, initialization is complete.

■ **Initializing the tire pressure warning system**

Initialize the system with the tire inflation pressure adjusted to the specified level

■ **The initialization operation**

- Make sure to carry out initialization after adjusting the tire inflation pressure. Also, make sure the tires are cold before carrying out initialization or tire inflation pressure adjustment.
- If you have accidentally turned the engine switch off during initialization, it is not necessary to press the reset switch again as initialization will restart automatically when the engine switch has been turned to IGNITION ON mode for the next

time.

- If you accidentally press the reset switch when initialization is not necessary, adjust the tire inflation pressure to the specified level when the tires are cold, and conduct initialization again.

■ Warning performance of the tire pressure warning system

The warning of the tire pressure warning system will change in accordance with the conditions under which it was initialized. 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.

■ When initialization of the tire pressure warning system has failed

Initialization can be completed in a few minutes. However, in the following cases, the settings have not been recorded and the system will not operate properly. If repeated attempts to record tire inflation pressure settings are unsuccessful, have the vehicle inspected by your Lexus dealer.

- When initializing the tire pressure warning system, the tire pressure warning light does not blink 3 times.
- After carrying out the initialization procedure, the tire pressure warning light blinks for 1 minute then stays on after driving for 20 minutes.



WARNING

■ When initializing the tire pressure warning system

Do not initialize tire inflation pressure 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.

ID code. When replacing a tire pressure warning valve and transmitter, it is necessary to register the ID code. Have the ID code registered by your Lexus dealer.

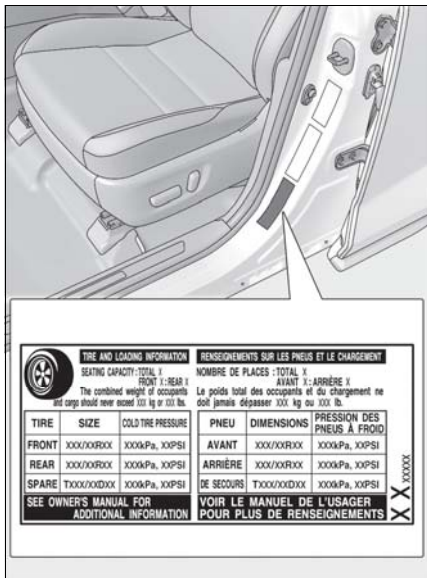
Registering ID codes

The tire pressure warning valve and transmitter is equipped with a unique

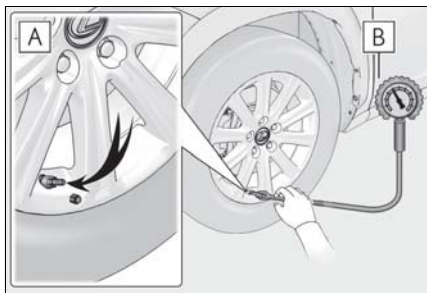
Tire inflation pressure

Checking the specified tire inflation pressure

The recommended cold tire inflation pressure and tire size are displayed on the tire and loading information label. (→P.411)



Inspection and adjustment procedure



A Tire valve

B Tire pressure gauge

- 1 Remove the tire valve cap.
- 2 Press the tip of the tire pressure gauge onto the tire valve.
- 3 Read the pressure using the gauge gradations.
- 4 If the tire inflation pressure is not at the recommended level, adjust the pressure.
If you add too much air, press the center of the valve to deflate.
- 5 After completing the tire inflation pressure measurement and adjustment, apply soapy water to the valve and check for leakage.
- 6 Put the tire valve cap back on.

Tire inflation pressure check interval

You should check tire inflation pressure every two weeks, or at least once a month. Do not forget to check the spare.

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 mile or 1.5 km, 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.
- Never exceed the vehicle capacity weight. Passengers and luggage weight should be placed so that the vehicle is balanced.



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.



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.)

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, tire pressure warning valves and transmitters must be installed. (→P.343, 351)



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

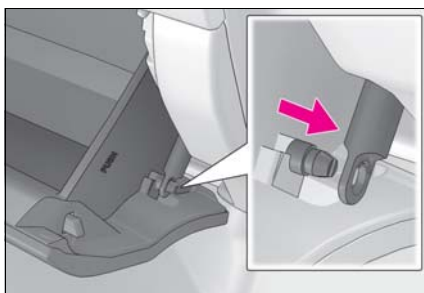
- Use only Lexus wheel nuts and wrenches designed for use with your aluminum wheels.
- When rotating, repairing or changing your tires, check that the wheel nuts are still tight after driving 1000 miles (1600 km).
- Be careful not to damage the aluminum wheels when using tire chains.
- Use only Lexus genuine balance weights or equivalent and a plastic or rubber hammer when balancing your wheels.

Air conditioning filter

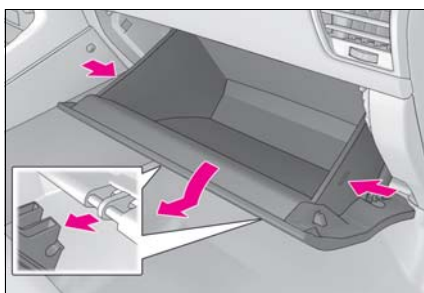
The air conditioning filter must be changed regularly to maintain air conditioning efficiency.

Removal method

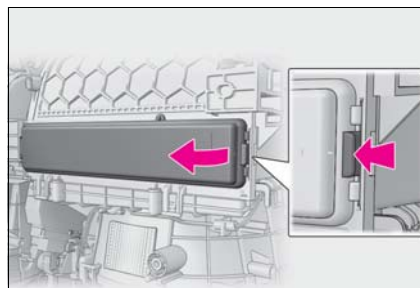
- 1 Turn the engine switch off.
- 2 Open the glove box. Slide off the damper.



- 3 Push in the glove box on the vehicle's outer side to disconnect the claws. Then pull out the glove box and disconnect the lower claws.

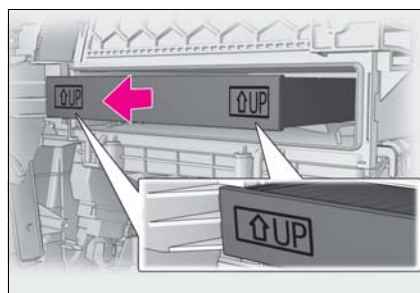


- 4 Remove the filter cover.



- 5 Remove the air conditioning filter and replace it with a new one.

The “↑ UP” marks shown on the filter 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. (For scheduled maintenance information, please refer to the “Owner’s Manual Supplement” or “Scheduled Maintenance”.)

■ 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 conditioning filter.

**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.

Electronic key battery**Replace the battery with a new one if it is depleted.****■ 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.

■ If the electronic key battery is depleted

The following symptoms may occur:

- The smart access system with push-button start and wireless remote control will not function properly.
- The operational range will be reduced.

Items to prepare

Prepare the following before replacing the battery:

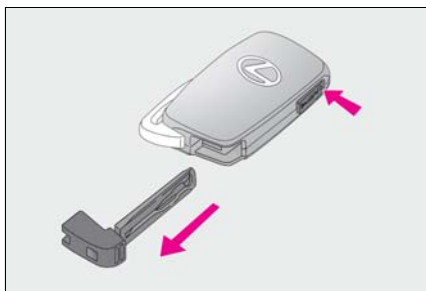
- Flathead screwdriver
- Lithium battery CR2032

■ 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 the local laws.

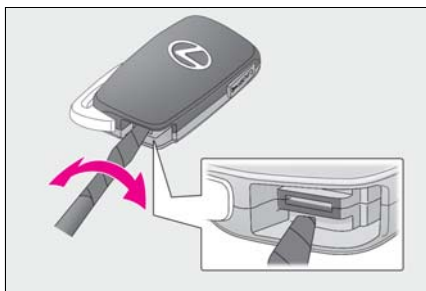
Replacing the battery

- 1 Take out the mechanical key.



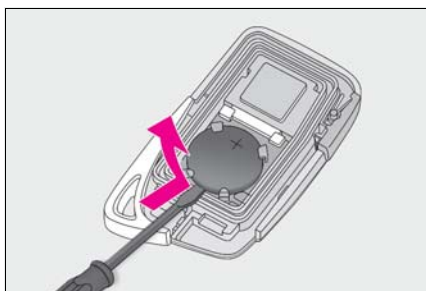
- 2 Remove the cover.

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

■ 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.

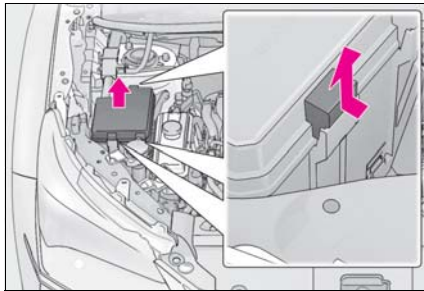
Checking and replacing fuses

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

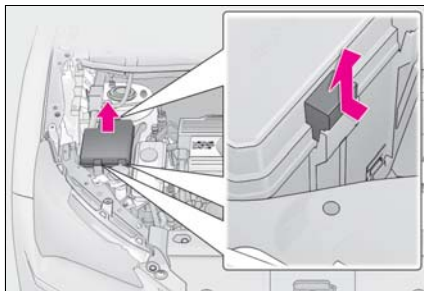
- 1 Turn the engine switch off.
- 2 Open the fuse box cover.
 - Engine compartment: type A fuse box

Push the tab in and lift the lid off.

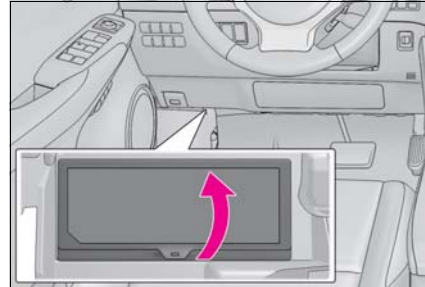


- Engine compartment: type B fuse box

Push the tab in and lift the lid off.

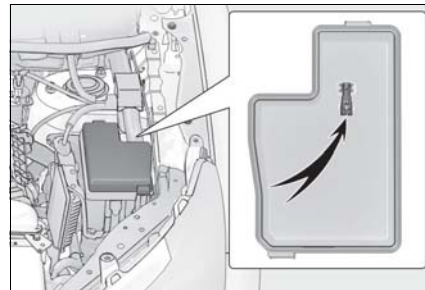


- Left side instrument panel
- Remove the lid.



- 3 Remove the fuse.

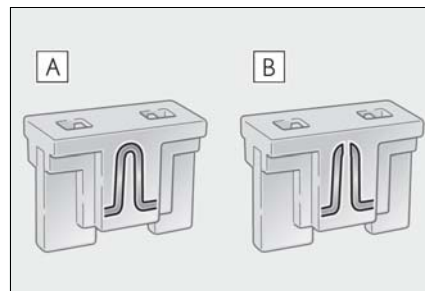
Only type A fuse can be removed using the pullout tool.



- 4 Check if the fuse is blown.

Replace the blown fuse with a new fuse of an appropriate amperage rating. The amperage rating can be found on the fuse box lid.

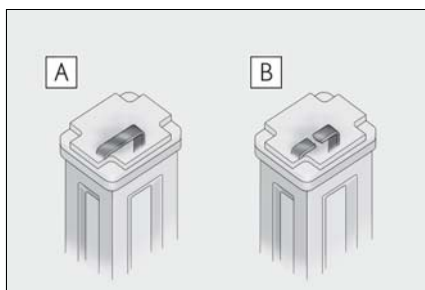
- Type A



A Normal fuse

B Blown fuse

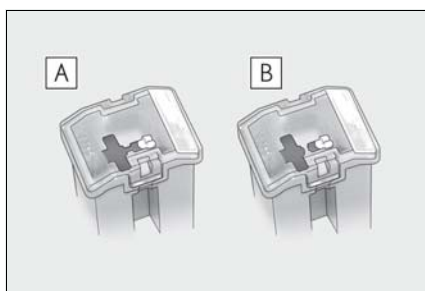
► Type B



A Normal fuse

B Blown fuse

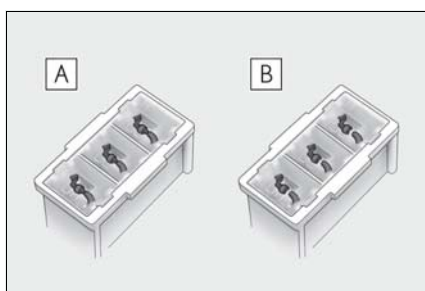
► Type C



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. (→P.358)
- 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.

■ When replacing light bulbs

Lexus recommends that you use genuine Lexus products designed for this vehicle. Because certain bulbs are connected to circuits designed to prevent overload, non-genuine parts or parts not designed for this vehicle may be unusable.

⚠ 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

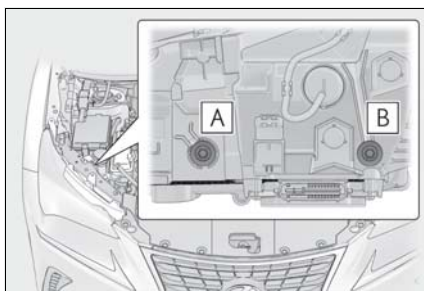
■ Before replacing fuses

Have the cause of electrical overload determined and repaired by your Lexus dealer as soon as possible.

Headlight aim

Vertical movement adjusting bolts

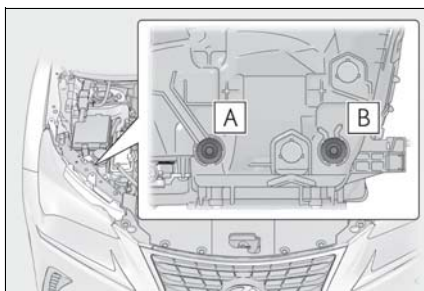
► Type A



A Adjustment bolt A

B Adjustment bolt B

► Type B



A Adjustment bolt A

B Adjustment bolt B

Before checking the headlight aim

- Make sure the vehicle has a full tank of gasoline and the area around the headlight is not deformed.
- Park the vehicle on level ground.
- Make sure the tire inflation pressure

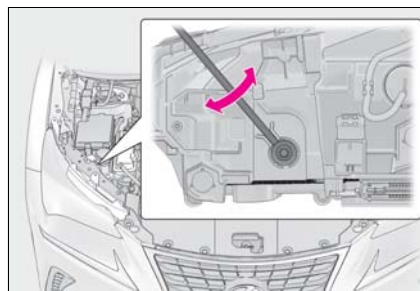
is at the specified level.

- Have someone sit in the driver's seat.
- Bounce the vehicle several times.

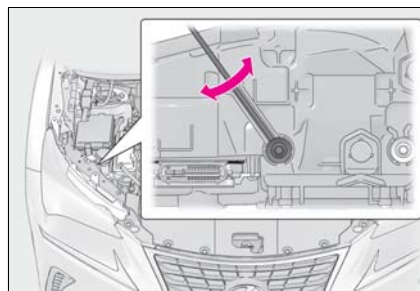
Adjusting the headlight aim

- 1 Using a Phillips-head screwdriver, turn bolt A in either direction. Remember the turning direction and the number of turns.

► Type A



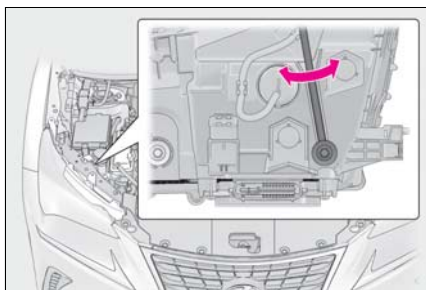
► Type B



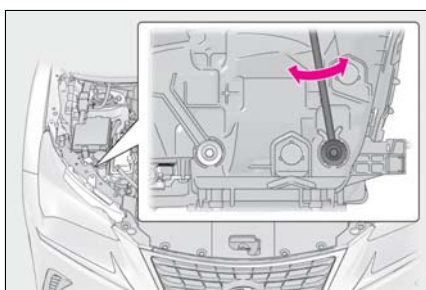
- 2 Turn bolt B the same number of turns and in the same direction as step 1.

If the headlight cannot be adjusted using this procedure, take the vehicle to your Lexus dealer to adjust the headlight aim.

► Type A



► Type B

**Light bulbs**

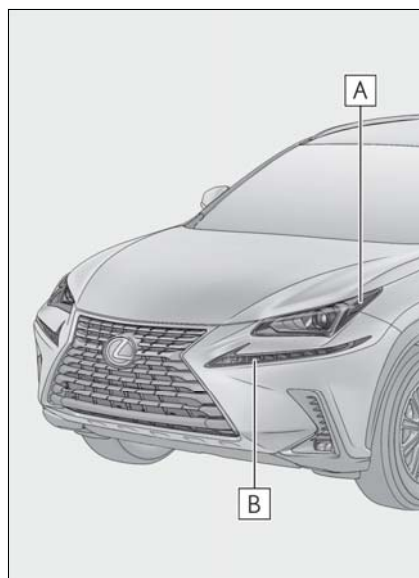
You may replace the following bulbs by yourself.

The difficulty level of replacement varies depending on the bulb. If necessary bulb replacement seems difficult to perform, contact your Lexus dealer.

For more information about replacing other light bulbs, contact your Lexus dealer.

Removing the engine compartment cover

→P.334

Bulb locations

A Front side marker light (bulb type)

B Front turn signal light (bulb type)

■ Bulbs that need to be replaced by the Lexus dealer

- Headlights
- Front turn signal lights (LED type)
- Parking lights and Daytime running lights
- Front fog lights
- Cornering lights (if equipped)
- Front side marker lights (LED type)
- Side turn signal lights
- Stop/tail lights
- Rear side marker lights
- Back-up light
- Rear turn signal light
- High mounted stoplight
- License plate lights
- Outer foot lights

■ LED lights

The lights other than the front side marker lights (bulb type) and front turn signal lights (bulb type) each 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 replacing light bulbs

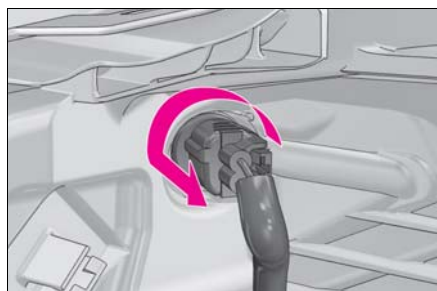
→P.356

Replacing light bulbs

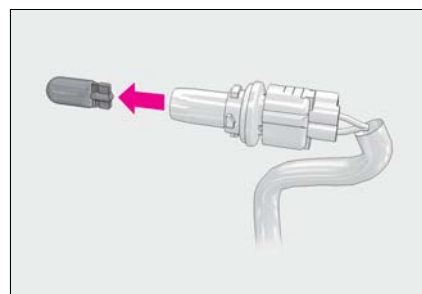
Before replacing, check the wattage of the light bulb to be replaced. (→P.413)

■ Front side marker lights (bulb type)

- 1 Turn the bulb base counterclockwise.



- 2 Remove the light bulb.



- 3 When installing, reverse the steps listed.

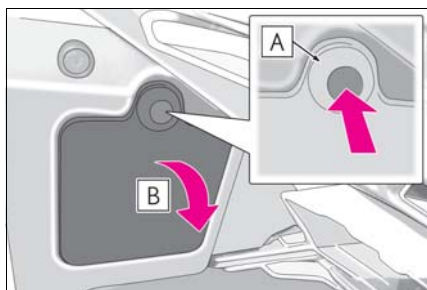
■ Front turn signal lights (bulb type)

- 1 Open the hood and remove the cover for engine compartment cover. (→P.331, 334)

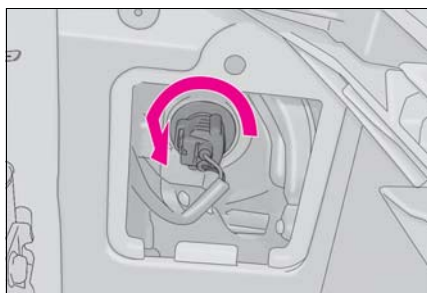
- 2 Remove the cover.

