

# <u> </u>لحديد

2010

ES 350

OWNER'S MANUAL



#### Your Lexus dealer

Your Lexus dealer will provide quality maintenance and any other assistance you may require.

If there is not a Lexus dealer near you, please call the following number:

### **U.S. OWNERS**

- In the U.S. mainland or Canada:
   Lexus Roadside Assistance
   1-800-25-LEXUS or 1-800-255-3987 (Toll-Free)
- In Hawaii:
   Servco Automotive Roadside Assistance/Customer Services
   1-800-25-LEXUS or 1-800-255-3987 (Toll-Free)

### **CANADIAN OWNERS**

In Canada or the U.S. mainland:
 Lexus Roadside Assistance/Customer Service
 1-800-26-LEXUS or 1-800-265-3987 (Toll-Free)

Please access our websites for further information.

- The U.S. mainland: www.lexus.com
- Hawaii: www.servcolexus.com
- Canada: www.lexus.ca

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Maintenance and care

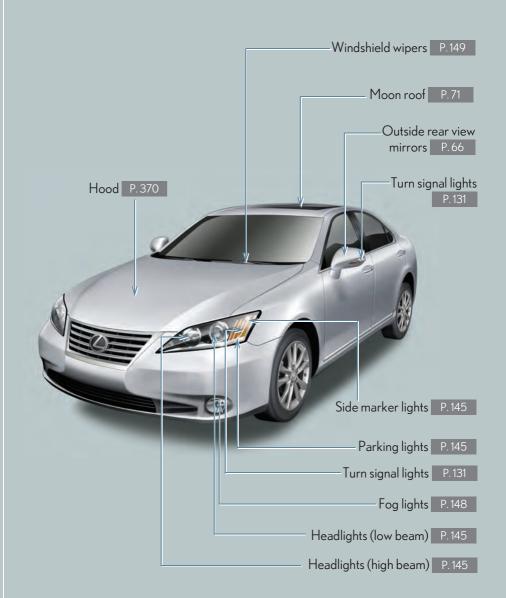
# 5 When trouble arises

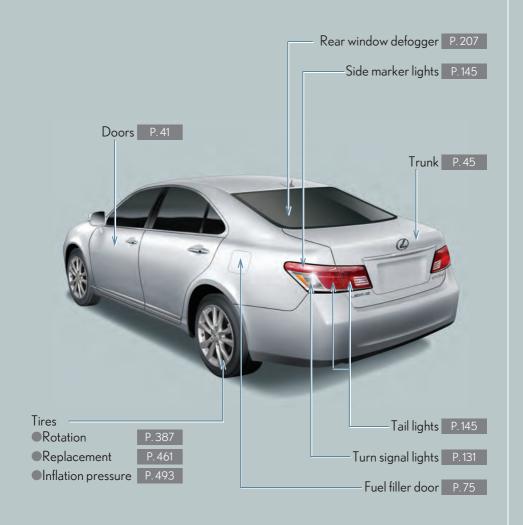
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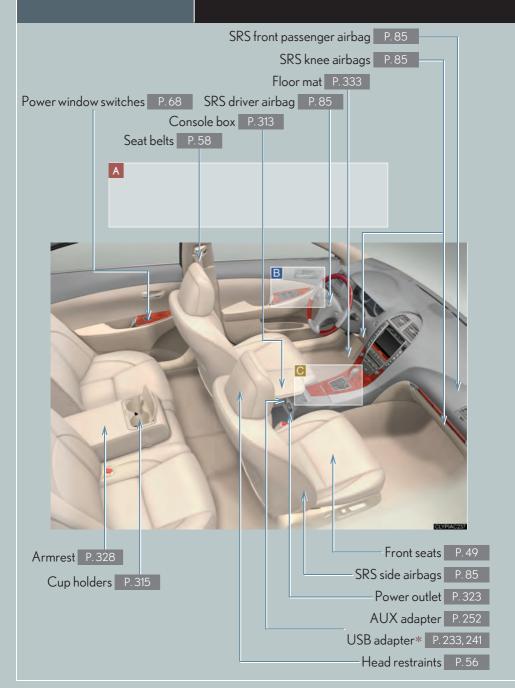
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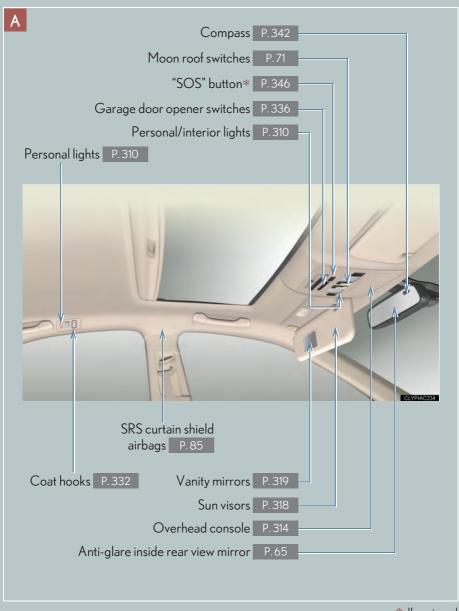