Push the center of the clip **A** and remove

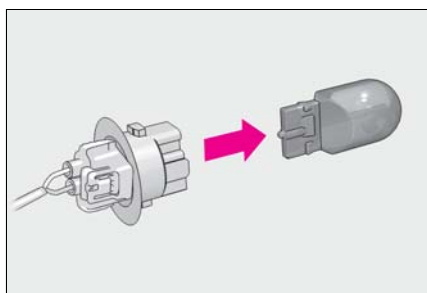
the clip and cover **B**.



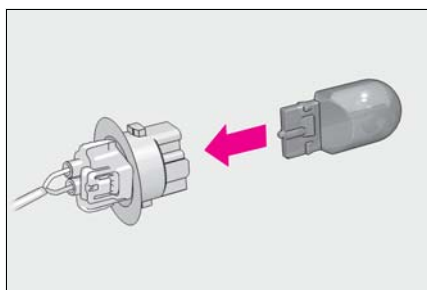
- 3** Turn the bulb base counterclockwise.



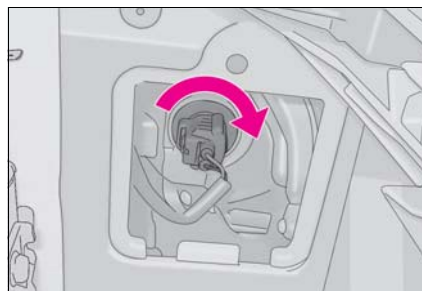
- 4** Remove the light bulb.



- 5** Replace the light bulb.

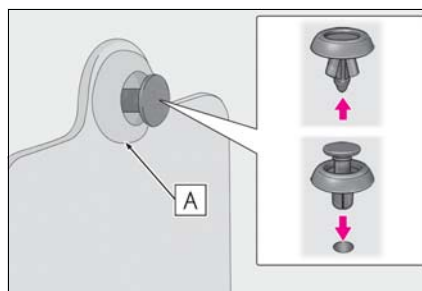


- 6** Turn clockwise and set the bulb base.



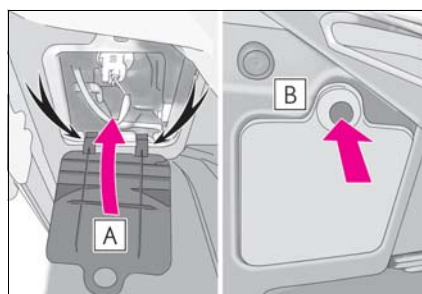
- 7** Attach the clip to the cover.

Push up on the center of the clip and attach the clip **A**.



- 8** Attach the cover.

Align the 2 tabs positions and close the cover **A** and fix the cover by pushing the center of the clip **B**.



- 9** Install the engine compartment cover. (→P.334)

**WARNING****■ Replacing light bulbs**

- Be sure to stop the engine and turn off the lights. Do not attempt to replace the bulb immediately after turning off the lights.
The bulbs become very hot and may cause burns.
 - Do not touch the glass portion of the light bulb with bare hands. When it is unavoidable to hold the glass portion, use and hold with a clean dry cloth to avoid getting moisture and oils on the bulb.
Also, if the bulb is scratched or dropped, it may blow out or crack.
 - Fully install light bulbs and any parts used to secure them. Failure to do so may result in heat damage, fire, or water entering the headlight unit. This may damage the headlights or cause condensation to build up on the lens.
 - Do not attempt to repair or disassemble light bulbs, connectors, electric circuits or component parts.
Doing so may result in death or serious injury due to electric shock.
- To prevent damage or fire**
- Make sure bulbs are fully seated and locked.
 - Check the wattage of the bulb before installing to prevent heat damage.

When trouble arises

7

7-1. Essential information

Emergency flashers..... 364

If your vehicle has to be stopped in
an emergency 364If the vehicle is trapped in rising
water 365

7-2. Steps to take in an emergency

If your vehicle needs to be towed
..... 367If you think something is wrong
..... 371

Fuel pump shut off system 372

If a warning light turns on or a
warning buzzer sounds 373If a warning message is displayed
..... 382

If you have a flat tire..... 385

If the engine will not start 393

If you lose your keys 394

If the fuel filler door cannot be
opened..... 395If the electronic key does not
operate properly 395If the vehicle battery is discharged
..... 398

If your vehicle overheats 401

If the vehicle becomes stuck 404

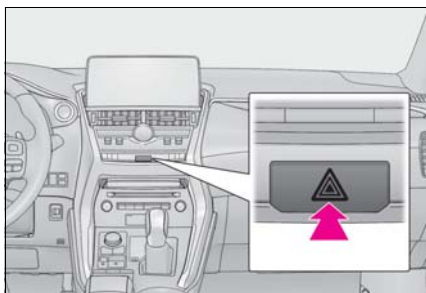
Emergency flashers

The emergency flashers are used to warn other drivers when the vehicle has to be stopped in the road due to a breakdown, etc.

Operating instructions

Press the switch.

All the turn signal lights will flash. 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 operating, the battery may discharge.

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 lever to N.
 - ▶ If the shift lever 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 lever 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 brakes and steering wheel will be lost, making the brake pedal harder to depress and 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 front side windows and rear side windows, as well as the rear window can be shattered with an emergency hammer* used for emergency escape. However, an emergency hammer can not shatter the windshield as it is laminated glass.

*: Contact your Lexus dealer or after-market 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.

2WD models: If towing your vehicle with a wheel-lift type truck from the front, the vehicle's rear wheels and axles must be in good conditions. (→P.367, 368)

If they are damaged, use a towing dolly or flatbed truck.

AWD models: If towing your vehicle with a wheel-lift type truck, use a towing dolly. (→P.367, 368)



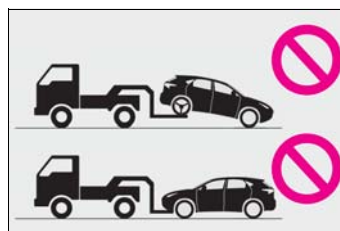
WARNING

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

When towing the vehicle

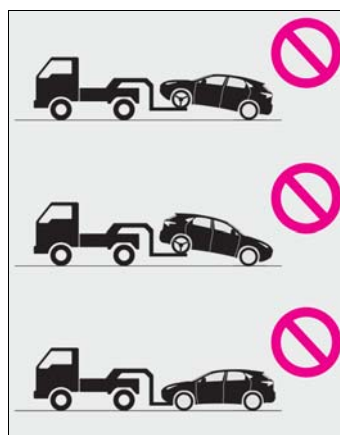
2WD models

Be sure to transport the vehicle with the front wheels raised or with all four wheels raised off the ground. If the vehicle is towed with the front wheels contacting the ground, the drivetrain and related parts may be damaged.



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.

**WARNING**

- Do not turn the engine switch off.
There is a possibility that the steering wheel is locked and cannot be operated.

■ **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**

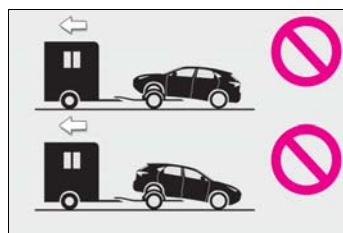
Do not tow with a sling-type truck, either from the front or rear.

■ **To prevent damage to the vehicle during emergency towing**

Do not secure cables or chains to the suspension components.

■ **Recreational towing (behind motor home, etc.)**

Never dinghy tow your vehicle to prevent causing serious damage to the Dynamic Torque Control AWD system (AWD models) and transmission.
(→P.162)



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. (→P.367)

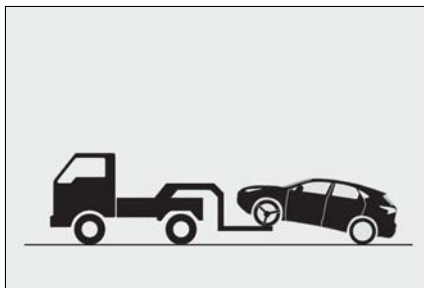
- The engine is running but the vehicle does not move.
- The vehicle makes an abnormal sound.

Towing with a wheel-lift type truck

- From the front (2WD models)

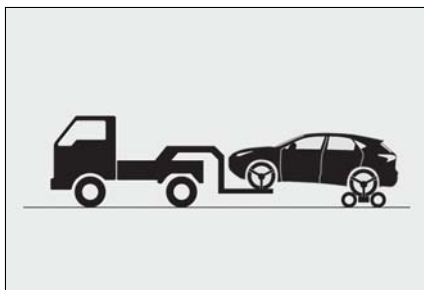
Release the parking brake.

Turn automatic mode off. (→P.172)



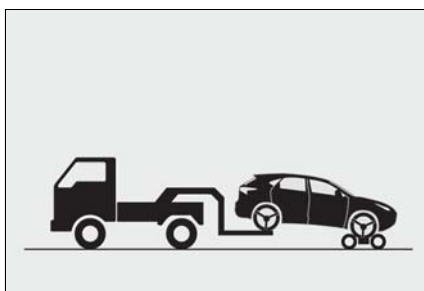
► From the front (AWD models)

Use a towing dolly under the rear wheels.



► From the rear

Use a towing dolly under the front wheels.

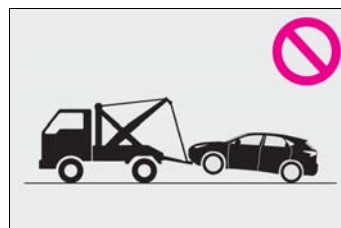


NOTICE

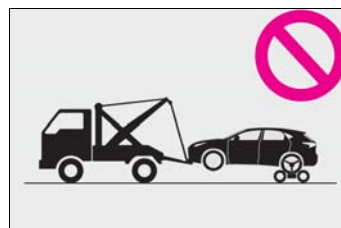
■ Towing with a sling-type truck

Do not tow with a sling-type truck to prevent body damage.

► 2WD models



► AWD models



Using a flatbed truck

When using a flat-bed truck to transport the vehicle, use tire strapping belts. Refer to the owner's manual of the flat-bed truck for the tire strapping method.

In order to suppress vehicle movement during transportation, set the parking brake and turn the engine switch off.

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 at most 50

370 7-2. Steps to take in an emergency

miles (80 km) at under 18 mph (30 km/h).

A driver must be in the vehicle to steer and operate the brakes. The vehicle's wheels, drivetrain, axles, steering and brakes must be in good condition.

Emergency towing procedure

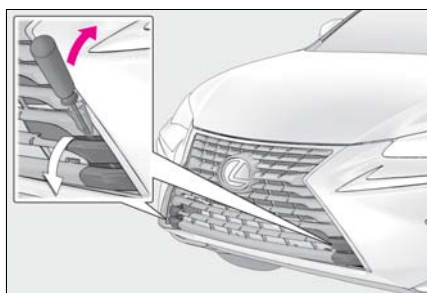
To have your vehicle towed by another vehicle, the towing eyelet must be installed to your vehicle. Install the towing eyelet using the following procedure.

1 Take out the wheel nut wrench, flat-head screwdriver and towing eyelet. (→P.386)

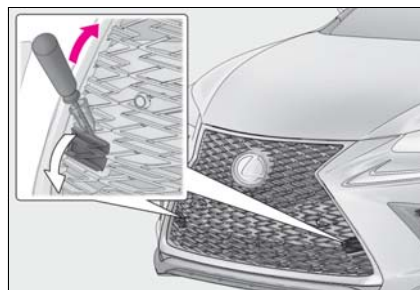
2 Remove the eyelet cover using a flathead screwdriver.

To protect the bodywork, place a rag between the screwdriver and the vehicle body as shown in the illustration.

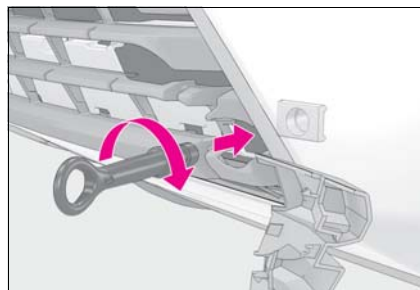
► Type A



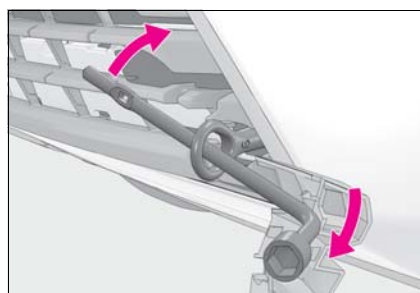
► Type B



3 Insert the towing eyelet into the hole and tighten partially by hand.



4 Tighten down the towing eyelet securely using a wheel nut wrench 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 lever to N and release the parking brake.

Turn automatic mode off. (→P.172)

When the shift lever cannot be shifted:
→P.168

■ 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.

■ Wheel nut wrench

Wheel nut wrench is installed in luggage compartment. (→P.386)

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 misfire or misses, 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
 (U.S.A.)  (Red) (Canada)	Indicates: ● The brake fluid level is low; or ● The brake system is malfunctioning → Immediately stop the vehicle in a safe place and contact your Lexus dealer. Continuing to drive the vehicle may be dangerous.

■ Charging system warning light*

Warning light	Details/Actions
	Indicates a malfunction in the vehicle's charging system → Immediately stop the vehicle in a safe place and contact your Lexus dealer. Continuing to drive the vehicle may be dangerous.

* : 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 → Immediately stop the vehicle in a safe place and contact your Lexus dealer. Continuing to drive the vehicle may be dangerous.

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

■ High coolant temperature warning light* (warning buzzer)

Warning light	Details/Actions
	Indicates that the engine is overheating → Immediately stop the vehicle in a safe place. Continuing to drive the vehicle may be dangerous. Handling method (→P.401)

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

■ Brake system warning light

Warning light	Details/Actions
 (Yellow)	Indicates a malfunction in the electric parking brake → Have the vehicle inspected by your Lexus dealer immediately.

■ Malfunction indicator lamp

Warning light	Details/Actions
 (U.S.A.)  (Canada)	Indicates a malfunction in: ● The electronic engine control system; ● The electronic throttle control system; or ● The electronic automatic transmission control system → Have the vehicle inspected by your Lexus dealer immediately.

■ SRS warning light

Warning light	Details/Actions
	Indicates a malfunction in: ● The SRS airbag system; ● The front passenger occupant classification system; or ● The seat belt pretensioner system → Have the vehicle inspected by your Lexus dealer immediately.

■ ABS warning light

Warning light	Details/Actions
 (U.S.A.)  (Canada)	Indicates a malfunction in: ● The ABS; or ● The brake assist system → Have the vehicle inspected by your Lexus dealer immediately.

■ Electric power steering system warning light (warning buzzer)

Warning light	Details/Actions
 (Yellow)  (Red)	Indicates a malfunction in the EPS (Electric Power Steering) system → Have the vehicle inspected by your Lexus dealer immediately.

■ PCS warning light

Warning light	Details/Actions
	When a buzzer sounds simultaneously: Indicates a malfunction has occurred in the PCS (Pre-Collision System). → Have the vehicle inspected by your Lexus dealer immediately. When a buzzer does not sound: The PCS (Pre-Collision System) has become temporarily unavailable, corrective action may be necessary. → Follow the instructions displayed on the multi-information display. (→P.196, 382) If the PCS (Pre-Collision System) or VSC (Vehicle Stability Control) system is disabled, the PCS warning light will illuminate. → P.204

■ LTA indicator* (warning buzzer)

Warning light	Details/Actions
 (Orange) (If equipped)	Indicates a malfunction in the LTA (Lane Tracing Assist) → Follow the instructions displayed on the multi-information display. (→P.213)

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

■ LDA indicator* (warning buzzer)

Warning light	Details/Actions
 (Orange) (If equipped)	Indicates a malfunction in the LDA (Lane Departure Alert) with steering control → Follow the instructions displayed on the multi-information display. (→P.221)

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

■ PKSB OFF indicator (warning buzzer)

Warning light	Details/Actions
 (Flashes) (If equipped)	When a buzzer sounds: Indicates a malfunction in the PKSB (Parking Support Brake) system → Have the vehicle inspected by your Lexus dealer immediately. 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. → Clear the dirt, etc.

■ Slip indicator light

Warning light	Details/Actions
	Indicates a malfunction in: ● The VSC system; ● The TRAC system; or ● The hill-start assist control system The light will flash when the VSC or TRAC system is operating. → Have the vehicle inspected by your Lexus dealer immediately.

■ Brake hold operated indicator

Warning light	Details/Actions
 (Flashes)	Indicates a malfunction in the brake hold system → Have the vehicle inspected by your Lexus dealer immediately.

■ Parking brake indicator

Warning light	Details/Actions
 (Flashes) (U.S.A.)	It is possible that the parking brake is not fully engaged or released → Operate the parking brake switch once again.
 (Flashes) (Canada)	This light comes on when the parking brake is not released. If the light turns off after the parking brake is fully released, the system is operating normally.

■ Low fuel level warning light

Warning light	Details/Actions
	Indicates that remaining fuel is approximately 2.3 gal. (9.0 L, 1.9 Imp.gal.) or less → Refuel the vehicle.

■ Driver's and front passenger's seat belt reminder light (warning buzzer)*

Warning light	Details/Actions
	Warns the driver and/or front passenger to fasten their seat belts → Fasten the seat belt. 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.

* : 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 inter-

mittently for a certain period of time after the vehicle reaches a certain speed.

■ Rear passengers' seat belt reminder light ^{*1}(warning buzzer ^{*2})

Warning light	Details/Actions
	Warns the rear passengers to fasten their seat belts → Fasten the seat belt.

^{*1}: This light illuminates on the center panel. Regardless of whether or not a rear passenger is present, if the engine switch is turned to IGNITION ON mode with the rear seat belts unfastened, this light will also illuminate for a certain period of time.

^{*2}: Rear passengers' seat belt warning buzzer:
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.

■ Master warning light (warning buzzer)

Warning light	Details/Actions
	A buzzer sounds and the warning light comes on and flashes to indicate that the master warning system has detected a malfunction. → P.382

■ Tire pressure warning light

Warning light	Details/Actions
	When the light comes on: Low tire inflation pressure such as ● Natural causes (→P.380) ● Flat tire (→P.385) → Adjust the tire inflation pressure to the specified level. The light will turn off after a few minutes. In case the light does not turn off even if the tire inflation pressure is adjusted, have the system checked by your Lexus dealer. When the light comes on after blinking for 1 minute: Malfunction in the tire pressure warning system (→P.380) → Have the system checked by your Lexus dealer.

■ **Brake Override System/Drive-Start Control warning light*** (warning buzzer)

Warning light	Details/Actions
	Brake Override System Indicates that the accelerator and brake pedals are being depressed simultaneously, and the Brake Override System is operating. → Release the accelerator pedal and depress the brake pedal. Indicates a malfunction in the Brake Override System (with warning buzzer) → Have the vehicle inspected by your Lexus dealer immediately. Drive-Start Control Indicates that the shift position was changed and Drive-Start Control was operated while depressing the accelerator pedal. (with warning buzzer) → Momentarily release the accelerator pedal. Indicates a malfunction in the Drive-Start Control system (with warning buzzer) → Have the vehicle inspected by your Lexus dealer immediately.

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

■ **SRS warning light**

This warning light system monitors the air-bag sensor assembly, front impact sensors, side impact sensors (front door), side impact sensors (rear), driver's seat position sensor, driver's seat belt buckle switch, front passenger occupant classification system (ECU and sensors), "AIR BAG ON" indicator light, "AIR BAG OFF" indicator light, front passenger's seat belt buckle switch, driver's seat belt pretensioner, front passenger's seat belt pretensioner and force limiter, airbags, interconnecting wiring and power sources. (→P.32)

■ **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.

■ **Electric power steering system warning light (warning buzzer)**

When the battery charge becomes insufficient of the voltage temporarily drops, the electric power steering system warning light may come on and the warning buzzer may sound.