# **Pictorial index**

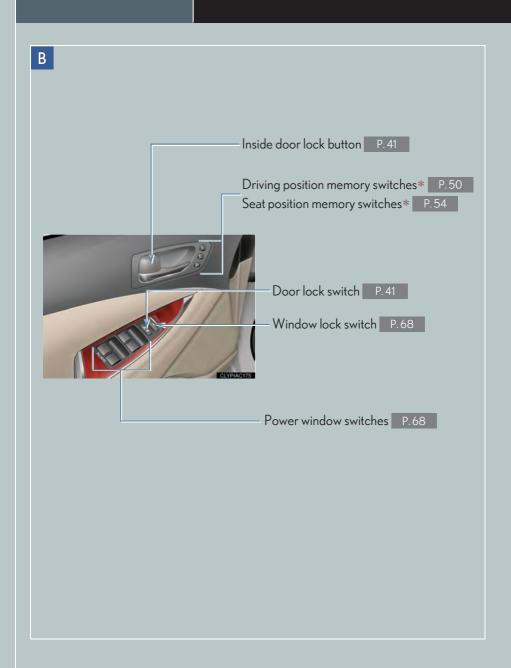
# Interior



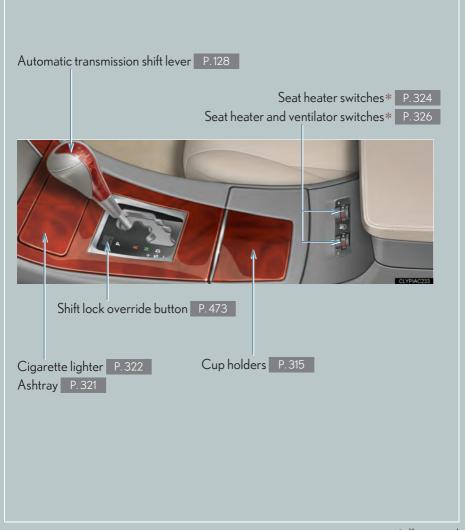


\*: If equipped

# Interior



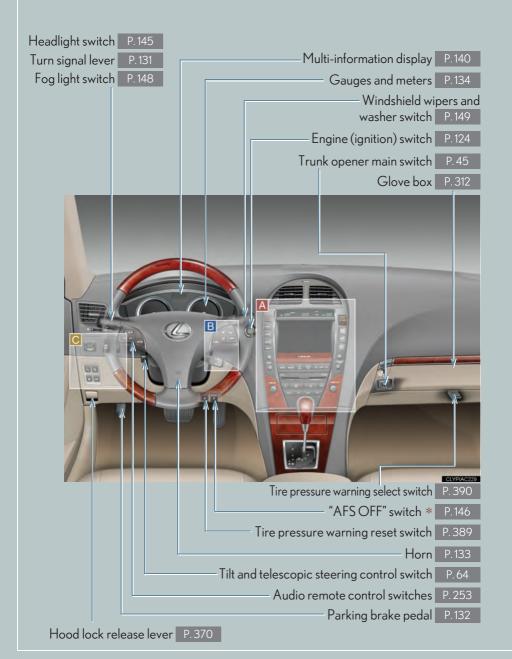


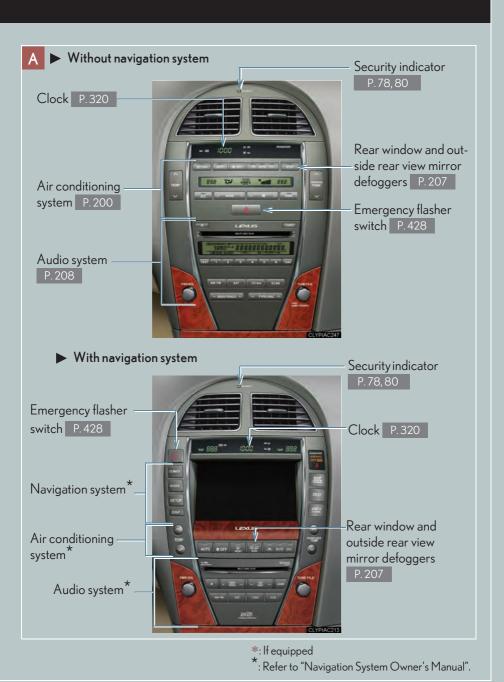


\*: If equipped

# **Pictorial index**

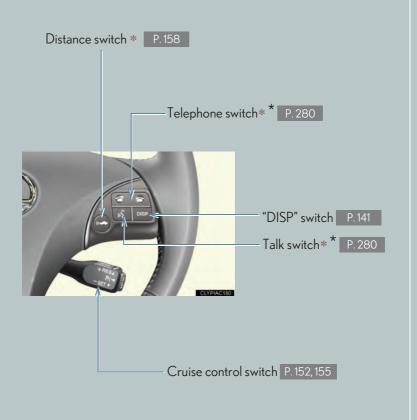
# Instrument panel

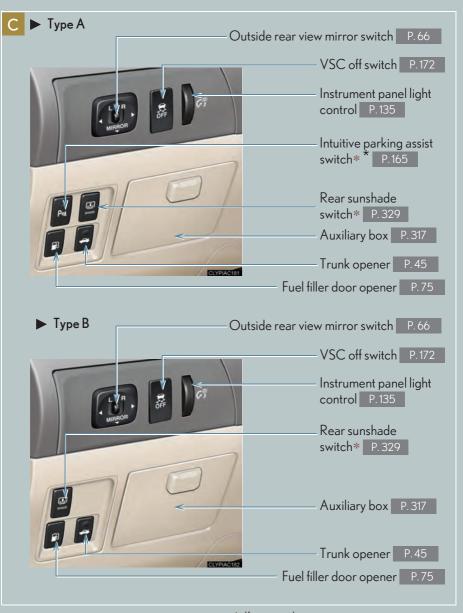




# Instrument panel

В





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

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

# 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 illustration 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

As the installation of a mobile two-way radio system in your vehicle could affect electronic systems such as the multiport fuel injection system/sequential multiport fuel injection system, cruise control system, anti-lock brake system, SRS airbag system and seat belt pretensioner system, be sure to check with your Lexus dealer for precautionary measures or special instructions regarding installation.

# 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.

# **A** CAUTION

### ■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 mobile 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.

When left unattended, 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 cigarette lighter, 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.

# Symbols used throughout this manual

### Cautions & Notices

### **A** CAUTION

This is a warning against anything which may cause injury to people if the warning is ignored. You are informed about what you must or must not do in order to reduce the risk of injury to yourself and others.



### ♠ NOTICE

This is a warning against anything which may cause damage to the vehicle or its equipment if the warning is ignored. You are informed about what you must or must not do in order to avoid or reduce the risk of damage to your Lexus and its equipment.

### Symbols used in illustrations



### Safety symbol

The symbol of a circle with a slash through it means "Do not", "Do not do this", or "Do not let this happen."





### Arrows indicating operations

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

# Before driving

1

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# Keys

### The following keys are provided with the vehicle.



### Electronic keys

- Operating the smart access system with push-button start (→P. 26)
- Operating the wireless remote control function (→P.38)
- 2 Mechanical keys
- 3 Key number plate

## Using the mechanical key



### Take out the mechanical key.

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.

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

Turn the trunk opener main switch OFF and lock the glove box and the armrest door as circumstances demand. ( $\rightarrow$ P. 45, 312, 331)

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

### ■ Key number plate

Keep the plate in a safe place such as your wallet, not in the vehicle. In the event that a mechanical key is lost, a new key can be made at your Lexus dealer using the key number plate.  $(\rightarrow P. 474)$ 

### ■ 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.

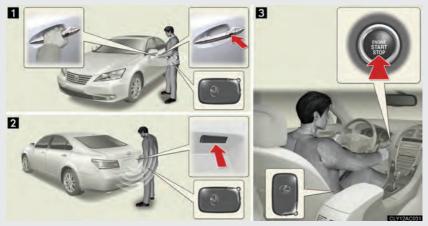
# ♠ NOTICE

### ■ To prevent key damage

- Do not subject the keys to strong shocks, expose them to high temperatures by placing them in direct sunlight, or get them wet.
- Do not expose the keys to electromagnetic materials or attach any material that blocks electromagnetic waves to the key surface.
- Do not disassemble the electronic key.

# 1-2. Opening, closing and locking the doors and trunk Smart access system with push-button start

The following operations can be performed simply by carrying the electronic key on your person, for example in your pocket. (The driver should always carry the electronic key.)



- 1 Locks and unlocks the doors  $(\rightarrow P. 27)$
- 2 Unlocks the trunk ( $\rightarrow$ P. 27)
- $\blacksquare$  Starts the engine ( $\rightarrow$ P. 124)

# Unlocking and locking the doors



Grip the handle to unlock the door.

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

The door cannot be unlocked for 3 seconds after the door is locked.



Press the lock button to lock the door.

Pressing and holding the button closes the windows and standard moon roof.

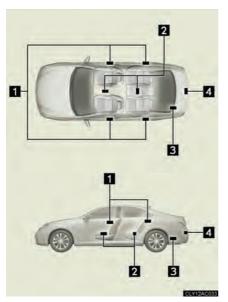
# Unlocking the trunk



Press and hold the button to unlock the trunk.

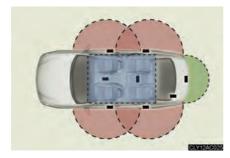
# Antenna location and effective range

### Antenna location



- 1 Antennas outside cabin
- 2 Antennas inside cabin
- 3 Antenna inside trunk
- 4 Antenna outside trunk

# ■ Effective range (areas within which the electronic key is detected)



When locking or unlocking the doors

The system can be operated when the electronic key is within about 2.3 ft. (70 cm) of any of the outside door handles. (Only the doors detecting the key can be operated.)

When unlocking the trunk

The system can be operated when the electronic key is within about 2.3 ft. (70 cm) of the trunk release button.

When starting the engine or changing "ENGINE START STOP" switch modes

The system can be operated when the electronic key is inside the vehicle.

### ■ Operation signals

Doors: A buzzer sounds and the emergency flashers flash to indicate that the doors have been locked/unlocked. (Locked: Once; Unlocked: Twice)

Trunk: A buzzer sounds to indicate that the trunk has been unlocked.

Windows and standard moon roof: A buzzer sounds to indicate that the windows and standard moon roof are operating.

### ■ Door lock buzzer

If a door is not fully closed, a buzzer sounds for 10 seconds if an attempt to lock the door is made. Fully close the door to stop the buzzer, and lock the vehicle once more.