■ **If the malfunction indicator lamp comes on while driving**

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.

■ **When the tire pressure warning light comes on**

Inspect the appearance of the tire to check that the tire is not punctured.

If the tire is punctured: →P.385

If the tire is not punctured:

Carry out the following procedure after the tire temperature has lowered sufficiently.

- Check the tire inflation pressure and adjust to the appropriate level.
- If the warning light does not go out even after several minutes, check that the tire inflation pressure is at the specified level and carry out initialization. (→P.347)

The warning light may come on again if the above operations are conducted without first allowing the tire temperature to lower sufficiently.

■ **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).

■ **When a tire is replaced with a spare tire**

The compact spare tire is not equipped with a tire pressure warning valve and transmitter. If a tire goes flat, the tire pressure warning light will not turn off even though the flat tire has been replaced with the spare tire. Replace the spare tire with the repaired tire and adjust the tire inflation pressure. The tire pressure warning light will go off after a few minutes.

■ **Conditions that the tire pressure warning system may not function properly**

→P.343

■ **If the tire pressure warning light frequently comes on after blinking for 1 minute**

If the tire pressure warning light frequently

comes on after blinking for 1 minute when the engine switch is turned to IGNITION ON mode, have it checked by your Lexus dealer.

■ **Warning buzzer**

In some cases, the buzzer may not be heard due to being in a noisy location or audio sound.



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.

- Stop your vehicle in a safe place as soon as possible. Adjust the tire inflation pressure immediately.



WARNING

- If the tire pressure warning light comes on even after tire inflation pressure adjustment, it is probable that you have a flat tire. Check the tires. If a tire is flat, change it with the spare tire and have the flat tire repaired 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.

■ **Maintenance of the tires**

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label (tire and load information label). (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label [tire and load information label], you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS-tire pressure warning system) that illuminates a low tire pressure telltale (tire pressure warning light) when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale (tire pressure warning light) illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS (tire pressure warning system) is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale (tire pressure warning light).

Your vehicle has also been equipped with a TPMS (tire pressure warning system) malfunction indicator to indicate when the system is not operating properly. The TPMS (tire pressure warning system) malfunction indicator is combined with the low tire pressure telltale (tire pressure warning light). When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended.

TPMS (tire pressure warning system) malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS (tire pressure warning system) from functioning properly. Always check the TPMS (tire pressure warning system) malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS (tire pressure warning system) to continue to function properly.



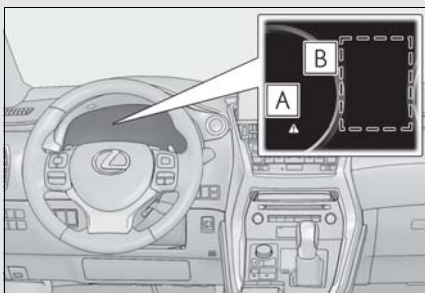
NOTICE

■ **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.



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 following actions have been performed, contact your Lexus dealer.

Messages and warnings

The warning lights 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.

	System warning light	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
—	Comes on or flashes	Sounds	Indicates an important situation, such as when the systems shown on the multi-information display may be malfunctioning
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

*: A buzzer sounds the first time a message is shown on the multi-information display.

■ System warning lights

The master warning light does not come on or flash in the following cases. Instead, a separate system warning light will come on along with a message shown on the multi-information display.

- Malfunction of the ABS
The ABS warning light comes on. (→P.375)
- Malfunction of the charging system
The charging system warning light comes on. (→P.373)

■ If “Shift to P Before Exiting Vehicle” is shown

Message is displayed when the driver's door is opened without turning the engine

switch to OFF with the shift lever in any position other than P.
Shift the shift lever to P.

■ If a message that indicates the malfunction of front camera is displayed

The following systems may be suspended until the problem shown in the message is resolved. (→P.196, 375)

- PCS (Pre-Collision System)
- LTA (Lane Tracing Assist) (if equipped)
- LDA (Lane Departure Alert with steering control) (if equipped)
- Automatic High Beam
- RSA (Road Sign Assist) (if equipped)
- Dynamic radar cruise control with full-speed range

■ If “RSA malfunction Visit Your Dealer” is shown

The system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

■ If “Radar Cruise Control Unavailable See Owner’s Manual” is shown

The dynamic radar cruise control with full-speed range system is suspended temporarily or until the problem shown in the message is resolved. (causes and coping methods: →P.196)

■ If “Radar Cruise Control Unavailable” is shown

The dynamic radar cruise control with full-speed range system cannot be used temporarily. Use the system when it becomes available again.

■ If “Oil Maintenance Required Soon” is shown

Indicates that the engine oil is scheduled to be changed. (The indicator will not work properly unless the oil maintenance data has been reset.)

Check the engine oil, and change if necessary. After changing the engine oil, the oil change system should be reset. (→P.335)

■ If “Oil Maintenance Required” is shown

Indicates that the engine oil should be changed. (After the engine oil is changed and the oil maintenance data has been reset.)

Check and change the engine oil, and oil filter by your Lexus dealer. After changing the engine oil, the oil change system should be reset. (→P.335)

■ If “See Owner’s Manual” is shown

● If the following messages are shown, following the instructions, accordingly.

- “Engine Coolant Temp High” (→P.401)

● If the following messages are shown, there may be a malfunction. Immediately have the vehicle inspected by your Lexus dealer.

- “Braking Power Low”
- “Smart Access System Malfunction”

● If the following messages are shown, there may be a malfunction. Immediately stop the vehicle in a safe

place and contact your Lexus dealer. Continuing to drive the vehicle may be dangerous.

- “Oil Pressure Low”
- “Charging System Malfunction”
- “Transmission Fluid Temp High”

■ Warning buzzer

→P.380



NOTICE

■ “High Power Consumption Partial Limit On AC/Heater Operation” is frequently shown

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 equipped with a spare tire. The flat tire can be replaced with the spare tire.
For details about tires: →P.341

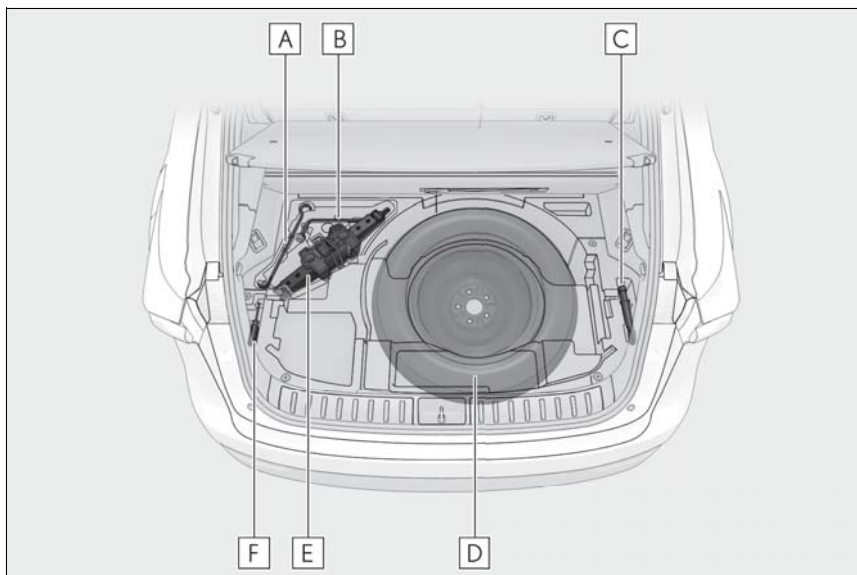
**WARNING****■ If you have a flat tire**

Do not continue driving with a flat tire. Driving even a short distance with a flat tire can damage the tire and the wheel beyond repair, which could result in an accident.

Before jacking up the vehicle

- Stop the vehicle in a safe place on a hard, flat surface.
- Set the parking brake.
- Shift the shift lever to P.
- Stop the engine.
- Turn on the emergency flashers.
(→P.364)

Location of the spare tire, jack and tools



- A** Jack handle
- B** Wheel nut wrench
- C** Towing eyelet
- D** Spare tire
- E** Jack
- F** Screwdriver



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.
- Only use the tire jack that comes with this vehicle for replacing a flat tire. Do not use it on other vehicles, and do not use other tire jacks for replacing tires on this vehicle.

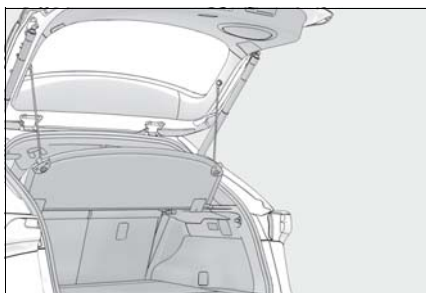
- Put the jack properly in its jack point.
- Do not put any part of your body under the vehicle while it is supported by the jack.
- Do not start the engine or drive the vehicle while the vehicle is supported by the jack.
- Do not raise the vehicle while someone is inside.
- When raising the vehicle, do not put an object on or under the jack.

⚠ WARNING

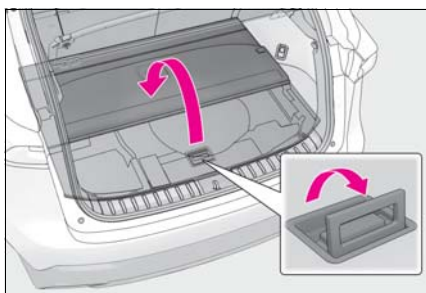
- Do not raise the vehicle to a height greater than that required to replace the tire.
- Use a jack stand if it is necessary to get under the vehicle.
- When lowering the vehicle, make sure that there is no-one near the vehicle. If there are people nearby, warn them vocally before lowering.

Taking out the jack

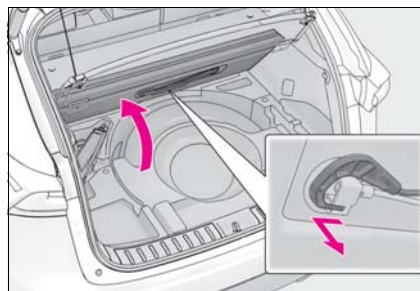
- 1 Open the back door.



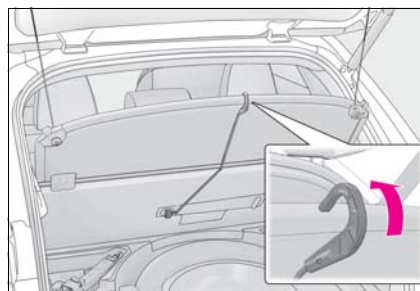
- 2 Pull the lever upwards and open the deck board.



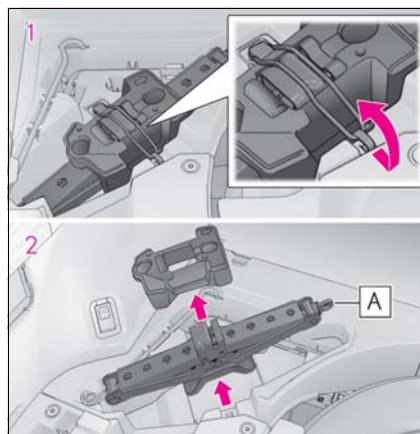
- 3 Lift the deck board and remove the hook on the backside of the deck board.



- 4 Use the hook to secure the deck board as shown in the illustration.



- 5 Removing the jack.



- 1 Remove the rubber band.
- 2 Remove the cover and the jack.

When stowing the jack, close it by turning

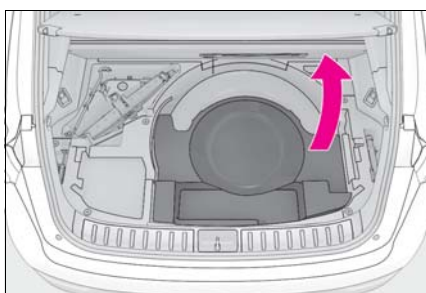
7

When trouble arises

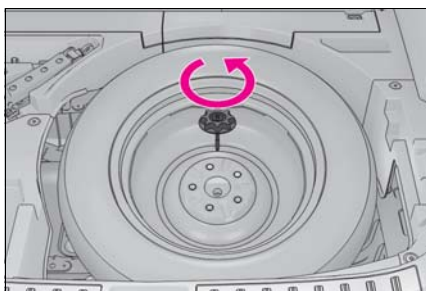
the handle indicated by **A** until it does not move anymore, stow the jack and the cover, and press on the jack to fix with the rubber band.

Taking out the spare tire

- 1 Remove deck under tray.



- 2 Loosen the center fastener that secures the spare tire.



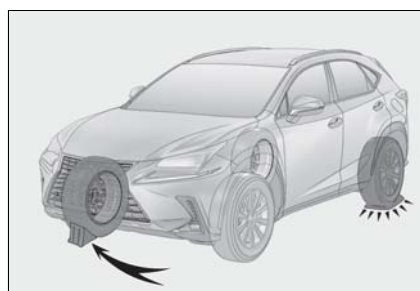
! WARNING

■ When storing the spare tire

Be careful not to catch fingers or other body parts between the spare tire and the body of the vehicle.

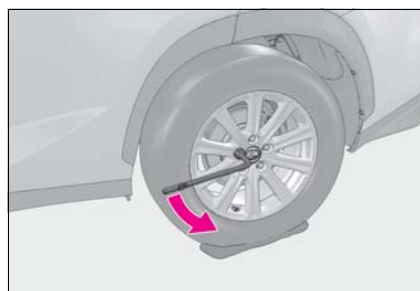
Replacing a flat tire

- 1 Chock the tires.



Flat 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

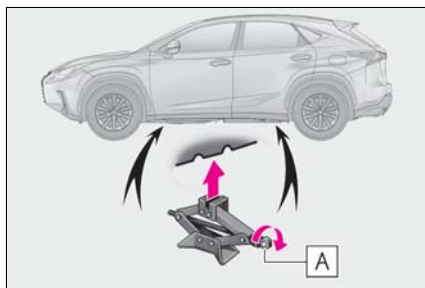
- 2 Slightly loosen the wheel nuts (one turn).



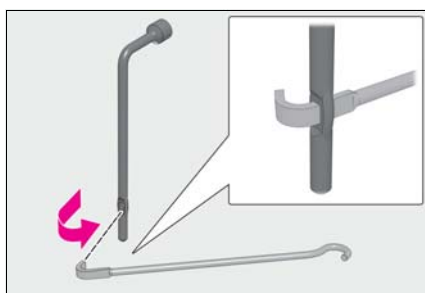
- 3 Turn the tire jack portion **A** by hand until the notch of the jack is in contact with the jack point.

The jack point guides are located under the rocker panel. They indicate the jack

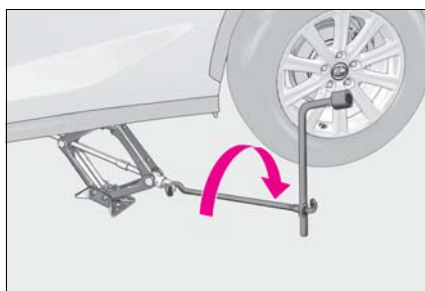
point positions.



- 4** Install the wheel nut wrench in jack handle.



- 5** Raise the vehicle until the tire is slightly raised off the ground.



- 6** 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 flat tire

● Observe the following precautions. Failure to do so may result in serious injury:

- Do not try to remove the wheel ornament by hand. Take due care in handling the ornament to avoid unexpected personal injury.
- 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.

WARNING

- 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 76 ft • lbf (103 N • m, 10.5 kgf • m) as soon as possible after changing wheels.
- 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.
- Do not attach a heavily damaged wheel ornament, as it may fly off the wheel while the vehicle is moving.

■ Replacing a flat tire for vehicles with power back door

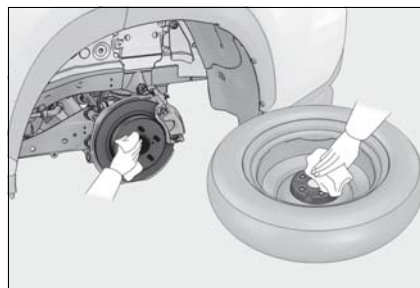
In cases such as when replacing tires, make sure to turn off the power back door system (→P.112). Failure to do so may cause the back door to operate unintentionally if the power back door switch is accidentally touched, resulting in hands and fingers being caught and injured.

Installing the spare tire

- 1 Remove any dirt or foreign matter from the wheel contact surface.

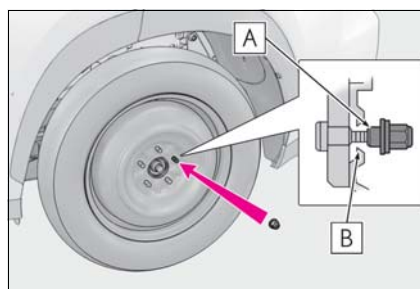
If foreign matter is on the wheel contact surface, the wheel nuts may loosen while the vehicle is in motion, causing the tire to

come off.

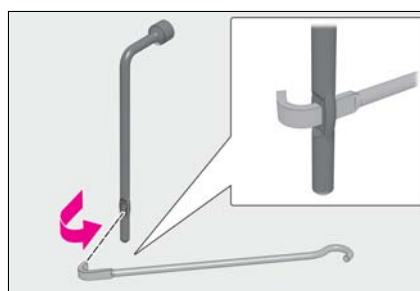


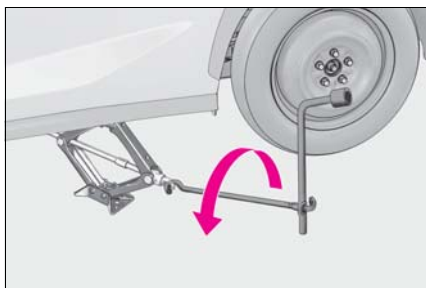
- 2 Install the spare tire and loosely tighten each wheel nut by hand by approximately the same amount.

Tighten the wheel nuts until the tapered portion **A** comes into loose contact with the disc wheel seat **B**.

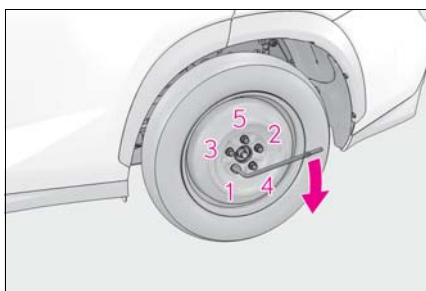


- 3 Install the wheel nut wrench in jack handle.



4 Lower the vehicle.**5** Firmly tighten each wheel nut two or three times in the order shown in the illustration.

Tightening torque:
76 ft·lbf (103 N·m, 10.5 kgf·m)

**6** Stow the flat tire, tire jack and all tools.**■ The compact spare tire**

- The compact spare tire is identified by the label "TEMPORARY USE ONLY" on the tire sidewall. Use the compact spare tire temporarily, and only in an emergency.

- Make sure to check the tire inflation pressure of the compact spare tire. (→P.411)

■ After completing the tire change

The tire pressure warning system must be reset. (→P.347)

■ When using the compact spare tire

As the compact spare tire is not equipped with a tire pressure warning valve and transmitter, low inflation pressure of the spare tire will not be indicated by the tire pressure

warning system. Also, if you replace the compact spare tire after the tire pressure warning light comes on, the light remains on.

■ When the compact spare tire is equipped

The vehicle becomes lower when driving with the compact spare tire compared to when driving with standard tires.

■ If you have a flat front tire on a road covered with snow or ice

Install the compact spare tire on one of the rear wheels of the vehicle. Perform the following steps and fit tire chains to the front tires:

- 1** Replace a rear tire with the compact spare tire.
- 2** Replace the flat front tire with the tire removed from the rear of the vehicle.
- 3** Fit tire chains to the front tires.

⚠ WARNING**■ When using the compact spare tire**

- Remember that the spare tire provided is specifically designed for use with your vehicle. Do not use your spare tire on another vehicle.
- Do not use more than one spare tire simultaneously.
- Replace the spare tire with a standard tire as soon as possible.
- Avoid sudden acceleration, abrupt steering, sudden braking and shifting operations that cause sudden engine braking.

**WARNING****■ When the compact spare tire is attached**

The vehicle speed may not be correctly detected, and the following systems may not operate correctly:

- ABS & Brake assist
- VSC
- TRAC
- Dynamic radar cruise control with full-speed range
- PCS (Pre-Collision System)
- EPS
- AVS (Adaptive Variable Suspension System) (if equipped)
- LTA (Lane Tracing Assist) (if equipped)
- LDA (Lane Departure Alert with steering control) (if equipped)
- Panoramic view monitor (if equipped)
- Lexus parking assist monitor (if equipped)
- Intuitive parking assist (if equipped)
- Navigation system (if equipped)
- BSM (Blind spot monitor) (if equipped)
- Automatic high Beam (if equipped)

Also, not only can the following system not be utilized fully, but it may even negatively affect the drive-train components:

- AWD system (if equipped)

■ Speed limit when using the compact spare tire

Do not drive at speeds in excess of 50 mph (80 km/h) when a compact spare tire is installed on the vehicle.

The compact spare tire is not designed for driving at high speeds. Failure to observe this precaution may lead to an accident causing death or serious injury.

■ After using the tools and jack

Before driving, make sure all the tools and jack are securely in place in their storage location to reduce the possibility of personal injury during a collision or sudden braking.

**NOTICE****■ Be careful when driving over bumps with the compact spare tire installed on the vehicle**

The vehicle becomes lower when driving with the compact spare tire compared to when driving with standard tires. Be careful when driving over uneven road surfaces.

■ Driving with tire chains and the compact spare tire

Do not fit tire chains to the compact spare tire.

Tire chains may damage the vehicle body and adversely affect driving performance.

■ 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.

If the engine will not start

If the engine will not start even though correct starting procedures are being followed (→P.163), 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.163)
- There may be a malfunction in the engine immobilizer system.
(→P.67)

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 terminal connections may be loose or corroded.
- The battery may be discharged.
(→P.398)

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.393)

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.
- The battery may be discharged.
(→P.398)
- 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 Set the parking brake.

- 2** Shift the shift lever to P.
- 3** Turn the engine switch to ACCESSORY mode.
- 4** 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

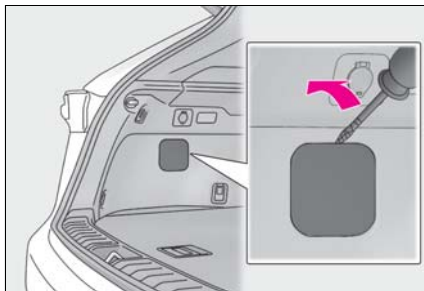
If the electronic key remains lost, the risk of vehicle theft increases significantly. Visit your Lexus dealer immediately with all remaining electronic keys and the card key that were provided with your vehicle.

If the fuel filler door cannot be opened

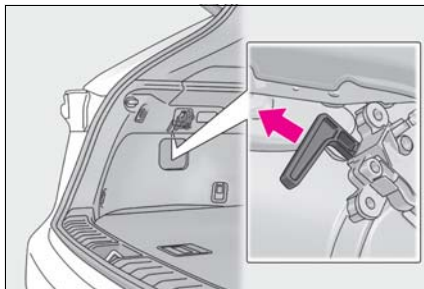
If the fuel filler door opener switch cannot be operated, the following procedure can be used to open the fuel filler door.

Opening the fuel filler door

- 1 Remove the cover inside the luggage compartment by inserting a screwdriver.
When removing the cover, to prevent damage, cover the tip of the screwdriver with a rag.



- 2 After removing the cover, pull the lever to unlock the fuel filler door and it will be ready to open as usual.



If the electronic key does not operate properly

If communication between the electronic key and vehicle is interrupted (→P.116) or the electronic key cannot be used because the battery is depleted, the smart access system with push-button start and wireless remote control cannot be used. In such cases, the doors can be opened and the engine can be started by following the procedure below.

Things to check before taking measures

- Make sure that the smart access system with push-button start has not been deactivated in the customization setting. If it is off, turn the function on.
- Check if battery-saving mode is set. If it is set, cancel the function. (→P.115)

NOTICE

- In case of a smart access system with push-button start malfunction or other key related problems

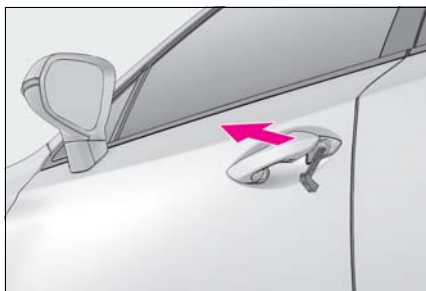
Take your vehicle with all the electronic keys provided with your vehicle, including the card key, to your Lexus dealer.

Locking and unlocking the doors

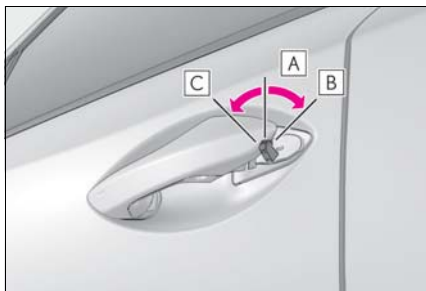
Use the mechanical key (→P.96) to perform the following operations.

■ Unlocking the door

- 1 Insert the mechanical key while pulling on the driver's door handle.



- 2 Turn the key in order to perform the following operations.



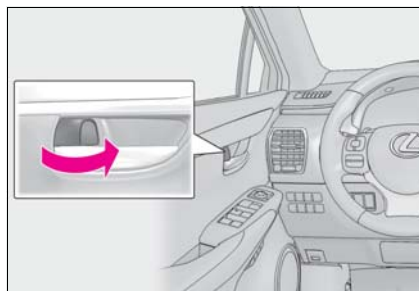
- A** Unlocking the door
- B** Opens the windows and moon roof* (turn and hold)
- C** Closes the windows and moon roof* (turn and hold)

* : This setting must be customized at your Lexus dealer

- 3 Remove the key, return the handle, and then pull the handle again.

■ Locking the door

- 1 Move the inside lock button to the lock position.



- 2 Close the door.

⚠ WARNING

■ When using the mechanical key and operating the power windows or moon roof

Operate the power window or 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 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 moon roof.

Starting the engine

- 1 Ensure that the shift lever is in P and depress the brake pedal.
- 2 Touch the Lexus emblem side of the electronic key to the engine switch.

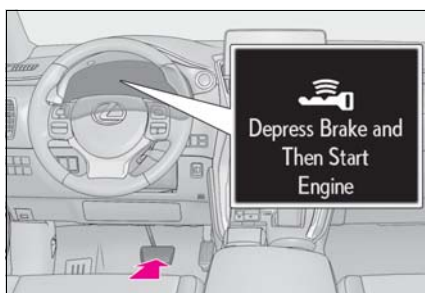
When the electronic key is detected, a buzzer sounds and the engine switch will turn to IGNITION ON mode. When the smart access system with push-button start is deactivated in customization setting, the engine switch will turn to

ACCESSORY mode.



engine switch in step **3** above.
The engine does not start and modes will be changed each time the switch is pressed.
(→P.165)

- 3** Firmly depress the brake pedal and check that message shown on the multi-information display.



- 4** Press the engine switch.

In the event that the engine still cannot be operated, contact your Lexus dealer.

■ Stopping the engine

Set the parking brake, shift the shift lever 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.

■ Alarm

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.

■ Changing engine switch modes

Release the brake pedal and press the

If the vehicle battery is discharged

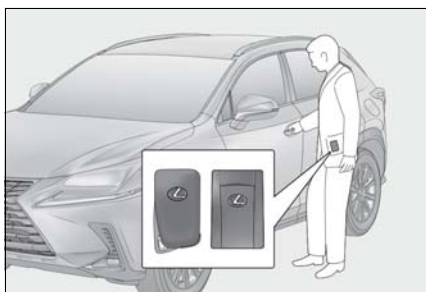
The following procedures may be used to start the engine if the vehicle's battery is discharged. You can also call your Lexus dealer or a qualified repair shop.

Restarting the engine

If you have a set of jumper (or booster) cables and a second vehicle with a battery, you can jump start your vehicle by following the steps below.

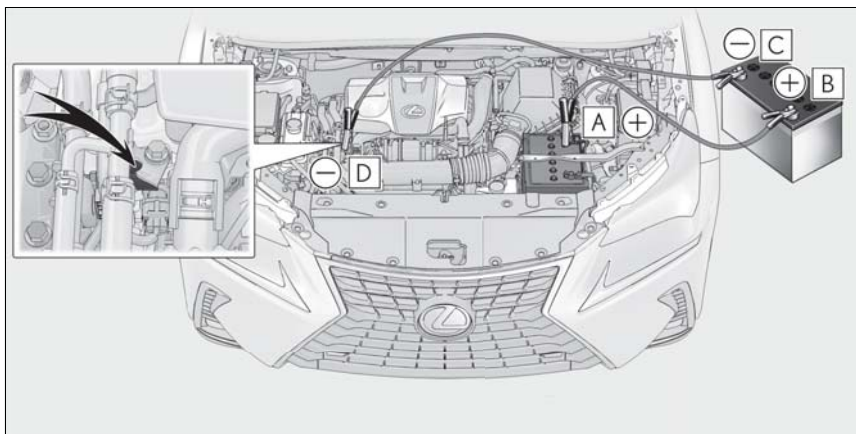
- 1 Confirm that the electronic key is being carried.

When connecting the jumper (or booster) cables, depending on the situation, the alarm may activate and the doors may lock. (→P.70)



- 2 Open the hood (→P.331)

- 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** Solid, stationary, unpainted metallic point away from the battery and any moving parts as shown in the illustration
- 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.
- 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.
- Turn off any unnecessary electrical components when the vehicle is running at a low speed for an extended period, such as in heavy traffic.

■ 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.)

■ When the battery is removed or discharged

- In some cases, it may not be possible to unlock the doors using the smart access system with push-button start 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.
- Some systems may require initialization.



WARNING

■ 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.
- 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.

**WARNING**

- Always wash your hands after handling the battery support, terminals, and other battery-related parts.
- Do not allow children near the battery.

**NOTICE****■ When handling jumper cables**

When connecting the jumper cables, ensure that they do not become entangled in the cooling fans or engine drive belt.

If your vehicle overheats

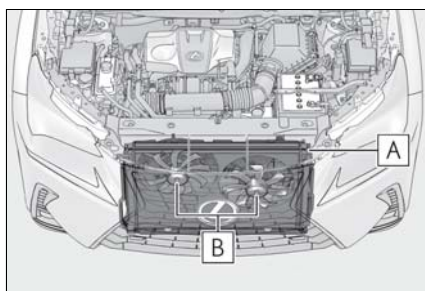
The following may indicate that your vehicle is overheating.

- The needle of the engine coolant temperature gauge (→P.77) enters the red zone, or a loss of engine power is experienced. (For example, the vehicle speed does not increase.)
- “Engine Coolant Temp High” 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.

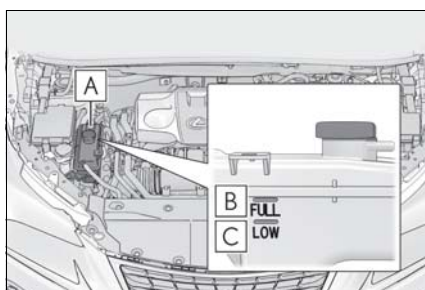


- A** Radiator
- B** Cooling fans

If a large amount of coolant leaks, immediately contact your Lexus dealer.

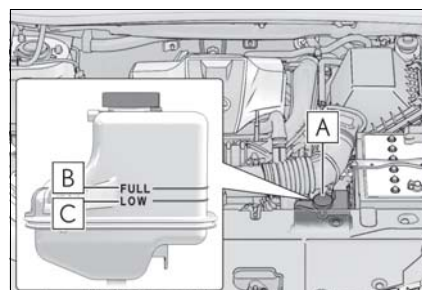
- 4** The coolant level is satisfactory if it is between the "FULL" and "LOW" lines on the reservoir.

► Engine



- A** Reservoir
- B** "FULL" line
- C** "LOW" line

► Intercooler radiator

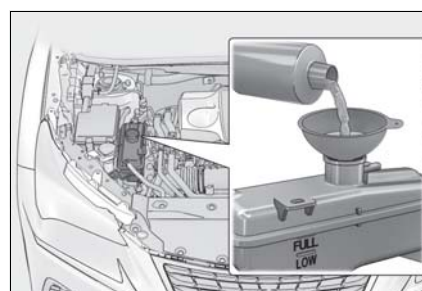


- A** Reservoir
- B** "FULL" line
- C** "LOW" line

- 5** Add coolant if necessary.

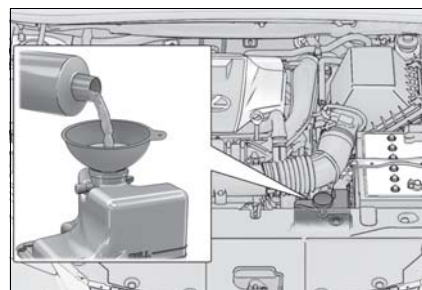
► Engine

Water can be used in an emergency if coolant is unavailable.



► Intercooler radiator

Water can be used in an emergency if coolant is unavailable.



- 6** Start the engine and turn the air conditioning system on to check that the radiator cooling fans operate and to check for coolant leaks from the radiator or hoses.

The fans operate when the air conditioning system is turned on immediately after a cold start. Confirm that the fans are 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 fans may not operate in freezing temperatures.)

- 7** If the fans are not operating:

Stop the engine immediately and contact your Lexus dealer.

If the fans are operating:

Have the vehicle inspected at the nearest Lexus dealer.

- 8** Check if "Engine Coolant Temp High" is shown on the multi-information display.

If the message does not disappear: Stop the engine and contact your Lexus dealer.

If the message is not displayed:

Have the vehicle inspected at the nearest Lexus dealer.

WARNING

- **To prevent an accident or injury 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.

- Do not touch within the engine compartment or get close when the cooling fan is operating. Body parts, clothes, etc., may get caught and lead to an accident, resulting in serious injury. The cooling fan operates automatically at times when the air conditioner is operating and times when the coolant temperatures are high. Also, it may operate for several minutes even after the engine switch is turned off.

- Keep hands and clothing (especially a tie, a scarf or a muffler) away from the fans and belts. Failure to do so may cause the hands or clothing to be caught, resulting in serious injury.

- Do not loosen the 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

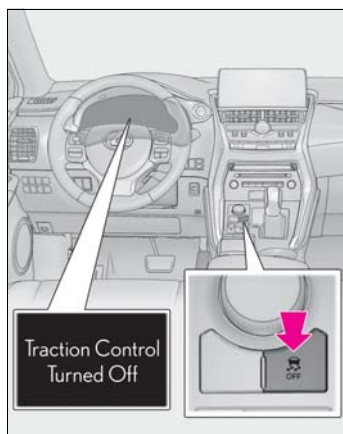
Carry out the following procedures if the tires spin or the vehicle becomes stuck in mud, dirt or snow:

Recovering procedure

- 1 Stop the engine. Shift the shift lever to P and set the parking brake.
- 2 Remove the mud, snow or sand from around the front wheels.
- 3 Place wood, stones or some other material under the front wheels to help provide traction.
- 4 Restart the engine.
- 5 Shift the shift lever to D or R, release the parking brake. Then, while exercising caution, depress the accelerator pedal.

■ When it is difficult to free the vehicle

Press  to turn off TRAC. (→P.260)

**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 lever

Be careful not to shift the shift lever 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 damage to the transmission and other components**

- Avoid spinning the front 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.

8-1. Specifications

Maintenance data (fuel, oil level,
etc.)406

Fuel information.....414

Tire information.....416

8-2. Customization

Customizable features.....425

8-3. Initialization

Items to initialize436

Maintenance data (fuel, oil level, etc.)

Dimensions and weight

Overall length		182.7 in. (4640 mm)
Overall width		72.6 in. (1845 mm)
Overall height ^{*1}		64.8 in. (1645 mm)
Wheelbase		104.7 in. (2660 mm)
Front and rear tread	Vehicles with 225/65R17 and 225/60R18 tires	62.2 in. (1580 mm)
	Vehicles with 235/55R18 tires	61.8 in. (1570 mm)
Vehicle capacity weight (Occupants + luggage)		895 lb. (405 kg)
Trailer Weight Rating ^{*2} (Trailer weight + cargo weight)		2000 lb. (910 kg)

^{*1}: Unladen vehicle

^{*2}: Vehicles with towing package

Seating capacity

Seating capacity	5 (Front 2, Rear 3)
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Vehicle identification

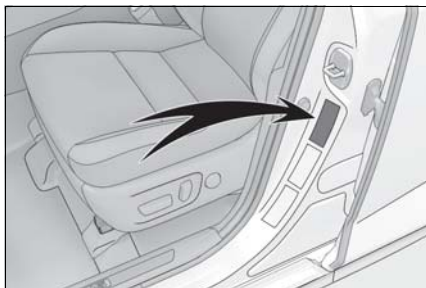
■ Vehicle identification number

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.

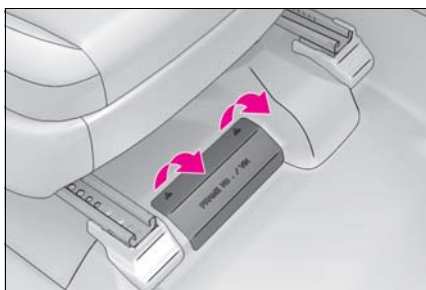
This number is stamped on the top left of the instrument panel.



This number is also on the Certification Label.

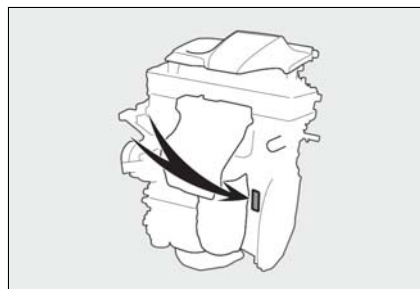


This number is also stamped under the right-hand front seat.



■ Engine number

The engine number is stamped on the engine block as shown.



Engine

Model	2.0 L 4-cylinder with turbocharger (8AR-FTS)
Type	4-cylinder in line, 4-cycle, gasoline
Bore and stroke	3.39 × 3.39 in. (86.0 × 86.0 mm)
Displacement	121.9 cu.in. (1998 cm ³)
Valve clearance (engine cold)	Automatic adjustment
Drive belt tension	Automatic adjustment

Fuel

Fuel type	Premium unleaded gasoline only
Octane Rating	91 (Research Octane Number 96) or higher
Fuel tank capacity (Reference)	15.9 gal. (60 L, 13.2 Imp.gal.)

Lubrication system

■ Oil capacity (Drain and refill [Reference *])

With filter	5.2 qt. (4.9 L, 4.3 Imp.qt.)
Without filter	5.0 qt. (4.7 L, 4.1 Imp.qt.)

*: The engine oil capacity is a reference quantity to be used when changing the engine oil. Warm up the engine 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: ILSAC GF-5 multigrade engine oil

Recommended viscosity: SAE 0W-20

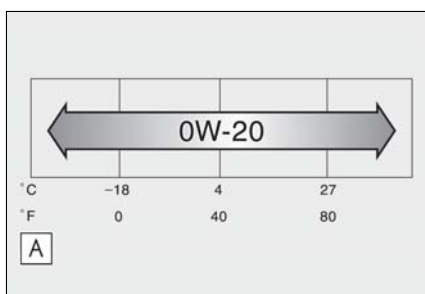
SAE 0W-20 is the best choice for good fuel economy and good starting in cold weather.

If SAE 0W-20 is not available, SAE 5W-20 oil may be used. However, it must be replaced with SAE 0W-20 at the next oil change.