### ■ Conditions affecting operation

The smart access system with push-button start uses 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 and wireless remote control from operating properly:

(Ways of coping:  $\rightarrow$  P. 475)

- When the electronic key battery is depleted
- Near a TV tower, electric power plant, gas station, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
- When carrying a portable radio, mobile phone, cordless phone or other wireless communication devices
- 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 multiple electronic keys are in the vicinity

- When carrying or using the electronic key together with the following devices that emit radio waves
  - · Another vehicle's electronic key or a wireless key that emits radio waves
  - Personal computers or personal digital assistants (PDAs)
  - · Digital audio players
  - Portable game systems
- If window tint with a metallic content or metallic objects are attached to the rear window

### ■ Switching the door unlock function

It is possible to set which doors the entry function unlocks.

STEP 1 Turn the "ENGINE START STOP" switch OFF.

When the indicator on the key surface is turned off, push and hold , , or ( for approximately 5 seconds while pushing on the key.

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	Unlocking doors	Веер
4	Hold the driver's door handle to unlock only the driver's door	Exterior: Beeps three times Interior: Pings once
	Hold the door handle except a driver's door handle to unlock all doors	
*	Hold any door handle to unlock all doors	Exterior: Beeps twice Interior: Pings once

Unlock the doors using the wireless remote control and open one of the doors.

If a door is not opened within 60 seconds after  $\widehat{\phantom{a}}$  is pressed, the doors will be locked again and the alarm will automatically be set. In case that the alarm is triggered, immediately stop the alarm. ( $\rightarrow$ P. 80)

### ■ Battery-saving function

In the following circumstances, the entry function is disabled in order to prevent the vehicle and electronic key batteries from discharging.

- When the entry function has not been used for 2 weeks or more
- When the electronic key has been left within approximately 6 ft. (2 m) of the vehicle for 10 minutes or more

The system will resume operation when...

- The vehicle is locked using the door handle lock switch.
- The vehicle is locked/unlocked using the wireless remote control function.  $(\rightarrow P.38)$
- The vehicle is locked/unlocked using the mechanical key.  $(\rightarrow P.475)$

### ■ Electronic key battery depletion

- The standard battery life is 1 to 2 years.
- If the battery becomes low, an alarm will sound in the cabin when the engine stops.  $(\rightarrow P.458)$
- The battery becomes depleted even if the electronic key is not used because the key always transmits radio waves. If the smart access system with push-button start or the wireless remote control does not operate, or the detection area becomes smaller, the battery may be depleted. Replace the battery when necessary. (→P. 404)
- 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
  - · Mobile phones, cordless phones and battery chargers
  - Recharging mobile phones or cordless phones
  - Glass top ranges
  - Table lamps

### ■ 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 function.)

### ■ 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 trunk is unlocked.
  - The electronic key is on the instrument panel, rear package tray or floor, or in the glove box when the engine is started or "ENGINE START STOP" switch modes are changed.
- 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. (The doors will automatically be locked after approximately 60 seconds if the doors are not opened and closed.)
- Gripping the door handle when wearing a glove may not unlock the door.
- 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.)
- 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.

### ■ When the vehicle is not driven for extended periods

To prevent theft of the vehicle, do not leave the electronic key within  $6 \, \text{ft.} \, (2 \, \text{m})$  of the vehicle.

### ■ Security feature

If a door is not opened within approximately 60 seconds after the vehicle is unlocked, the anti-theft system automatically locks the vehicle again.

### ■ Alarms and warning indicators

A combination of exterior and interior alarms as well as warnings displayed on the multi-information display are used to prevent theft of the vehicle and unforeseeable accidents resulting from erroneous operation. Take appropriate measures in response to any warning indications on the multi-information display.  $(\rightarrow P. 449)$ 

The following table describes circumstances and correction procedures when only alarms are sounded.

Alarm	Situation	Correction procedure
Exterior alarm sounds once for 2 seconds	Tried to lock the doors using the entry function while the electronic key is still inside the passenger compartment	Retrieve the electronic key from the passenger compartment and lock the doors again.
	Closed the trunk while the electronic key is still inside the trunk and all doors are locked	Retrieve the electronic key from the trunk and close the trunk lid.
Exterior alarm sounds once for 60 seconds	Tried to exit the vehicle with the electronic key and lock the doors without first turning the "ENGINE START STOP" switch OFF	Turn the "ENGINE START STOP" switch OFF and lock the doors again.
Exterior alarm sounds once for 10 seconds	Tried to lock the vehicle using the entry function while a door is open	Close all of the doors and lock the doors again.
Exterior alarm sounds once for 3 seconds and inte- rior alarm sounds continuously	When the "ENGINE START STOP" switch is in ACCES- SORY or IGNITION ON mode, an attempt was made to open the door and exit the vehicle, and the shift lever was not in P.	Shift the shift lever to P.

Alarm	Situation	Correction procedure
Interior alarm pings continuously	Turned the "ENGINE START STOP" switch to ACCES- SORY mode while the driver's door is open (Opened the driver's door when the "ENGINE START STOP" switch is in ACCES- SORY mode.)	Turn the "ENGINE START STOP" switch OFF and close the driver's door.
	Turned the "ENGINE START STOP" switch OFF while the driver's door is open	Close the driver's door.