- 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 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 label:

The International Lubricant Specification Advisory Committee (ILSAC) Certification Mark is added to some oil containers to help you select the oil you should use.



A Outside temperature

Oil viscosity (0W-20 is explained here as an example):



Cooling system

Capacity *	Gasoline engine	8.3 qt. (7.9 L, 7.0 Imp.qt.)
	Intercooler	3.1 qt. (2.9 L, 2.6 Imp.qt.)
Coolant type		Use either of the following: • "Toyota Super Long Life Coolant" • Similar high-quality ethylene glycol-based non-silicate, non-amine, non-nitrite, and nonborate coolant with long-life hybrid organic acid technology Do not use plain water alone.

* : The coolant capacity is the quantity of reference.
 If replacement is necessary, contact your Lexus dealer.

Ignition system

■ Spark plug

Make	NGK DILFR7K9G
Gap	0.04 in. (0.9 mm)



NOTICE

■ Iridium-tipped spark plugs

Use only iridium-tipped spark plugs. Do not adjust the spark plug gap.

Electrical system

■ Battery

Specific gravity reading at 68°F (20°C):	1.25 or higher If the specific gravity is lower than the standard value, charge the battery.
--	---

■ Charging rates

Quick charge	15 A max.
Slow charge	5 A max.

Automatic transmission

Fluid capacity *	7.2 qt. (6.8L, 6.0 Imp. qt)
Fluid type	Toyota Genuine ATF WS

* : The fluid capacity is the quantity of reference.
If replacement is necessary, contact your Lexus dealer.

**NOTICE****■ Transmission fluid type**

Using transmission fluid other than the above type may cause abnormal noise or vibration, or damage the transmission of your vehicle.

Transfer (AWD models)

Oil capacity	0.48 qt. (0.45 L, 0.40 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 of matching quality to satisfy the above specification. Please contact your Lexus dealer for further details.

Rear differential (AWD models)

Oil capacity	0.5 qt. (0.5 L, 0.4 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 of matching quality to satisfy the above specification. Please contact your Lexus dealer for further details.

Brakes

Pedal clearance *	3.94 in. (100 mm) Min.
Brake pad wear limit	0.04 in. (1.0 mm)
Pedal free play	0.04 – 0.24 in. (1.0 – 6.0 mm)
Fluid type	• FMVSS No. 116 DOT 3 or SAE J1703 • FMVSS No. 116 DOT 4 or SAE J1704

* : Minimum pedal clearance when depressed with a force of 110 lbf (490 N, 50.0 kgf) while the engine is running.

Steering

Free play	Less than 1.2 in. (30 mm)
-----------	---------------------------

Tires and wheels

► Type A

Tire size	225/65R17 102H
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions ► Front 35 psi (240 kPa, 2.4 kgf/cm² or bar) ► Rear 35 psi (240 kPa, 2.4 kgf/cm² or bar) Driving at high speeds (above 100 mph [160 km/h]) (in countries where such speeds are permitted by law) Add 1 psi (10 kPa, 0.1 kgf/cm² or bar) to the front and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	17 x 7 J
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)

► Type B

Tire size	225/60R18 100H
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions ► Front 32 psi (220 kPa, 2.2 kgf/cm² or bar) ► Rear 32 psi (220 kPa, 2.2 kgf/cm² or bar) Driving at high speeds (above 100 mph [160 km/h]) (in countries where such speeds are permitted by law) Add 9 psi (60 kPa, 0.6 kgf/cm² or bar) to the front and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	18 × 7 1/2 J
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)

► Type C

Tire size	235/55R18 100V
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions ► Front 32 psi (220 kPa, 2.2 kgf/cm² or bar) ► Rear 32 psi (220 kPa, 2.2 kgf/cm² or bar) Driving at high speeds (above 100 mph [160 km/h]) (in countries where such speeds are permitted by law) Add 9 psi (60 kPa, 0.6 kgf/cm² or bar) to the front and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	18 × 7 1/2 J
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)

► Compact spare tire

Tire size	T165/80D17 104M
Spare tire inflation pressure (Recommended cold tire inflation pressure)	60 psi (420 kPa, 4.2 kgf/cm ² or bar)

Wheel size	17 × 4 T
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)

Light bulbs

	Light bulbs	Bulb No.	W	Type
Exterior	Front side marker lights (bulb type)	W5W	5	A
	Front turn signal lights (bulb type)*	WY21W	21	B
Interior	Vanity lights	—	8	A

A: Wedge base bulbs (clear)

B: Wedge base bulbs (amber)

*: If equipped

Fuel information

You must only use unleaded gasoline in your vehicle.

Select premium unleaded gasoline with an octane rating of 91 (Research Octane Number 96) or higher required for optimum engine performance and fuel economy. If the octane rating is less than 91, damage to the engine may occur and may void the vehicle warranty.

At minimum, the gasoline you use should meet the specifications of ASTM D4814 in the U.S.A.

Gasoline quality

In very few cases, driveability problems may be caused by the brand of gasoline you are using. If driveability problems persist, try changing the brand of gasoline. If this does not correct the problem, consult your Lexus dealer.

Recommendation of the use of gasoline containing detergent additives

- Lexus recommends the use of gasoline that contains detergent additives to avoid the build-up of engine deposits.
- All gasoline sold in the U.S.A. contains minimum detergent additives to clean and/or keep clean intake systems, per EPA's lowest additives concentration program.
- Lexus strongly recommends the use of Top Tier Detergent Gasoline. For more information on Top Tier Detergent Gasoline and a list of marketers, please go to the official website www.toptiergas.com.

Recommendation of the use of low emissions gasoline

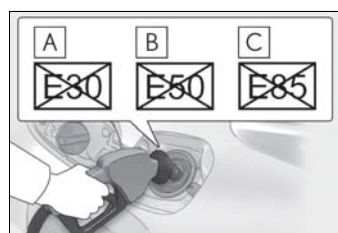
Gasolines containing oxygenates such as ethers and ethanol, as well as reformulated gasolines, are available in some cities. These fuels are typically acceptable for use,

providing they meet other fuel requirements.

Lexus recommends these fuels, since the formulations allow for reduced vehicle emissions.

Non-recommendation of the use of blended gasoline

- 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).



- If you use gasohol in your vehicle, be sure that it has an octane rating no lower than 91.
- Lexus does not recommend the use of gasoline containing methanol.

Non-recommendation of the use of gasoline containing MMT

Some gasoline contains an octane enhancing additive called MMT (Methylcyclopentadienyl Manganese Tricarbonyl).

Lexus does not recommend the use of gasoline that contains MMT. If fuel containing MMT is used, your emission control system may be adversely affected.

The malfunction indicator lamp on the instrument cluster may come on. If this happens, contact your Lexus dealer for service.

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 leaded gasoline.

Leaded gasoline can cause damage to your vehicle's three-way catalytic converters causing the emission control system to malfunction.

- Do not use gasohol other than the type previously stated.

Other gasohol may cause fuel system damage or vehicle performance problems.

- Using unleaded gasoline with an octane number or rating lower than the level previously stated will cause persistent heavy knocking. At worst, this will lead to engine damage.

■ Fuel-related poor driveability

If poor driveability (poor hot starting, vaporization, engine knocking, etc.) is encountered after using a different type of fuel, discontinue the use of that type of fuel.

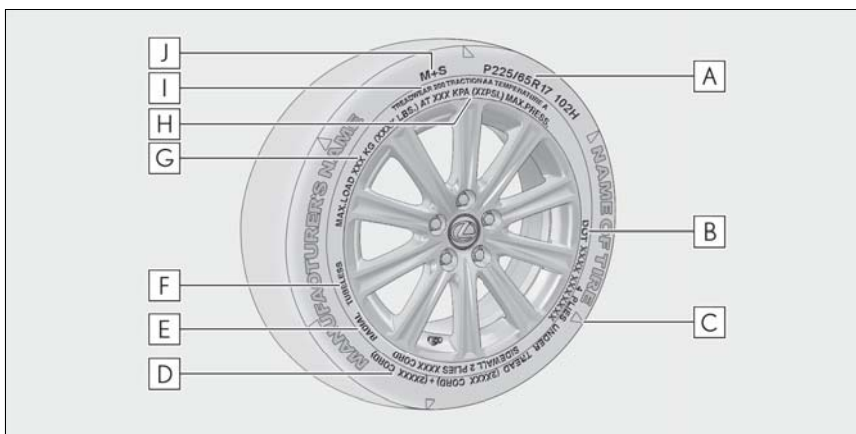
■ When refueling with gasohol

Take care not to spill gasohol. It can damage your vehicle's paint.

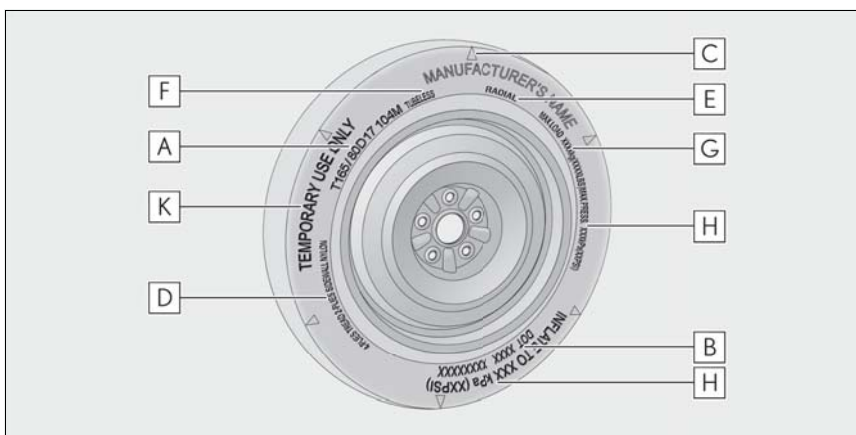
Tire information

Typical tire symbols

► Full-size tire



- Compact spare tire



- A** Tire size (→P.418)
- B** DOT and Tire Identification Number (TIN) (→P.417)
- C** Location of treadwear indicators (→P.341)
- D** Tire ply composition and materials

Plies are layers of rubber-coated parallel cords. Cords are the strands which form the plies in a tire.

E Radial tires or bias-ply tires

A radial tire has "RADIAL" on the sidewall. A tire not marked "RADIAL" is a bias-ply tire.

F TUBELESS or TUBE TYPE

A tubeless tire does not have a tube and air is directly put into the tire. A tube type tire has a tube inside the tire and the tube maintains the air pressure.

G Load limit at maximum cold tire inflation pressure (→P.341)**H** Maximum cold tire inflation pressure (→P.411)

This means the pressure to which a tire may be inflated.

I Uniform tire quality grading

For details, see "Uniform Tire Quality Grading" that follows.

J Summer tires or all season tires (→P.341)

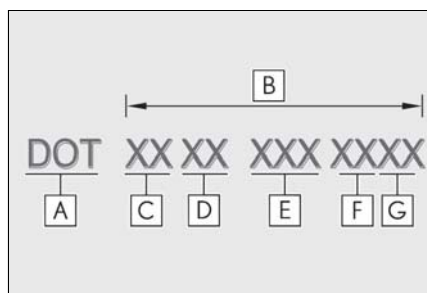
An all season tire has "M+S" on the sidewall. A tire not marked "M+S" is a summer tire.

K "TEMPORARY USE ONLY"

A compact spare tire is identified by the phrase "TEMPORARY USE ONLY" molded on its sidewall. This tire is designed for temporary emergency use only.

Typical DOT and Tire Identification Number (TIN)

► Type A

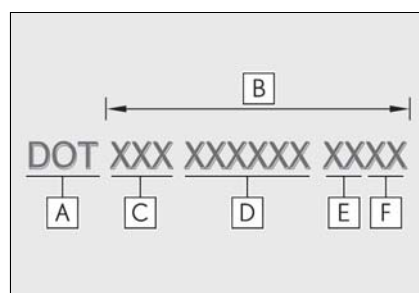
**A** DOT symbol***B** Tire Identification Number (TIN)**C** Tire manufacturer's identification mark**D** Tire size code**E** Manufacturer's optional tire type

code (3 or 4 letters)

F Manufacturing week**G** Manufacturing year

*: The DOT symbol certifies that the tire conforms to applicable Federal Motor Vehicle Safety Standards.

► Type B

**A** DOT symbol***B** Tire Identification Number (TIN)**C** Tire manufacturer's identification

mark

D Manufacturer's code

E Manufacturing week

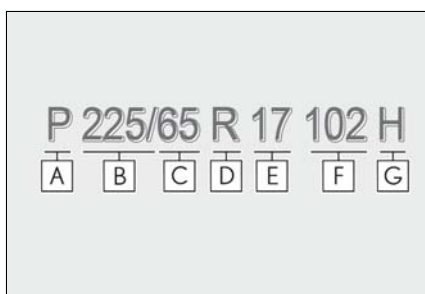
F Manufacturing year

* : The DOT symbol certifies that the tire conforms to applicable Federal Motor Vehicle Safety Standards.

Tire size

Typical tire size information

The illustration indicates typical tire size.



A Tire use
(P = Passenger car,
T = Temporary use)

B Section width (millimeters)

C Aspect ratio
(tire height to section width)

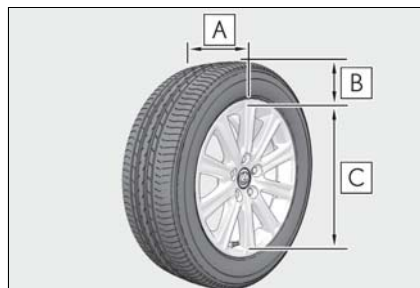
D Tire construction code
(R = Radial, D = Diagonal)

E Wheel diameter (inches)

F Load index (2 digits or 3 digits)

G Speed symbol (alphabet with one letter)

Tire dimensions

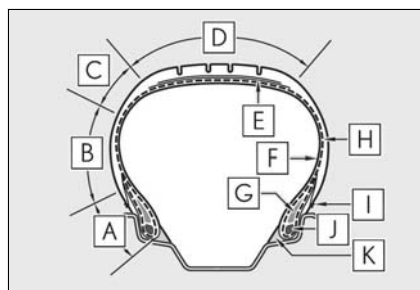


A Section width

B Tire height

C Wheel diameter

Tire section names



A Bead

B Sidewall

C Shoulder

D Tread

E Belt

F Inner liner

G Reinforcing rubber

H Carcass

I Rim lines

J Bead wires

K Chafer**Uniform Tire Quality Grading**

This information has been prepared in accordance with regulations issued by the National Highway Traffic Safety Administration of the U.S. Department of Transportation.

It provides the purchasers and/or prospective purchasers of Lexus vehicles with information on uniform tire quality grading.

Your Lexus dealer will help answer any questions you may have as you read this information.

■ DOT quality grades

All passenger vehicle tires must conform to Federal Safety Requirements in addition to these grades. Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

For example: Treadwear 200 Traction AA Temperature A

■ Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course.

For example, a tire graded 150 would wear one and a half (1 - 1/2) times as well on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road

characteristics and climate.

■ Traction AA, A, B, C

The traction grades, from highest to lowest, are AA, A, B and C, and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete.

A tire marked C may have poor traction performance.

Warning: The traction grade assigned to this tire is based on braking (straight ahead) traction tests and does not include cornering (turning) traction.

■ Temperature A, B, C

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure.

Grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109.

Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Warning: The temperature grades for this tire are established for a tire that is properly inflated and not overloaded.

Excessive speed, underinflation, or excessive loading, either separately or in combi-

nation, can cause heat buildup and possible tire failure.

Glossary of tire terminology

Tire related term	Meaning
Cold tire inflation pressure	Tire pressure when the vehicle has been parked for three hours or more, or has not been driven more than 1 mile or 1.5 km under that condition
Maximum inflation pressure	The maximum cold inflated pressure to which a tire may be inflated, shown on the sidewall of the tire
Recommended inflation pressure	Cold tire inflation pressure recommended by a manufacturer
Accessory weight	The combined weight (in excess of those standard items which may be replaced) of transmission, power steering, power brakes, power windows, power seats, radio and heater, to the extent that these items are available as factory-installed equipment (whether installed or not)
Curb weight	The weight of a motor vehicle with standard equipment, including the maximum capacity of fuel, oil and coolant, and if so equipped, air conditioning and additional weight optional engine

Tire related term	Meaning
Maximum loaded vehicle weight	The sum of: (a) Curb weight (b) Accessory weight (c) Vehicle capacity weight (d) Production options weight
Normal occupant weight	150 lb. (68 kg) times the number of occupants specified in the second column of Table 1* that follows
Occupant distribution	Distribution of occupants in a vehicle as specified in the third column of Table 1* below
Production options weight	The combined weight of installed regular production options weighing over 5 lb. (2.3 kg) in excess of the standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim
Rim	A metal support for a tire or a tire and tube assembly upon which the tire beads are seated
Rim diameter (Wheel diameter)	Nominal diameter of the bead seat
Rim size designation	Rim diameter and width

Tire related term	Meaning
Rim type designation	The industry manufacturer's designation for a rim by style or code
Rim width	Nominal distance between rim flanges
Vehicle capacity weight (Total load capacity)	The rated cargo and luggage load plus 150 lb. (68 kg) times the vehicle's designated seating capacity
Vehicle maximum load on the tire	The load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight, and dividing by two
Vehicle normal load on the tire	The load on an individual tire that is determined by distributing to each axle its share of curb weight, accessory weight, and normal occupant weight (distributed in accordance with Table 1* below), and dividing by two
Weather side	The surface area of the rim not covered by the inflated tire
Bead	The part of the tire that is made of steel wires, wrapped or reinforced by ply cords and that is shaped to fit the rim
Bead separation	A breakdown of the bond between components in the bead

Tire related term	Meaning
Bias ply tire	A pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the centerline of the tread
Carcass	The tire structure, except tread and sidewall rubber which, when inflated, bears the load
Chunking	The breaking away of pieces of the tread or sidewall
Cord	The strands forming the plies in the tire
Cord separation	The parting of cords from adjacent rubber compounds
Cracking	Any parting within the tread, sidewall, or innerliner of the tire extending to cord material
CT	A pneumatic tire with an inverted flange tire and rim system in which the rim is designed with rim flanges pointed radially inward and the tire is designed to fit on the underside of the rim in a manner that encloses the rim flanges inside the air cavity of the tire
Extra load tire	A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire

Tire related term	Meaning
Groove	The space between two adjacent tread ribs
Innerliner	The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire
Innerliner separation	The parting of the innerliner from cord material in the carcass
Intended outboard sidewall	(a)The sidewall that contains a whitewall, bears white lettering, or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire, or (b)The outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle
Light truck (LT) tire	A tire designated by its manufacturer as primarily intended for use on light-weight trucks or multipurpose passenger vehicles
Load rating	The maximum load that a tire is rated to carry for a given inflation pressure
Maximum load rating	The load rating for a tire at the maximum permissible inflation pressure for that tire

Tire related term	Meaning
Maximum permissible inflation pressure	The maximum cold inflation pressure to which a tire may be inflated
Measuring rim	The rim on which a tire is fitted for physical dimension requirements
Open splice	Any parting at any junction of tread, sidewall, or innerliner that extends to cord material
Outer diameter	The overall diameter of an inflated new tire
Overall width	The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to labeling, decorations, or protective bands or ribs
Passenger car tire	A tire intended for use on passenger cars, multipurpose passenger vehicles, and trucks, that have a gross vehicle weight rating (GVWR) of 10,000 lb. or less.
Ply	A layer of rubber-coated parallel cords
Ply separation	A parting of rubber compound between adjacent plies

Tire related term	Meaning
Pneumatic tire	A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load
Radial ply tire	A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90 degrees to the centerline of the tread
Reinforced tire	A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire
Section width	The linear distance between the exteriors of the sidewalls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands
Sidewall	That portion of a tire between the tread and bead
Sidewall separation	The parting of the rubber compound from the cord material in the sidewall

Tire related term	Meaning
Snow tire	A tire that attains a traction index equal to or greater than 110, compared to the ASTM E-1136 Standard Reference Test Tire, when using the snow traction test as described in ASTM F-1805-00, Standard Test Method for Single Wheel Driving Traction in a Straight Line on Snow-and Ice-Covered Surfaces, and which is marked with an Alpine Symbol () on at least one sidewall
Test rim	The rim on which a tire is fitted for testing, and may be any rim listed as appropriate for use with that tire
Tread	That portion of a tire that comes into contact with the road
Tread rib	A tread section running circumferentially around a tire
Tread separation	Pulling away of the tread from the tire carcass
Treadwear indicators (TWI)	The projections within the principal grooves designed to give a visual indication of the degrees of wear of the tread
Wheel-holding fixture	The fixture used to hold the wheel and tire assembly securely during testing

*: Table 1—Occupant loading and distribution for vehicle normal load for vari-

ous designated seating capacities

Designated seating capacity, Number of occupants	Vehicle normal load, Number of occupants	Occupant distribution in a normally loaded vehicle
2 through 4	2	2 in front
5 through 10	3	2 in front, 1 in second seat
11 through 15	5	2 in front, 1 in second seat, 1 in third seat, 1 in fourth seat
16 through 20	7	2 in front, 2 in second seat, 2 in third seat, 1 in fourth seat

Customizable features

Your vehicle includes a variety of electronic features that can be personalized to suit your preferences. The settings of these features can be changed using the multi-information display, the Remote Touch, or at your Lexus dealer.