- If the smart access system with push-button start does not operate properly
  - Locking and unlocking the doors: Use the mechanical key.  $(\rightarrow P.475)$
  - Starting the engine: $\rightarrow$ P. 124
- When the electronic key battery is fully depleted
  - $\rightarrow$ P. 404
- Customization that can be configured at Lexus dealer

Settings (e.g. smart access system with push-button start) can be deactivated. (Customizable features  $\rightarrow$ P. 511)

- Certification for the smart access system with push-button start
  - ► For vehicles sold in the USA

FCC ID: NI4TMLF-3

FCC ID: HYQ14AAB

FCC ID: HYQ13BZH

FCC ID: HYQ14ABK

FCC ID: HYQ13BZW

#### NOTF:

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:

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.

## **A** CAUTION

## ■ Caution regarding interference with electronic devices

- People with implanted pacemakers or cardiac defibrillators should keep away from the smart access system antennas. (→P. 28)
  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 emitting the radio waves. Then, consult your doctor to see if you should disable the entry function.
- User of any electrical medical device other than implanted pacemakers and implanted cardiac 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 for disabling the entry function.

## 1-2. Opening, closing and locking the doors and trunk

## Wireless remote control

The wireless remote control can be used to lock and unlock the vehicle and the trunk from outside the vehicle.



- Locks all doors
- Unlocks all doors

Pressing the button unlocks the driver's door. Pressing the button again within 3 seconds unlocks the other doors.

- Opens the windows and standard moon roof (push and hold)\*
- Unlocks the trunk (push and hold)
- Sounds alarm (push and hold) ( $\rightarrow$ P. 80)
- \*: This setting must be customized at your Lexus dealer.

## ■ Operation signals

Doors: A buzzer sounds and the emergency flashers flash to indicate that the doors have been locked/unlocked. (Locked: Once; Unlocked: Twice)

Trunk: A buzzer sounds to indicate that the trunk has been unlocked.

#### ■ Door lock buzzer

If a door is not fully closed, a buzzer sounds for 10 seconds if an attempt to lock the door is made. Fully close the door to stop the buzzer, and lock the vehicle once more.

## ■ Electronic key battery depletion

→P.32

## ■ Security feature

 $\rightarrow$ P.33

- When the electronic key battery is fully depleted
  - $\rightarrow$ P. 404
- Conditions affecting operation
  - $\rightarrow$ P. 30
- Customization that can be configured at Lexus dealer

Settings (e.g. trunk unlocking function) can be changed. (Customizable features  $\rightarrow$ P. 511)

- Certification for wireless remote control
  - ► For vehicles sold in the USA

FCC ID: HYQ14AAB FCC ID: HYQ13BZH FCC ID: HYQ14ABK FCC ID: HYQ13BZW

#### 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:

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.

## Doors

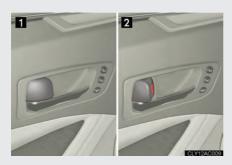
The vehicle can be locked and unlocked using the entry function, wireless remote control or door lock switch.

- Entry function
  - $\rightarrow$ P. 26
- Wireless remote control
  - $\rightarrow$ P.38
- Door lock switch



- 1 Locks all doors
- Unlocks all doors

Inside lock button



- 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.

## Locking the front doors from the outside without a key

The door cannot be locked if the "ENGINE START STOP" switch is in ACCESSORY or IGNITION ON mode, or the electronic key is left inside the vehicle.

Depending on the position of the electronic key, the key may not be detected correctly and the door may be locked.

## Rear door child-protector lock



The door cannot be opened from inside the vehicle when the locks are set.

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 cancelled:

Function	Operation
Shift position linked door locking function	Shifting the shift lever out of P locks all doors.
Shift position linked door unlocking function	Shifting the shift lever to P unlocks all doors.
Speed linked door locking function	All doors are locked when the vehicle speed is approximately 12 mph (20 km/h) or higher.
Driver's door linked door unlocking function	All doors are unlocked when the driver's door is opened within 10 seconds after turning the "ENGINE START STOP" switch OFF.

Setting and canceling the functions (vehicles without a navigation system only)

To switch between setting and canceling, follow the procedure below:

STEP 1 Close all the doors and switch the "ENGINE START STOP" switch to IGNITION ON mode. (Perform the step 2 within 10 seconds.)



Shift the shift lever to P or N, and press and hold the driver's door lock switch ( or or approximately 5 seconds and then release.

The shift lever and switch positions corresponding to the desired function to be set are shown as follows.

Use the same procedure to cancel the function.

Function	Shift lever position	Driver's door lock switch position
Shift position linked door locking function		â
Shift position linked door unlocking function	'	E C
Speed linked door locking function		â
Driver's door linked door unlocking function	N	e d

When the setting or canceling operation is complete, all doors are locked and then unlocked.

## ■ 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.

#### ■ Using the mechanical key

The doors can also be locked and unlocked with the mechanical key.  $(\rightarrow P. 475)$ 

#### ■ Customization that can be configured at Lexus dealer

Settings (e.g. unlocking function using a key) can be changed. (Customizable features →P. 511)

## **A** CAUTION

#### ■ To prevent an accident

Observe the following precautions while driving the vehicle.
Failing to do so may result in a door opening and an occupant falling out, resulting in death or serious injury.

- Always use a seat belt.
- Always lock all doors.
- Ensure that all doors are properly closed.
- Do not pull the inside handle of the doors while driving.
   The doors may be opened and the passengers are thrown out of the vehicle and it may result in serious injury or death.
  - Be especially careful for the front doors, 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 seat.

## 1-2. Opening, closing and locking the doors and trunk **Trunk**

The trunk can be opened using the trunk opener, entry function or wireless remote control.

Opening the trunk from inside the vehicle



Release the trunk lid.

- Opening the trunk from outside the vehicle
  - ► Entry function
  - $\rightarrow$ P. 26
  - ► Wireless remote control
  - $\rightarrow$ P.38

## Locking the trunk opener feature



Turn the main switch in the glove box OFF to disable the trunk opener.

- 2 OFF

The trunk lid cannot be opened even with the trunk opener, the wireless remote control or the entry function.

## ■ Trunk handle



Use the trunk handle when closing the trunk.

#### ■ Internal trunk release lever



The trunk lid can be opened by pulling down on the glow-in-the-dark lever located on the inside of trunk lid.

The lever will continue to glow for some time after the trunk lid is closed.

## **■** Trunk light

The trunk light turns on when the trunk is opened.

## **A** CAUTION

## ■ Caution while driving

- Keep the trunk lid closed while driving.
   If the trunk lid is left open, it may hit near-by objects while driving or luggage in the trunk 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 trunk lid before driving.
- Before driving the vehicle, make sure that the trunk lid is fully closed. If the trunk lid is not fully closed, it may open unexpectedly while driving, causing an accident.
- Never let anyone sit in the trunk. 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 enter the trunk.
   If a child is accidentally locked in the trunk, they could overheat or suffocate.
- Do not allow a child to open or close the trunk lid.
   Doing so may cause the trunk lid to operate unexpectedly, or cause the child's hands, head, or neck to be caught by the closing trunk lid.

## **A** CAUTION

#### Using the trunk

Observe the following precautions.

Failure to do so may cause parts of the body to be caught, resulting in serious injury.

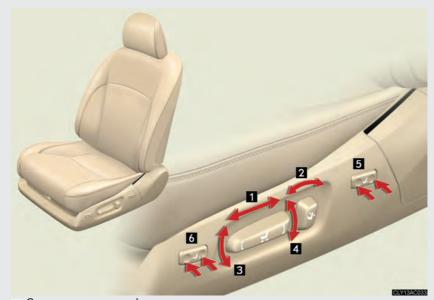
- Remove any heavy loads, such as snow and ice, from the trunk lid before opening it. Failure to do so may cause the trunk lid to fall closed again after it is opened.
- When opening or closing the trunk lid, thoroughly check to make sure the surrounding area is safe.
- If anyone is in the vicinity, make sure they are safe and let them know that the trunk is about to open or close.
- Use caution when opening or closing the trunk lid in windy weather as it may move abruptly in strong wind.





- The trunk lid may fall if it is not opened fully. It is more difficult to open or close the trunk lid on an incline than on a level surface, so beware of the trunk lid unexpectedly opening or closing by itself. Make sure that the trunk lid is fully open and secure before using the trunk.
- When closing the trunk lid, take extra care to prevent your fingers etc. from being caught.
- When closing the trunk lid, make sure to press it lightly on its outer surface. If the trunk handle is used to fully close the trunk lid, it may result in hands or arms being caught.
- Do not attach any accessories other than genuine Lexus parts to the trunk lid. Such additional weight on the trunk lid may cause the lid to fall closed again after it is opened.

## Front seats



- 1 Seat position switch
- 2 Seatback angle switch
- 3 Seat cushion (front) angle switch
- 4 Vertical height adjustment switch
- 5 Lumbar support switch
- 6 Seat leg support adjusting switch (driver's seat) (if equipped)

## **A** CAUTION

## ■ Seat adjustment

Do not recline the seat more than necessary when the vehicle is in motion to reduce the risk of sliding under the lap belt.

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.

## **Driving position memory (driver's seat)**\*

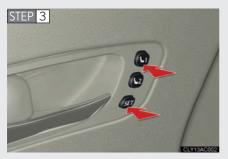
Your preferred driving position (the position of the driver's seat, steering wheel and outside rear view mirrors) can be memorized and recalled with the touch of a button. It is also possible to set this function to activate automatically when the doors are unlocked.

Two different driving positions can be entered into memory.

## ■ Entering a position to memory

Turn the "ENGINE START STOP" switch to IGNITION ON mode.

STEP 2 Adjust the driver's seat, steering wheel, and outside rear view mirrors to the desired positions.



Push the "SET" button, then within 3 seconds push button 1 or 2 until the signal beeps.

If the selected button has already been preset, the previously recorded position will be overwritten.

## Recalling the memorized position

Check that the shift lever is set in P.

Turn the "ENGINE START STOP" switch to IGNITION ON mode.



Push button 1 or 2 to recall the memorized position.

## Linking driving position memory with door unlock operation

Record your driving position to button 1 or 2 before performing the following.

- ► Using the wireless remote control
- STEP 1 Turn the "ENGINE START STOP" switch OFF and close the driver's door.



While pressing the desired button (1 or 2), press on the wireless remote control until the signal beeps.

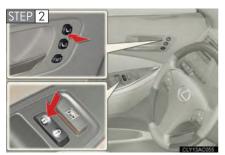
The driving position is recalled when the driver's door is unlocked using the entry function or wireless remote control and the driver's door is opened. STEP 3 Open one of the doors.