Customizing vehicle features

When customizing vehicle features, ensure that the vehicle is parked in a safe place with the shift lever in P and the parking brake set.

■ Changing using the Remote Touch

- 1 Press the "MENU" button on the Remote Touch.
- 2 Select  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.

■ Changing using the multi-information display

- 1 Press  or  of the meter control switches and select .
- 2 Press  or  of the meter control switches, select the item, and then press .
- 3 Press  or  of the meter control switches, select the desired setting, and then press .

To go back to the previous screen or exit the customize mode, press .

⚠ WARNING

■ Cautions 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.

- A** Settings that can be changed using the Remote Touch
- B** Settings that can be changed using the multi-information display

C Settings that can be changed by your Lexus dealer

D Settings that can be changed using the vehicle switch

Definition of symbols: ○ = Available, – = Not available

■ Door lock (→P.98, 395)

Function	Default setting	Customized setting	A	B	C	D
Unlocking using a mechanical key	Driver's door unlocked in first step, all doors unlocked in second step	All doors unlocked in first step	–	–	○	–
Automatic door locking function	Shift position linked door locking operation	Off	○	–	○	–
		Speed linked door locking operation	○	–	○	–
Automatic door unlocking function	Shift position linked door unlocking operation	Off	○	–	○	–
		Driver's door linked door unlocking operation	○	–	○	–

■ Smart access system with push-button start and wireless remote control (→P.98, 114)

Function	Default setting	Customized setting	A	B	C	D
Operation signal (emergency flashers)	On	Off	○	–	○	–
Operation buzzer volume	5	Off	○	–	○	–
		1 to 7				
Time elapsed before the automatic door lock function is activated if a door is not opened after being unlocked	60 seconds	Off	–	–	○	–
		30 seconds				
		120 seconds				
Open door reminder buzzer (When locking the vehicle)	On	Off	–	–	○	–

■ Smart access system with push-button start (→P.114)

Function	Default setting	Customized setting	A	B	C	D
The doors that are unlocked using the smart access system with push-button start can be selected	Driver's door	All the doors	☐	☐	☐	☐
Smart access system with push-button start	On	Off	☐	☐	☐	☐
Number of consecutive door lock operations	2 times	As many as desired	☐	☐	☐	☐

■ Wireless remote control (→P.95)

Function	Default setting	Customized setting	A	B	C	D
Wireless remote control	On	Off	☐	☐	☐	☐
Unlocking operation	Driver's door unlocked in first step, all doors unlocked in second step	All doors unlocked in first step	☐	☐	☐	☐
Panic function	On	Off	☐	☐	☐	☐
The function that validates the  HOLD switch of the wireless remote control when locking the door (→P.105)	When locking the door	When unlocking the door	☐	☐	☐	☐

■ Automatic light control system (→P.177)

Function	Default setting	Customized setting	A	B	C	D
Light sensor sensitivity	Standard	-2 to 2	☐	☐	☐	☐
Adjust the time elapsed before the headlights automatically turn off	30 seconds	Off	☐	☐	☐	☐
		60 seconds				
		90 seconds				

■ Lights (→P.177)

Function	Default setting	Customized setting	A	B	C	D
Daytime Running Lights (Daytime running lights can be disabled)	On	Off	O	–	O	–

■ Illumination (→P.288)

Function	Default setting	Customized setting	A	B	C	D
Time elapsed before the interior lights turn off	15 seconds	Off	O	–	O	–
		7.5 seconds				
		30 seconds				
Time elapsed before the exterior lights turn off	15 seconds	Off	O	–	O	–
		7.5 seconds				
		30 seconds				
Operation after the engine switch is turned off	On	Off	–	–	O	–
Operation when the doors are unlocked	On	Off	–	–	O	–
Operation when you approach the vehicle with the electronic key on your person	On	Off	–	–	O	–
Footwell lighting	On	Off	–	–	O	–
Fading out of the outer foot lights when they turn off	Long	Short	–	–	O	–

■ Multi-information display (→P.77, 80)

Function	Default setting	Customized setting	A	B	C	D
Eco Driving Indicator Light	On	Off	–	O	–	–
Language ^{*1}	English	French	O	O	–	–
		Spanish				

Function	Default setting	Customized setting	A	B	C	D
Units ^{*1}	miles (MPG US)	miles (MPG Imperial)	○	○	–	–
		km (L/100 km)				
		km (km/L)				
 switch settings	Drive information 1	Desired status screen ^{*2}	–	○	–	–
Drive information 1	Current fuel consumption	*3	–	○	–	–
	Average fuel consumption (after reset)					
Drive information 2	Distance (range)	*3	–	○	–	–
	Average speed (after reset)					
Drive information 3	Average fuel consumption (after refuel)	*3	–	○	–	–
	Elapsed time (after start)					
Pop-up display ^{*4}	On	Off	–	○	–	–
Accent color	Color 1 	Color 2 	○	○	–	–
Clock	24-hour display	12-hour display	–	○	–	–

^{*1}: The default setting varies according to countries.

^{*2}: Some status screens cannot be registered (indicated on the multi-information display)

^{*3}: 2 of the following items: current fuel consumption, average fuel economy (after reset), average fuel economy (after refuel), average fuel economy (after start), average vehicle speed (after reset), average vehicle speed (after start), distance (driving range), distance (after start), elapsed time (after reset), elapsed time (after start), blank

^{*4}: Intersection guidance, Incoming calls, Adjust brightness

■ Head-up display* (→P.86)

Function	Default setting	Customized setting	A	B	C	D
Route guidance to destination	On	Off	–	–	–	○
Driving assist system information	On	Off	–	–	–	○
Audio system operation status	On	Off	–	–	–	○
Lane display	On	Off	–	–	–	○

* : If equipped

■ Automatic air conditioning system (→P.277)

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	○	–	○	–

■ Power windows (→P.136)

Function	Default setting	Customized setting	A	B	C	D
Mechanical key linked operation	Off	On	–	–	○	–
Wireless remote control linked open operation	Off	On	–	–	○	–

■ Moon roof^{*1}(→P.138)

Function	Default setting	Customized setting	A	B	C	D
Mechanical key linked operation ^{*2}	Off	On	–	–	O	–
Wireless remote control linked open or Tilt up operations ^{*2}	Off	On	–	–	O	–

^{*1}: If equipped

^{*2}: This function cannot be customized unless power window operations, using the wireless remote control or mechanical key, is enabled.

■ Turn signal lever (→P.171)

Function	Default setting	Customized setting	A	B	C	D
The number of times the turn signal lights flash automatically when the turn signal lever is moved to the first position during a lane change	3	4	–	–	O	–
		5				
		6				
		7				
		Off				

■ PKSA (Parking Support Alert)^{*} (→P.234)

Function	Default setting	Customized setting	A	B	C	D
Buzzer volume	2	1	–	O	O	–
		3				

^{*}: If equipped

■ Intuitive parking assist^{*} (→P.235)

Function	Default setting	Customized setting	A	B	C	D
Display setting (When intuitive parking assist is operating)	On	Off	–	O	O	–

^{*}: If equipped

■ Parking Support Brake function (for static objects)* (→P.240)

Function	Default setting	Customized setting	A	B	C	D
Parking Support Brake function (for static objects)	On	Off	–	○	–	–

* : If equipped

■ Driving position memory* (→P.126)

Function	Default setting	Customized setting	A	B	C	D
Driver's seat movement when exiting the vehicle	Standard	Off	○	–	○	–
		Partial				
Selection the door linking driving position memory with door unlock operation	Driver's door	All doors	–	–	○	–

* : If equipped

■ Outside rear view mirrors (→P.134)

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				
Linked mirror function when reversing	On	Off	–	–	○	–

■ LTA (Lane Tracing Assist)* (→P.205)

Function	Default setting	Customized setting	A	B	C	D
Lane centering function	On	Off	–	○	–	–
Steering assist function	On	Off	–	○	–	–
Alert types	Steering wheel vibration	Buzzer	–	○	–	–
Alert sensitivity	High	Standard	–	○	–	–

Function	Default setting	Customized setting	A	B	C	D
Vehicle sway warning function	On	Off	–	○	–	–
Vehicle sway warning sensitivity	Standard	High	–	○	–	–
		Low	–	○	–	–

*: If equipped

■ LDA (Lane Departure Alert with steering control)* (→P.214)

Function	Default setting	Customized setting	A	B	C	D
Steering assist function	On	Off	–	○	–	–
Alert types	Steering wheel vibration	Buzzer	–	○	–	–
Alert sensitivity	High	Standard	–	○	–	–
Vehicle sway warning function	On	Off	–	○	–	–
Vehicle sway warning sensitivity	Standard	High	–	○	–	–
		Low	–	○	–	–

*: If equipped

■ PCS (Pre-Collision System) (→P.198)

Function	Default setting	Customized setting	A	B	C	D
PCS (Pre-Collision System)	On	Off	–	○	–	–
Adjust alert timing	Middle	Early	–	○	–	–
		Late	–	○	–	–

■ RSA (Road Sign Assist)* (→P.222)

Function	Default setting	Customized setting	A	B	C	D
RSA (Road Sign Assist)	On	Off	–	○	–	–

Function	Default setting	Customized setting	A	B	C	D
Excess speed notification method	Display only	No notification	–	○	–	–
		Display and buzzer				
Excess speed notification level	1 mph (2 km/h)	3 mph (5 km/h)	–	○	–	–
		5 mph (10 km/h)				
Other notifications method (No-entry notification)	Display only	No notification	–	○	–	–
		Display and buzzer				

*: If equipped

■ Power back door^{*1}(→P.102)

Function	Default setting	Customized setting	A	B	C	D
Back door automatic open and stop position	5	Stop at the desired position (height) ^{*2}	○	–	–	○
		1 to 5				
Back door opener switch operations	When the back door is locked ^{*3}	When the back door is unlocked	–	–	○	–
Power back door operations	On	Off	–	○	–	–
Operation buzzer volume	3	1	–	○	–	–
		2				
Kick Sensor ^{*1, 4}	On	Off	–	○	–	–

^{*1}: If equipped

^{*2}: Configured by operating the  switch of the lower back door. (→P.113)

^{*3}: While carrying the electronic key on your person, press the back door opener switch.

^{*4}: When the towing hitch is installed, the kick sensor does not work

■ Driving mode select switch (→P.257)

Function	Default setting	Customized setting	A	B	C	D
Powertrain control in custom mode	Normal	Power	○	–	–	–
		Eco				
Chassis control in custom mode	Normal	Sport	○	–	–	–
Air conditioning operation in custom mode	Normal	Eco	○	–	–	–

■ Eco mode (→P.257)

Function	Default setting	Customized setting	A	B	C	D
Heating/cooling operation minimized in Eco mode	On	Off	–	–	○	–

■ 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 lever to any position other than P, all the doors will be locked.
 - If the vehicle is started with all the doors locked, the speed linked door locking function would not operate.
 - If the vehicle is started with any door unlocked, the speed linked door locking function will operate.
 - When the smart access system with push-button start is off, smart door unlocking cannot be customized.
 - When the doors remain closed after unlocking the doors and the automatic door lock function is activated, the signals will be generated in accordance with the Operation signal (buzzer) and the Operation signal (emergency flashers) settings.
- In the following situations, customize mode in which the settings can be changed through the multi-information display will automatically be turned off.
- A warning message appears after the customize mode screen is displayed.
 - The engine switch is turned off.
 - The vehicle begins to move while the customize mode screen is displayed.

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 the items to initialize

Item	When to initialize	Reference
Parking Support Brake function (for static objects)*	After reconnecting or changing the battery	P.246
Message indicating maintenance is required (Except for Canada)	After the maintenance is performed	P.324
Tire pressure warning system	• When rotating the tires on vehicles with differing front and rear tire inflation pressures • When changing the tire inflation pressure by changing traveling speed or load weight, etc. • When changing the tire size	P.347
Oil maintenance	After the maintenance is performed	P.335
Lexus parking assist monitor*	• After reconnecting or changing the battery • After changing a fuse	Refer to the "NAVIGATION AND MULTIMEDIA SYSTEM OWNER'S MANUAL".
Panoramic view monitor*		
Power back door*		P.109
Power window	When functioning abnormally	P.136
Moon roof*		P.139

* : If equipped

9-1. For owners

Reporting safety defects for U.S.
owners **438**

Seat belt instructions for Cana-
dian owners (in French) **438**

SRS airbag instructions for Cana-
dian owners (in French) **440**

Headlight aim instructions for
Canadian owners (in French)
..... **447**

Reporting safety defects for U.S. owners

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying the Lexus Division of Toyota Motor Sales, U.S.A., Inc. (Toll-free: 1-800-25-LEXUS).

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Lexus Division of Toyota Motor Sales, U.S.A., Inc.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to <http://www.safercar.gov>; or write to: Administrator, NHTSA, 1200 New Jersey Ave. SE., Washington, DC 20590. You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

Seat belt instructions for Canadian owners (in French)

The following is a French explanation of seat belt instructions extracted from the seat belt section in this manual.

See the seat belt section for more detailed seat belt instructions in English.

Utilisation correcte des ceintures de sécurité



- Déroulez la sangle diagonale de telle sorte qu'elle passe bien sur l'épaule, sans pour autant être en contact avec le cou ou glisser de l'épaule.
- Placez la sangle abdominale le plus bas possible sur les hanches.
- Réglez la position du dossier de siège. Asseyez-vous le dos le plus droit possible et calez-vous bien dans le siège.
- Ne pas vriller la ceinture de sécurité.

Entretien et soin

■ Soins à porter aux ceintures de sécurité

Nettoyez avec un chiffon ou une éponge humectée d'eau savonneuse tiède. Par ailleurs, vérifiez régulièrement que les ceintures ne sont pas effilochées, entaillées, ou ne paraissent pas exagérément usées.



AVERTISSEMENT

Respectez les précautions suivantes afin de réduire le risque de blessure en cas de freinage brusque, d'embarquée ou d'accident. À défaut, des blessures graves, voire mortelles, pourraient s'ensuivre.

■ Port de la ceinture de sécurité

- Ne pas passer la sangle diagonale sous le bras.
- Faites toujours passer votre ceinture de sécurité au plus bas sur vos hanches et bien dans l'axe.

■ État et usure des ceintures de sécurité

Inspectez les ceintures de sécurité périodiquement. Contrôlez qu'elles ne sont pas entaillées, effilochées, et que leurs ancrages ne sont pas desserrés. Ne pas utiliser une ceinture de sécurité défectueuse avant qu'elle ne soit remplacée. Une ceinture de sécurité défectueuse n'apporte aucune garantie de protection de l'occupant contre des blessures graves, voire mortelles.

■ Lorsque vous utilisez la ceinture de sécurité du siège central arrière

Ne pas utiliser la ceinture de sécurité du siège central arrière avec une de ses deux boucles déverrouillée. Si une seule des boucles est verrouillée, tout freinage brusque ou collision peut entraîner des blessures graves, voire mortelles.



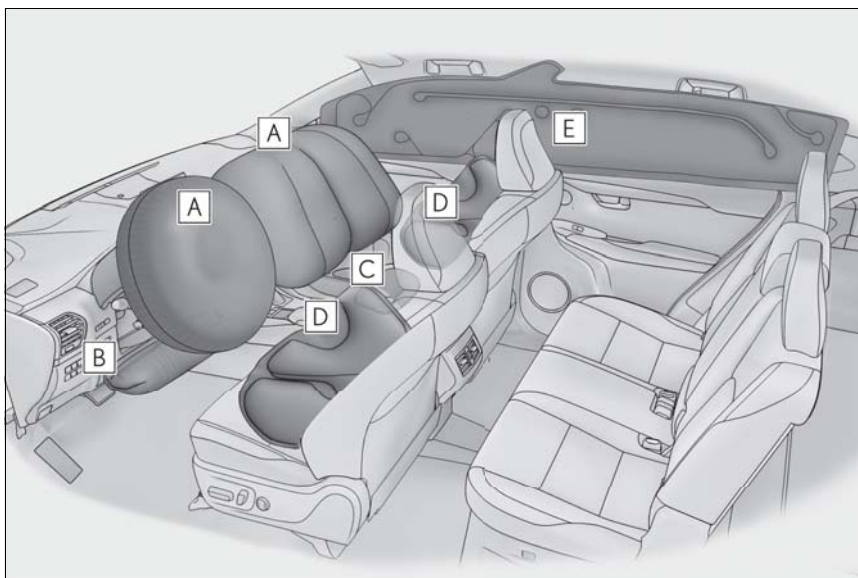
SRS airbag instructions for Canadian owners (in French)

The following is a French explanation of SRS airbag instructions extracted from the SRS airbag section in this manual.

See the SRS airbag section for more detailed seat belt instructions in English.