If a door is not opened within 60 seconds after  $\widehat{\phantom{a}}$  is pressed, the doors will be locked again and the alarm will automatically be set. In case that the alarm is triggered, immediately stop the alarm.  $(\rightarrow P. 80)$ 

► Using the door lock switch

Carry only the key to which you want to link the driving position. If 2 or more keys are in the vehicle, the driving position cannot be linked properly.

STEP 1 Close the driver's door and turn the "ENGINE START STOP" switch OFF.



While pressing the desired button (1 or 2), press the lock or unlock side on the driver's door lock switch until the signal beeps.

The driving position is recalled when the driver's door is unlocked using the entry function or wireless remote control and the driver's door is opened.

## ■ Canceling the linked door unlock operation

- STEP 1 Turn the "ENGINE START STOP" switch OFF and close the driver's door.
- While pushing the SET button, press on the wireless remote control until the signal beeps.

## Operating the driving position memory after turning the "ENGINE START STOP" switch OFF

Memorized positions (except for the steering wheel positions) can be activated up to 180 seconds after the driver's door is opened and another 60 seconds after it is closed again, even after turning the "ENGINE START STOP" switch OFF.

#### ■ To cancel seat position recall

Perform any of the following operations.

- Push the "SET" button.
- Push button 1 or 2.
- Adjust the seat using the switches (only cancels seat position recall).

## ■ If the battery is disconnected

The memorized positions are erased when the battery is disconnected.

## **A** CAUTION

## Seat adjustment caution

Take care during seat adjustment that the seat does not strike the rear passenger or squeeze your body against the steering wheel.

# 1-3. Adjustable components (seats, mirrors, steering wheel) Seat position memory (front passenger's seat)\*

Your preferred front passenger seat position can be memorized and recalled with the touch of a button.

Two different seat positions can be entered into memory.

## ■ Entering a position to memory

Turn the "ENGINE START STOP" switch to IGNITION ON mode.

STEP 2 Adjust the front passenger seat to the desired position.



Push the "SET" button, then within 3 seconds push button 1 or 2 until the signal beeps.

If the selected button has already been preset, the previously recorded position will be overwritten.

Recalling the memorized position
Check that the shift lever is set in P.



Push button 1 or 2 to recall the memorized position.

## ■ Retained accessory power

Memorized position can be activated up to 180 seconds after the front passenger door is opened, even after turning the "ENGINE START STOP" switch OFF.

## ■ To cancel seat position recall

Perform any of the following operations.

- Push the "SET" button.
- Push button 1 or 2.
- Adjust the seat position using the switches.

## ■ If the battery is disconnected

The memorized positions are erased when the battery is disconnected.

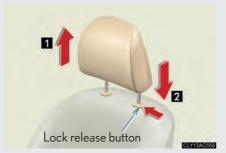
## **A** CAUTION

## ■Seat adjustment caution

Take care during seat adjustment that the seat does not strike the rear passenger.

## **Head restraints**

## Head restraints are provided for all seats.



- 1 Up
  - Pull the head restraints up.
- 2 Down

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

## ■ Removing the head restraints



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

## ■ 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 when lowering the head restraint.

## ■ Adjusting the height of the head restraints



Make sure that the head restraints are adjusted so that the center of the head restraint is closest to the top of your ears.

## Adjusting the rear seat head restraints

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

## **A** CAUTION

#### ■ 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.

## Seat belts

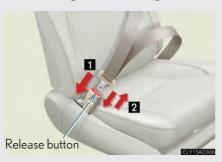
Make sure that all occupants are wearing their seat belts before driving the vehicle.

## 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.

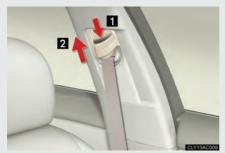
## Fastening and releasing the seat belt



- Fastening the belt

  Push the tab into the buckle until a clicking sound is heard.
- Releasing the belt Press the release button.

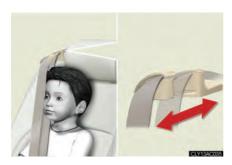
## Adjusting the height of the belt (front seats)



- 1 Down
- 2 Up

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

## Seat belt comfort guide (outside rear seats)



If the shoulder belt sits close to a person's neck, slide the seat belt comfort guide forward.

## Seat belt pretensioners (front and outside rear seats)



The pretensioner helps the seat belt to quickly restrain the occupant by retracting the seat belt when the vehicle is subjected to certain types of severe frontal collision.

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

## Pre-collision seat belts (front seats of vehicles with pre-collision system)

If the pre-collision sensor detects that a collision is unavoidable, the precollision system will retract the seat belt, thus enhancing the effectiveness of the seat belt pretensioner in a crash.

The same will happen if the driver makes an emergency braking or loses control of the vehicle.  $(\rightarrow P. 176)$ 

## ■ 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.  $(\rightarrow P. 105)$ 

## ■ Pregnant women



Obtain medical advice and wear the seat belt in the proper way.  $(\rightarrow P. 58)$ 

Women who are pregnant should position the lap belt as low as possible over the hips in the same manner as other occupants. Extend the shoulder belt completely over the shoulder and position the belt across the chest. Avoid belt contact over the rounding of the abdominal area.