Système de coussins gonflables SRS

■ Emplacement des coussins gonflables SRS



► Coussins gonflables SRS frontaux

A Coussin gonflable SRS conducteur/passager avant

Participent à la protection de la tête et du thorax du conducteur et du passager avant contre les chocs avec les éléments de l'habitacle

B Coussin gonflable SRS de genoux

Participe à la protection du conducteur

C Coussin gonflable SRS d'assise de siège

Participe à retenir le passager avant

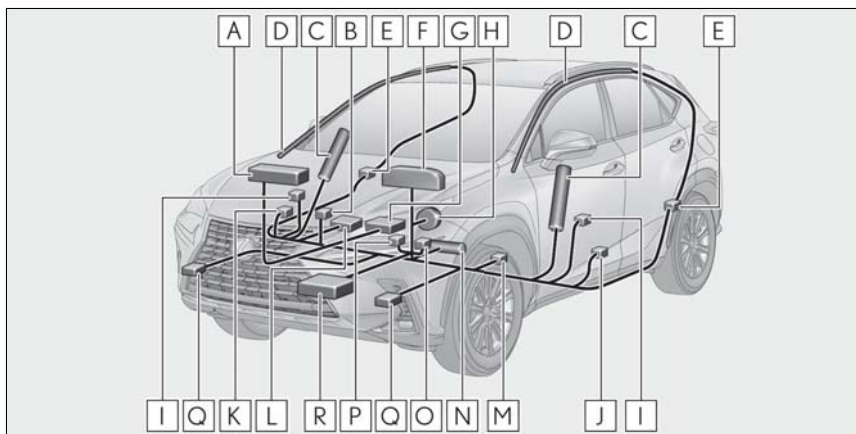
► Coussins gonflables SRS latéraux et rideau

D Coussins gonflables SRS latéraux

Participent à la protection du haut du corps des occupants aux places avant

E Coussins gonflables SRS rideau

- Participent principalement à la protection de la tête des occupants assis dans les sièges des places extérieures
- Participent à empêcher les occupants d'être éjectés du véhicule en cas de retournement de celui-ci

■ Composition du système de coussins gonflables SRS**A** Coussin gonflable passager avant**B** Témoins indicateurs "AIR BAG ON" et "AIR BAG OFF"**C** Coussins gonflables latéraux**D** Coussins gonflables rideau**E** Capteurs d'impact latéral (arrière)**F** Témoin d'alerte SRS**G** Système de classification d'occupant du siège passager avant (ECU et capteurs)**H** Coussin gonflable conducteur**I** Capteurs d'impact latéral (porte avant)**J** Prétensionneur de ceinture de sécurité du conducteur**K** Prétensionneur et limiteurs d'effort de ceinture de sécurité du passager avant**L** Coussin gonflable d'assise de siège**M** Capteur de position du siège conducteur**N** Coussin gonflable de genoux

- O** Contacteur de boucle de ceinture de sécurité conducteur
- P** Contacteur de boucle de ceinture de sécurité passager avant
- Q** Capteurs d'impact avant
- R** Boîtier électronique de coussins gonflables

Votre véhicule est équipé de COUSSINS GONFLABLES INTELLIGENTS (ADVANCED AIRBAGS) conçus selon les normes de sécurité américaines applicables aux véhicules à moteur (FMVSS208). Le boîtier électronique de coussins gonflables (ECU) utilise les informations reçues des capteurs, etc. détaillés dans le schéma ci-dessus de composition du système pour commander le déploiement des coussins gonflables. Ces informations comprennent des informations sur la gravité de la collision et les occupants. Le déploiement rapide des coussins gonflables est obtenu au moyen d'une réaction chimique dans les dispositifs pyrotechniques, qui produit un gaz inoffensif permettant d'amortir le mouvement des occupants.

**AVERTISSEMENT****■ Précautions avec les coussins gonflables SRS**

Respectez les précautions suivantes concernant les coussins gonflables SRS. À défaut, des blessures graves, voire mortelles, pourraient s'ensuivre.

- Le conducteur et tous les passagers à bord du véhicule doivent porter leur ceinture de sécurité correctement. Les coussins gonflables SRS sont des dispositifs de protection complémentaires aux ceintures de sécurité.



AVERTISSEMENT

- Le coussin gonflable SRS conducteur se déploie avec une puissance considérable et peut occasionner des blessures graves, voire mortelles, notamment lorsque le conducteur se trouve très près du coussin gonflable. L'autorité fédérale chargée de la sécurité routière aux États-Unis, la NHTSA (National Highway Traffic Safety Administration) conseille: Sachant que la zone de danger pour le coussin gonflable conducteur se trouve dans les premiers 2 à 3 in. (50 à 75 mm) du déploiement, placez-vous à 10 in. (250 mm) du coussin gonflable conducteur pour garantir une marge de sécurité suffisante. Cette distance est à mesurer entre le moyeu du volant de direction et le sternum. Si vous êtes assis à moins de 10 in. (250 mm), vous pouvez changer votre position de conduite de plusieurs façons:
 - Reculez votre siège le plus possible, tout en continuant à pouvoir atteindre confortablement les pédales.
 - Inclinez légèrement le dossier du siège. Bien que les véhicules soient différents les uns des autres, la plupart des conducteurs peuvent s'asseoir à une distance de 10 in. (250 mm), même avec le siège conducteur complètement avancé, simplement en inclinant un peu le dossier de siège. Si vous avez des difficultés à voir la route après avoir incliné votre siège, utilisez un coussin ferme et antidérapant pour vous rehausser ou, si votre véhicule est équipé du réglage en hauteur du siège, remontez-le.
 - Si votre volant de direction est réglable, inclinez-le vers le bas. Cela vous permet d'orienter le coussin gonflable vers votre buste plutôt que vers la tête et le cou.

Le siège doit être réglé selon les recommandations de la NHTSA ci-dessus, tout en conservant le contrôle des pédales et du volant, et la vue des commandes au tableau de bord.

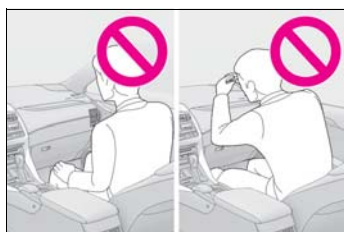
- Si vous attachez une rallonge de ceinture de sécurité aux boucles des ceintures de sièges avant, mais pas au pêne de la ceinture de sécurité proprement dite, les coussins gonflables SRS frontaux déterminent que le conducteur et le passager avant portent leur ceinture de sécurité, alors même qu'elle n'est pas attachée. Dans ce cas, les coussins gonflables SRS frontaux risquent de ne pas se déployer correctement en cas de collision, causant des blessures graves, voire mortelles. Veillez à porter la ceinture de sécurité avec la rallonge de ceinture de sécurité.



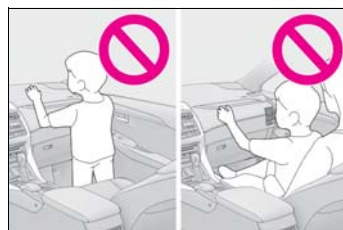
- Le coussin gonflable SRS passager avant se déploie également avec une puissance considérable et peut occasionner des blessures graves, voire mortelles, notamment lorsque le passager avant se trouve très près du coussin gonflable. Le siège du passager avant doit se trouver le plus loin possible du coussin gonflable et le dossier doit être réglé de manière à ce que le passager avant soit assis bien droit.

**AVERTISSEMENT**

- Le déploiement d'un coussin gonflable peut infliger des blessures graves, voire mortelles, aux nourrissons et aux enfants mal assis et/ou mal attachés. Installez dans un siège de sécurité enfant les enfants trop jeunes pour pouvoir utiliser la ceinture de sécurité. Lexus recommande vivement d'installer tous les nourrissons et enfants aux places arrière du véhicule et de prévoir pour eux des systèmes de retenue adaptés. Les sièges arrière sont plus sûrs pour les nourrissons et les enfants que le siège passager avant.
- Ne jamais installer un siège de sécurité enfant type dos à la route sur le siège passager avant, même si le témoin indicateur "AIR BAG OFF" est allumé. En cas d'accident, la force exercée par le déploiement rapide du coussin gonflable passager avant peut causer des blessures graves, voire mortelles à un enfant, si le siège de sécurité enfant type dos à la route est installé sur le siège passager avant.
- Ne pas s'asseoir sur le bord du siège et ne pas s'appuyer contre la planche de bord.



- Ne pas laisser un enfant rester debout devant le coussin gonflable SRS passager avant ni assis sur les genoux du passager avant.



- Ne pas laisser les occupants des sièges avant voyager avec un objet sur les genoux.
- Ne pas s'appuyer contre la porte, contre le rail latéral de toit ou contre les montants avant, latéraux et arrière.



- Interdisez à quiconque de s'agenouiller sur le siège passager en appui contre la porte ou de sortir la tête ou les mains à l'extérieur du véhicule.

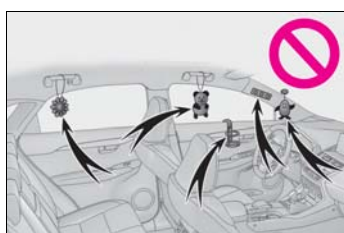


⚠ AVERTISSEMENT

- Ne rien fixer ou disposer sur la planche de bord, la garniture centrale du moyeu de volant de direction et la partie inférieure du tableau de bord. Lors du déploiement des coussins gonflables SRS conducteur, passager avant et de genoux, tout objet risque de se transformer en projectile.



- Ne rien fixer aux parties telles qu'une porte, le pare-brise, une vitre latérale, un montant avant ou arrière, un rail latéral de toit et une poignée de maintien.



- Ne pas suspendre aux crochets à vêtements un cintre nu ni aucun objet dur ou tranchant. En cas de déploiement des coussins gonflables SRS rideau, tous ces objets pourraient se transformer en projectiles et causer des blessures graves, voire mortelles.
- Si une housse en vinyle recouvre la partie où le coussin gonflable SRS de genoux se déploie, veuillez à l'enlever.

- N'utilisez pour les sièges aucun accessoire venant recouvrir les parties où se déploient les coussins gonflables SRS latéraux et le coussin gonflable SRS d'assise de siège, car il risquerait de gêner le déploiement des coussins gonflables SRS. De tels accessoires peuvent empêcher les coussins gonflables latéraux et d'assise de siège de s'activer correctement, neutraliser le système ou provoquer le déploiement accidentel des coussins gonflables latéraux et d'assise de siège, provoquant ainsi des blessures graves, voire mortelles.

- Évitez de faire subir des chocs ou des pressions excessives aux parties renfermant les composants des coussins gonflables SRS. En effet, cela pourrait entraîner un mauvais fonctionnement des coussins gonflables SRS.

- Ne touchez aucun composant du système immédiatement après le déclenchement (déploiement) des coussins gonflables SRS, car ils sont alors encore très chauds.

- Si vous avez des difficultés à respirer après le déploiement des coussins gonflables SRS, ouvrez une porte ou une vitre pour faire entrer de l'air frais, ou bien descendez du véhicule si cela ne présente pas de danger. Retirez tout résidu dès que possible afin d'éviter d'éventuelles irritations de la peau.

- Si les parties renfermant les coussins gonflables SRS, telles que la garniture du moyeu de volant et les garnitures de montants avant et arrière, apparaissent abîmées ou craquelées, faites-les remplacer par votre concessionnaire Lexus.

**AVERTISSEMENT**

- Ne rien poser sur le siège du passager avant, comme un coussin par exemple. Cela a pour conséquence de répartir le poids du passager sur toute la surface du siège, ce qui empêche le capteur de détecter normalement le poids du passager. En conséquence, les coussins gonflables SRS frontaux du passager avant peuvent ne pas se déployer en cas de collision.

■ **Modification et élimination en fin de vie des éléments du système de coussins gonflables SRS**

Consultez impérativement votre concessionnaire Lexus si vous avez besoin d'intervenir sur votre véhicule ou de procéder à l'une des modifications suivantes. Les coussins gonflables SRS peuvent ne pas fonctionner correctement ou se déployer (se gonfler) accidentellement, provoquant ainsi des blessures graves, voire mortelles.

- Installation, dépose, démontage et réparations des coussins gonflables SRS
- Réparations, modifications, démontage ou remplacement du volant, du tableau de bord, de la planche de bord, des sièges ou de leur garnissage, des montants avant, latéraux et arrière ou des rails latéraux de toit
- Réparation ou modification des ailes avant, du bouclier avant, ou des flancs de l'habitacle
- Installation d'un équipement de protection sur la calandre (pare-buffle, pare-kangourou, etc.), d'un chasse-neige, de treuils ou d'une galerie de toit
- Modification des suspensions du véhicule
- Installation d'appareils électroniques, tels qu'un émetteur/récepteur radio ou lecteur de CD

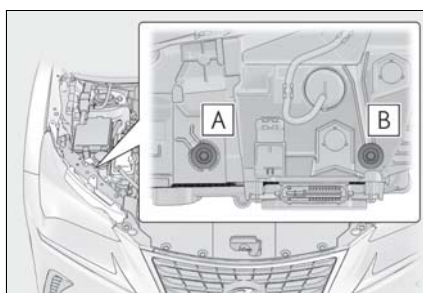
- Aménagements du véhicule visant à permettre sa conduite par une personne atteinte d'un handicap physique

Headlight aim instructions for Canadian owners (in French)

The following is a French explanation of headlight aim instructions from the headlight aim section in this manual.

Vis de réglage en mouvement vertical

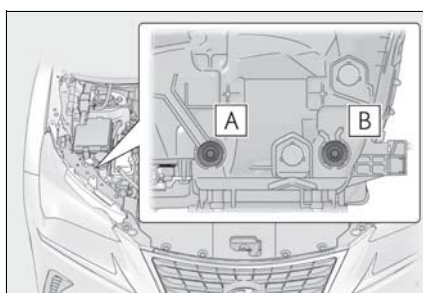
► Type A



A Vis de réglage A

B Vis de réglage B

► Type B



A Vis de réglage A

B Vis de réglage B

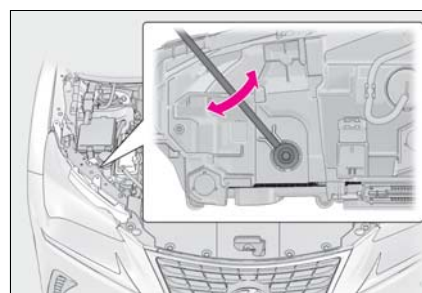
Avant de contrôler le pointage des projecteurs

- Veillez à ce que le réservoir de carburant soit plein et vérifiez que la partie autour des projecteurs n'est pas déformée.
- Stationnez le véhicule sur sol plat.
- Vérifiez que les pneus sont gonflés à la pression préconisée.
- Demandez à quelqu'un de s'asseoir dans le siège conducteur.
- Faites plusieurs fois rebondir le véhicule sur ses suspensions.

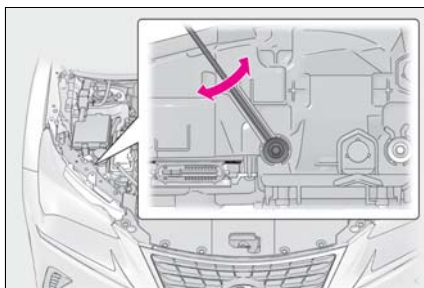
Réglage du pointage des projecteurs

- 1 Avec un tournevis à empreinte Philips, tournez la vis A dans l'un ou l'autre sens. Notez le sens de rotation et le nombre de tours.

► Type A



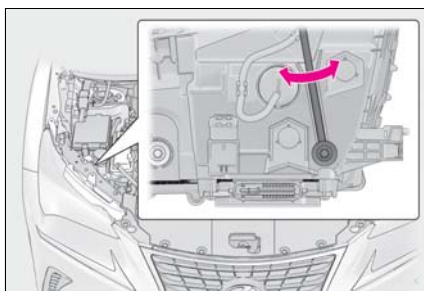
► Type B



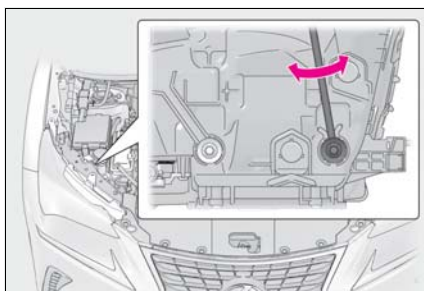
- 2** Tournez la vis B du même nombre de tours et dans le même sens qu'à l'étape 1.

Si vous n'arrivez pas à régler les projecteurs par cette procédure, confiez le véhicule à votre concessionnaire Lexus afin qu'il en règle le pointage.

► Type A



► Type B



Index

449

What to do if... (Troubleshooting)	450
Alphabetical Index.....	453

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.394)
- If you lose your electronic keys, the risk of vehicle theft increases significantly. Contact your Lexus dealer immediately. (→P.394)



The electronic key does not operate properly

- Is the electronic key battery weak or depleted? (→P.353)



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.165)

- Is the electronic key left inside the vehicle?

When locking the doors, make sure that you have the electronic key on your person.

- The function may not operate properly due to the condition of the radio wave. (→P.116)



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.101)

If you think something is wrong



The engine does not start

- Did you press the engine switch while firmly depressing the brake pedal? (→P.163)
- Is the shift lever in P? (→P.163)
- Is the electronic key anywhere detectable inside the vehicle? (→P.114)
- Is the steering wheel unlocked? (→P.163)
- Is the electronic key battery weak or depleted?
In this case, the engine can be started in a temporary way. (→P.396)
- Is the battery discharged? (→P.398)



The shift lever cannot be shifted from P even if you depress the brake pedal

- Is the engine switch in IGNITION ON mode?
If you cannot release the shift lever by depressing the brake pedal with the engine switch in IGNITION ON mode (→P.168)



The steering wheel cannot be turned after the engine is stopped

- It is locked automatically to prevent theft of the vehicle. (→P.163)



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.137)



The engine switch is turned off automatically

- The auto power off function will be operated if the vehicle is left in ACCESSORY or IGNITION ON mode (the engine is not operating) for a period of time. (→P.166)



A warning buzzer sounds during driving

- The seat belt reminder light is flashing

Are the driver and the passengers wearing the seat belts? (→P.377, 378)

- The parking brake indicator is on
Is the parking brake released? (→P.171)

Depending on the situation, other types of warning buzzer may also sound. (→P.373, 382)



An alarm is activated and the horn sounds

- Did anyone inside the vehicle open a door during setting the alarm?
The sensor detects it and the alarm sounds. (→P.69)

To stop the alarm, turn the engine switch to IGNITION ON mode or start the engine.



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.382)



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.373, 382.

When a problem has occurred

If you have a flat tire

- Stop the vehicle in a safe place and replace the flat tire with the spare tire. (→P.385)



The vehicle becomes stuck

- Try the procedure for when the vehicle becomes stuck in mud, dirt, or snow. (→P.404)

Alphabetical Index

A

A/C	277
Air conditioning filter	352
Automatic air conditioning system	277
Micro dust and pollen filter	283
ABS (Anti-lock Brake System)	259
Function	259
S-FLOW mode	283
Warning light	375
Active Sound Control (ASC)	176
Adaptive Variable Suspension system (AVS)	260
AFS (Adaptive Front-lighting System)	179
Air conditioning filter	352
Air conditioning system	277
Air conditioning filter	352
Automatic air conditioning system	277
Micro dust and pollen filter	283
S-FLOW mode	283
Airbags	32
Airbag operating conditions	34
Airbag precautions for your child	37
Airbag warning light	374
Correct driving posture	25
Curtain shield airbag operating conditions	35
Curtain shield airbag precautions	37
Front passenger occupant classification system	41
General airbag precautions	37
Locations of airbags	32
Modification and disposal of airbags	40
Seat cushion airbag	32
Side airbag operating conditions	35
Side airbag precautions	37
Side and curtain shield airbags operating conditions	35
Side and curtain shield airbags precautions	37
SRS airbag instructions for Canadian owners	440

SRS airbags	32
SRS warning light	374
Alarm	69
Alarm	69
Warning buzzer	373
Anchor brackets	55, 57
Antenna (Smart access system with push-button start)	114
Anti-lock brake system (ABS)	259
Function	259
Warning light	375
Approach warning	230
Armrest	307
ASC (Active Sound Control)	176
Assist grips	307
Automatic air conditioning system	277
Air conditioning filter	352
Automatic air conditioning system	277
Micro dust and pollen filter	283
S-FLOW mode	283
Automatic headlight leveling system	178
Automatic High Beam	180
Automatic light control system	178
Auxiliary box	293

B

Back door	102
Wireless remote control	103, 105
Back-up lights	
Replacing light bulbs	359
Battery	
If the battery is discharged	398
Preparing and checking before winter	265
Warning light	373
Blind Spot Monitor (BSM)	249
Blind Spot Monitor function	252
Rear Cross Traffic Alert function	254
Bottle holders	292

Brake	
Brake Hold	174
Fluid	411
Parking brake	171
Warning light	374
Brake assist	259
Brake Hold	174
Break-in tips.....	145
Brightness control	
Instrument panel light control	79
BSM (Blind Spot Monitor).....	249
Blind Spot Monitor function.....	252
Rear Cross Traffic Alert function.....	254
BSM (Blind Spot Monitor) main switch	
.....	249

C

Card key	94
Care	
Aluminum wheels.....	318
Exterior	318
Interior	321
Seat belts.....	321
Cargo capacity.....	150, 152, 406
Cargo hooks	294
Cargo net hooks.....	294
Chains	266
Child restraint system.....	47
Booster seats installation	53
Convertible seats installation.....	52
Front passenger occupant classification	
system	41
Infant seats definition.....	49
Infant seats installation.....	51
Installing CRS with LATCH anchors.....	55
Installing CRS with seat belts.....	51
Installing CRS with top tether strap.....	57
LATCH anchors.....	55
Child safety	47
Airbag precautions.....	37
Back door precautions.....	102
Battery precautions.....	339, 400

Child restraint system.....	47
How your child should wear the seat belt	
.....	27
Installing child restraints.....	47
Moon roof precautions.....	140
Power window lock switch.....	137
Power window precautions	137
Rear door child-protectors	101
Removed key battery precautions.....	354
Seat belt extender precautions.....	27
Seat belt precautions	26, 47
Seat heater precautions.....	285
Child-protectors.....	101
Cleaning.....	318, 321
Aluminum wheels	318
Exterior.....	318
Interior	321
Seat belts	321
Clock	298
Compass.....	314
Condenser	337
Console box	292
Consumption screen	90
Coolant	
Capacity.....	409
Checking	336
Preparing and checking before winter	
.....	265
Warning light	374
Cooling system.....	336
Engine overheating.....	401
Cornering lights.....	179
Coussins gonflables	
Modification et élimination en fin de vie	
des coussins gonflables	446
Précautions avec les coussins gonflables	
latéraux	442
Précautions avec les coussins gonflables	
latéraux et rideau	442
Précautions avec les coussins gonflables	
pour votre enfant	442

Précautions avec les coussins gonflables rideau	442
Précautions générales avec les coussins gonflables	442
Cruise control	
Dynamic radar cruise control with full- speed range	224
Cup holders	292
Curtain shield airbags	32
Customizable features	425
D	
Daytime running light system	178
Deck board	295
Deck under tray	295
Defogger	
Outside rear view mirrors	278
Rear window	278
Windshield	278
Differential	410
Dimension	406
Dinghy towing	162
Display	
BSM (Blind Spot Monitor)	249
Drive information	81
Dynamic radar cruise control with full- speed range	224
Head-up display	86
Intuitive parking assist	235
LDA (Lane Departure Alert with steering control)	214
LTA (Lane Tracing Assist)	205
Multi-information display	80
Warning messages	382
Do-it-yourself maintenance	329
Door lock	
Back door	103
Side doors	98
Smart access system with push-button start	114
Wireless remote control	95

Doors

Automatic door locking and unlocking system	101
Back door	102
Door glasses	136
Door lock	98
Outside rear view mirrors	134
Rear door child-protectors	101
Side doors	98
Drive information	81
Drive-start control	145, 167
Driver's seat belt reminder light	377
Driver's seat position memory	126
Driving	
Break-in tips	145
Correct posture	25
Driving mode select switch	257
Procedures	144
Winter drive tips	265
Driving position memory	126
Memory recall function	127
Dynamic radar cruise control with full- speed range	
Function	224

E

Eco Driving Indicator	76
Eco mode	257
EDR (Event data recorder)	7
Electric Power Steering (EPS)	
Function	259
Warning light	375
Electronic key	
Battery-saving function	115
If the electronic key does not operate properly	395
Replacing the battery	353
Emergency flashers	364

Emergency, in case of	
If a warning buzzer sounds	373
If a warning light turns on	373
If a warning message is displayed.....	382
If the battery is discharged.....	398
If the electronic key does not operate properly.....	395
If the engine will not start	393
If the fuel filler door cannot be opened	395
If the vehicle is trapped in rising water	365
If you have a flat tire.....	385
If you lose your keys.....	394
If you think something is wrong	371
If your vehicle becomes stuck.....	404
If your vehicle has to be stopped in an emergency	364
If your vehicle needs to be towed.....	367
If your vehicle overheats.....	401
Engine	407
Accessory mode	165
Compartment	333
Engine switch.....	163
Hood.....	331
How to start the engine.....	163
Identification number.....	407
If your vehicle has to be stopped in an emergency	364
Ignition switch (Engine switch).....	163
Overheating.....	401
Engine compartment cover	334
Engine coolant	
Capacity.....	409
Checking	336
Preparing and checking before winter	265
Warning light.....	374
Engine coolant temperature gauge	77
Engine immobilizer system	67
Engine oil	
Capacity	408

Checking	334
Warning light	373
Engine oil maintenance data	335
Engine switch	163
EPS (Electronic Power Steering)	
Function	259
Warning light	375
Event data recorder (EDR).....	7

F

Flat tire	385
Tire pressure warning system	343
Floor mats	24
Fluid	
Automatic transmission	410
Brake.....	411
Washer	340
Fog lights	
Replacing light bulbs.....	359
Switch.....	183
Front passenger occupant classification system	41
Front passenger's seat belt reminder light	377
Front seat heaters.....	286
Front seats	120
Adjustment.....	120
Cleaning.....	321
Correct driving posture	25
Driving position memory	126
Head restraints.....	129
Power easy access system	126
Seat heaters	285
Seat position memory	126
Front side marker lights	
Light switch	177
Replacing light bulbs.....	359
Wattage.....	413
Front turn signal lights	
Replacing light bulbs.....	359
Turn signal lever	171
Wattage.....	413

Fuel	
Capacity	407
Fuel gauge	77
Gas station information	464
Information	414
Refueling	190
Type	407
Warning light	377
Fuel filler door	190
Refueling	190
When the fuel filler door cannot be opened	395
Fuses	355

G

Garage door opener	308
Gas station information	464
Gauges	77
Glove box	292
Glove box light	292
Grocery bag hooks	295

H

Head restraints	129
Head-up display	86
Headlights	177
Automatic headlight leveling	178
Automatic High Beam system	180
Light switch	177
Replacing light bulbs	359
Heated steering wheel	285
Heaters	
Automatic air conditioning system	277
Heated steering wheel	286
Seat heaters	286
High mounted stoplight	
Replacing light bulb	359
Hill-start assist control	260
Hood	331
Open	331

Hooks	
Cargo hooks	294
Retaining hooks (floor mat)	24
Horn	132

I

I/M test	328
Identification	
Engine	407
Vehicle	406
Ignition switch (Engine switch)	163
Illuminated entry system	288
Immobilizer system	67
Indicators	74
Initialization	
Items to initialize	436
Inside rear view mirror	132
Instrument panel light control	79
Interior lights	288
Intuitive parking assist	
Enabled/disabled on the system	235
Function	235
Warning message	237

J

Jack	
Positioning a floor jack	331
Vehicle-equipped jack	386
Jack handle	386
Jam protection function	
Moon roof	139
Power back door closer	109
Power windows	136
Rear seats	125

K

Keyless entry	
Smart access system with push-button start	114
Wireless remote control	95

Keys	94
Battery-saving function	115
Electronic key	94
Engine switch.....	163
If the electronic key does not operate properly.....	395
If you lose your keys.....	394
Key number plate	94
Keyless entry	98, 114
Mechanical key.....	94
Replacing the battery.....	353
Warning buzzer.....	115
Wireless remote control key	95
Knee airbags	32

L

Lane Departure Alert with steering control (LDA)	214
Lane Tracing Assist (LTA)	205
Language (multi-information display)	428
LATCH anchors	55
LDA (Lane Departure Alert with steering control)	214
Lever	
Auxiliary catch lever.....	331
Hood lock release lever.....	331
Shift lever.....	167
Turn signal lever.....	171
Wiper lever.....	183
Lexus Enform Remote	65
LEXUS Enform Safety Connect	60
Lexus Enform Service Connect	66
Lexus Safety System+ 2.0	
Automatic High Beam.....	180
Dynamic radar cruise control with full-speed range.....	224
LDA (Lane Departure Alert with steering control).....	214
LTA (Lane Tracing Assist).....	205
PCS (Pre-Collision System).....	198
RSA (Road Sign Assist)	222

License plate lights	
Light switch	177
Replacing light bulbs.....	359

Light	
Automatic High Beam system.....	180
Cornering lights	179
Fog light switch	183
Headlight switch.....	177
Illuminated entry system.....	288
Interior light list	288
Interior lights	290
Personal lights	289
Replacing light bulbs.....	359
Turn signal lever	171
Vanity lights	298
Wattage.....	413
Welcome light illumination control	99

Light bulbs	
Replacing	358, 359
Wattage.....	413
LTA (Lane Tracing Assist)	205
Luggage cover	296

M

Maintenance	
Do-it-yourself maintenance	329
General maintenance	325
Maintenance data.....	406
Maintenance requirements	324
Malfunction indicator lamp	374
Meter	
Head-up display.....	86
Indicators.....	72
Instrument panel light control.....	79
Meters.....	77
Multi-information display	80
Warning lights	373
Warning messages.....	382
Micro dust and pollen filter	283
Mirrors	
Inside rear view mirror.....	132
Outside rear view mirror defoggers.....	278

Outside rear view mirrors	134
Vanity mirrors.....	298
Moon roof	
Jam protection function.....	139
Operation.....	138
Warning message.....	140, 382
Multi-information display	
Clock	77
Drive information.....	81
Dynamic radar cruise control with full- speed range.....	224
Language.....	428
LDA (Lane Departure Alert with steering control).....	214
LTA (Lane Tracing Assist).....	205
Warning messages	382
N	
Noise from under vehicle	6
O	
Odometer	77
Oil	
Engine oil	408
Rear differential oil	410
Transfer oil.....	410
Opener	
Back door.....	105
Fuel filler door.....	190
Hood.....	331
Outside rear view mirrors	134
Adjusting and folding	134
Blind Spot Monitor (BSM)	249
Linked mirror function when reversing	135
Mirror position memory.....	126
Outside rear view mirror defoggers.....	278
Outside temperature display	77
Overheating	401

P	
Paddle shift switches	169
Panic mode	96
Parking brake	
Operation.....	171
Parking brake engaged warning buzzer/ message.....	173
Warning light	377
Parking lights	
Light switch	177
Replacing light bulbs.....	359
Parking Support Brake function (for static objects).....	240
Enabled/disabled on the system	241
Indicator.....	73, 74
Warning light	376
Warning messages.....	246
PCS (Pre-Collision System)	
Changing settings of the system.....	200
Function	198
Warning light	375
Warning message.....	382
Personal lights.....	288
Switch.....	290
PKSA (Parking Support Alert).....	234
Power back door opener and closer ...	105
Power easy access system	126
Power outlet	299
Power steering (Electric Power Steering system).....	259
Warning light	375
Power windows	
Door lock linked window operation.....	137
Jam protection function.....	136
Operation.....	136
Window lock switch.....	137
Pre-Collision System (PCS)	
Changing settings of the system.....	200
Function	198
Warning light	375
Warning message.....	382

R

Radar cruise control (dynamic radar cruise control with full-speed range).....	224
Radiator	337
Rear Cross Traffic Alert	254
Rear seat	
Folding down the rear seatbacks.....	122
Rear side marker lights	
Light switch.....	177
Replacing light bulbs.....	359
Rear turn signal lights	
Replacing light bulbs.....	359
Turn signal lever.....	171
Rear view mirror	
Inside rear view mirror.....	132
Outside rear view mirrors	134
Rear window defogger	278
Rear window wiper.....	188
Refueling	190
Capacity	407
Fuel types.....	407
Opening the fuel tank cap.....	190
When the fuel filler door cannot be opened	395
Remote Touch	272
Replacing	
Electronic key battery.....	353
Fuses	355
Light bulbs.....	359
Tires	385
Reporting safety defects for U.S. owners	438
Resetting the message indicating maintenance is required.....	324
RSA (Road Sign Assist).....	222

S

S-FLOW mode	283
Safety Connect.....	60

Seat belts.....	26
Adjusting the seat belt shoulder anchor height	30
Automatic Locking Retractor.....	28
Child restraint system installation.....	47
Cleaning and maintaining the seat belt	321
Emergency Locking Retractor	28
How to wear your seat belt	27
How your child should wear the seat belt	27
Pregnant women, proper seat belt use	26
Reminder light and buzzer	377, 378
Seat belt extender.....	27
Seat belt instructions for Canadian owners.....	438
Seat belt pretensioners	30
SRS warning light.....	374
Seat heaters	285
Seat position memory.....	126
Seat ventilators.....	287
Seating capacity.....	152, 406
Seats	
Adjustment	120, 121
Adjustment precautions	120, 122
Child seats/child restraint system installation	47
Cleaning.....	321
Driving position memory	126
Folding down the rear seatbacks.....	122
Front seat heaters	286
Head restraint.....	129
Power easy access system	126
Properly sitting in the seat	25
Rear seat heaters	286
Seat position memory	126
Seat ventilators	287
Sécurité de l'enfant	
Précautions avec les coussins gonflables	442

- Sensor**
 - Automatic High Beam system.....180
 - BSM (Blind Spot Monitor).....252
 - Inside rear view mirror.....133
 - Intuitive parking assist.....235
 - Kick sensor.....106
 - Radar sensor.....192
 - Rain-sensing windshield wipers.....187
- Service reminder message**.....324
- Shift lever**.....167
- Shift lock system**.....168
- Side airbags**.....32
- Side doors**.....98
- Side marker lights**
 - Light switch.....177
 - Replacing light bulbs.....359
- Side mirrors**.....134
 - Adjusting and folding.....134
 - BSM (Blind Spot Monitor).....249
- Side turn signal lights**
 - Replacing light bulbs.....359
 - Turn signal lever.....171
- Smart access system with push-button**
 - start**.....114
 - Antenna location.....114
 - Entry functions.....98, 103
 - Starting the engine.....163
 - Warning message.....382
- Snow tires**.....265
- Spare tire**
 - Inflation pressure.....411
 - Storage location.....386
- Spark plug**.....409
- Specifications**.....406
- Speedometer**.....77
- Sport mode**.....257
- Steering wheel**
 - Adjustment.....131
 - Heated steering wheel.....285
 - Power easy access system.....126
- Stop lights**
 - Replacing light bulbs.....359
- Storage feature**.....291
- Storage precautions**.....291
- Stuck**
 - If the vehicle becomes stuck.....404
- Sun visors**.....298
- Switch**
 - ASC (Active Sound Control) dial.....176
 - Automatic High Beam switch.....180
 - Brake hold switch.....174
 - BSM (Blind Spot Monitor) main switch.....249
 - Cruise control switch.....224
 - Door lock switch.....100
 - Driving mode select switch.....257
 - Driving position memory switches.....126
 - Emergency flashers switch.....364
 - Engine switch.....163
 - Fog light switch.....183
 - Garage door opener switches.....308
 - Heated steering wheel.....285
 - HUD (Head-up display) switches.....86
 - Ignition switch.....163
 - LDA switch.....218
 - Light switches.....177
 - LTA switch.....210
 - Meter control switches.....80
 - Moon roof switches.....138
 - Outside rear view mirror switches.....134
 - Paddle shift switches.....169
 - Parking brake switch.....171
 - Power back door opener and closer switch.....105
 - Power window switch.....136
 - Rear window and outside rear view mirror defoggers switch.....278
 - Rear window wiper and washer switch.....188
 - Seat heater switches.....285
 - "SOS" button.....60
 - Tire pressure warning reset switch.....347
 - Vehicle-to-vehicle distance switch.....224
 - VSC off switch.....260

Window lock switch 137
 Windshield wipers and washer switch
 183, 188

T

Tachometer 77
Tail lights
 Light switch 177
 Replacing light bulbs 359
Theft deterrent system
 Alarm 69
 Engine immobilizer system 67
Tire inflation pressure
 Maintenance data 411
 Warning light 378
Tire information 416
 Glossary 420
 Size 418
 Tire identification number 417
 Uniform Tire Quality Grading 419
Tire pressure warning system
 Function 343
 Initializing 347
 Installing tire pressure warning valves
 and transmitters 346
 Registering ID codes 348
 Tire pressure warning reset switch .. 347
 Warning light 378
Tires 341
 Chains 266
 Checking 341
 Glossary 420
 If you have a flat tire 385
 Inflation pressure 349, 411
 Replacing 341
 Rotating tires 342

 Size 411
 Snow tires 265
 Spare tire 385, 411
 Tire identification number 417
 Tire pressure warning system 343
 Uniform Tire Quality Grading 419
 Warning light 378
Tools 386
Top tether strap 57
Total load capacity 406
Towing
 Dinghy towing 162
 Emergency towing 367
 Towing eyelet 370
 Trailer Sway Control 260
 Trailer towing 153, 161
TRAC (Traction Control) 260
Trailer Sway Control 260
Trailer towing 153, 161
Transmission
 Automatic transmission 167
 Selecting a driving mode 257
Trip meters 77
Turn signal lights
 Replacing light bulbs 359
 Turn signal lever 171
 Wattage 413

V

Vanity lights
 Vanity lights 298
 Wattage 413
Vanity mirrors 298
 Vanity lights 298
Vehicle data recordings 6
Vehicle identification number 406
Vehicle Stability Control (VSC) 259
VSC (Vehicle Stability Control) 259

W

Warning buzzers

Approach warning.....	230
Downshifting	170
Intuitive parking assist.....	239
Light reminder.....	178
Open door.....	99
Seat belt reminder.....	377, 378
Vehicle sway warning	209, 218

Warning lights

ABS	375
Brake hold operated indicator	377
Brake Override System	379
Brake system	373
Charging system	373
Drive-Start Control	379
Electric power steering	375
High coolant temperature	374
LDA indicator	376
Low engine oil pressure.....	373
Low fuel level.....	377
LTA indicator	376
Malfunction indicator lamp.....	374
Master warning light	378
Parking brake indicator	377
PCS warning light	375
PKSB OFF indicator	376
Seat belt reminder light	377, 378
Slip indicator	376
SRS.....	374
Tire pressure.....	378

Warning messages.....382

Washer

Checking	340
Low washer fluid warning message.....	340, 382
Preparing and checking before winter	265
Switch	183, 188

Washing and waxing..... 318

Weights

Cargo capacity.....	150, 152, 406
Load limits	152, 406
Weights	406

Wheels.....351

Replacing wheels.....	351
Size.....	411

Window glasses.....136

Window lock switch.....137

Windows

Power windows.....	136
Rear window defogger.....	278
Washer	183, 188

Windshield wiper de-icer.....282

Windshield wipers

Intermittent windshield wipers	183
Rain-sensing windshield wipers.....	185

Winter driving tips.....265

Wireless charger.....300

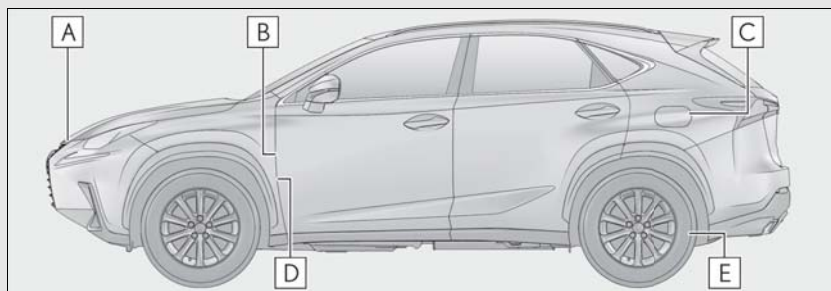
Wireless remote control key.....95

Battery-saving function.....	115
Locking/Unlocking	95
Panic mode.....	96
Replacing the battery.....	353

For information regarding the equipment listed below, refer to the "NAVIGATION AND MULTI-MEDIA SYSTEM OWNER'S MANUAL".

- Audio/visual system
- Navigation system
- Lexus parking assist monitor
- Panoramic view monitor
- Lexus Enform

GAS STATION INFORMATION



- A** Auxiliary catch lever (→P.331)
- B** Back door opener switch* (→P.105)
- C** Fuel filler door (→P.190)
- D** Hood lock release lever (→P.331)
- E** Tire inflation pressure (→P.411)

*: Vehicles with power back door

Fuel tank capacity (Reference)	15.9 gal. (60 L, 13.2 Imp.gal.)	
Fuel type	Premium unleaded gasoline only	P.407
Cold tire inflation pressure		P.411
Engine oil capacity (Drain and refill – reference)		P.408
Engine oil type		P.408