If the seat belt is not worn properly, not only a 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.

#### ■ 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. ( $\rightarrow$ P. 101)
- When the child becomes large enough to properly wear the vehicle's seat belt, follow the instructions on P. 58 regarding seat belt usage.

## 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.

#### ■ 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.

## **A** CAUTION

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

Failing to do so may cause death or severe 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.

## **A** CAUTION

- Do not recline the seat any more than necessary to achieve a proper seating position. 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.

#### ■ 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.  $(\rightarrow P. 59)$ 

#### ■ 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.

## Child restraint lock function belt precaution

Do not allow children to play with the child restraint lock function belt. If the belt becomes twisted around a child's neck, it will not be possible to pull the belt out leading 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.

## **A** CAUTION

## ■ Seat belt damage and wear

- Do not damage the seat belts by allowing the belt, plate, or buckle to be jammed in the door.
- Inspect the seat belt system periodically. Check for cuts, fraying, and loose parts.
   Do not use a damaged seat belt until it is replaced. Damaged seat belts cannot protect an occupant from death or serious injury.
- Ensure that the belt and tab 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 of the pretensioner may prevent it from operating properly resulting in death or serious injury.

## ■Using a seat belt extender

- 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.
- 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

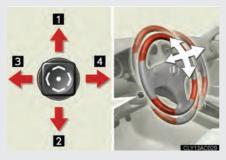
## ■ When using a seat belt extender

When releasing the seat belt, press on the buckle release button on the extender, not on the seat belt.

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

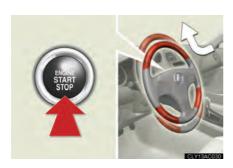
## Steering wheel

The steering wheel can be adjusted to a comfortable position while the "ENGINE START STOP" switch is in ACCESSORY or IGNITION ON mode.



- 1 Up
- 2 Down
- 3 Away from the driver
- 4 Toward the driver

## Auto tilt away



When the "ENGINE START STOP" switch is turned OFF, the steering wheel returns to its stowed position by moving up and away to enable easier driver entry and exit.

Turning the "ENGINE START STOP" switch to ACCESSORY or IGNITION ON mode will return the steering wheel to the original position.

## **A** CAUTION

## ■ Caution while driving

Do not adjust the steering wheel while driving.

Doing so may cause the driver to mishandle the vehicle and an accident, resulting in death or serious injury.

## Anti-glare inside rear view mirror

In AUTO mode, sensors are used to detect the headlights of vehicles behind and automatically reduces the reflected light.



#### Turns AUTO mode ON/OFF

The indicator comes on when AUTO mode is turned ON.

The anti-glare mirror default mode is AUTO. The anti-glare mirror is automatically set to AUTO whenever the "ENGINE START STOP" switch is turned on.

#### ■ To prevent sensor error



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

## **CAUTION**

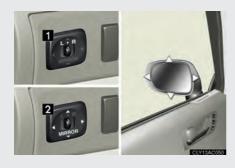
## ■ Caution while driving

Do not adjust the position of the mirror while driving.

Doing so may lead to mishandling of the vehicle and an accident, resulting in death or serious injury.

## Outside rear view mirrors

Mirror angle can be adjusted using the switch when the "ENGINE START STOP" switch is in ACCESSORY or IGNITION ON mode.



- Select a mirror to adjust (L: left or R: right)
- Adjust the mirror up, down, in, or out using the switch

## ■ When the mirrors are fogged up

Turn on the mirror defoggers to defog the mirrors.  $(\rightarrow P. 207)$ 

■ Folding back the mirrors



Push back in the direction of the vehicle's rear.

■ One-touch adjustment of the mirror angle (vehicles with driving position memory)

A desired mirror face angle can be entered to memory and adjusted with the touch of a button.  $(\rightarrow P. 50)$ 

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

The outside rear view mirrors will automatically angle downwards when the vehicle is reversing in order to give a better view of the ground. However, this function will not operate when the mirror select switch is in the neutral position (between L and R).

#### ■ Auto anti-glare function

When the anti-glare inside rear view mirror is set to AUTO mode, the outside rear view mirrors will activate in conjunction with the anti-glare inside rear view mirror to reduce reflected light.  $(\rightarrow P. 65)$ 

## **A** CAUTION

#### ■ When driving the vehicle

Observe the following precautions while driving.

Failing to do so may result in loss of control of the vehicle and cause an accident, resulting in death or serious injury.

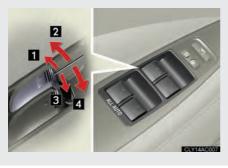
- Do not adjust the mirrors while driving.
- Do not drive with the mirrors folded back.
- Both the driver and passenger side mirrors must be extended and properly adjusted before driving.

## ■ When the mirror defoggers are operating

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

# 1-4. Opening and closing the windows and moon roof Power windows

The power windows can be opened and closed using the following switches.



- 1 Closing
- 2 One-touch closing\*
- Opening
- 4 One-touch opening\*
- \*: Pushing the switch in the opposite direction will stop window travel partway.

#### Lock switch



Press the switch down to lock passenger window switches.

Use this switch to prevent children from accidentally opening or closing a passenger window.

## ■ The power windows can be operated when

The "ENGINE START STOP" switch is in IGNITION ON mode.

#### ■ Linked door lock window operation

- The power windows can be opened and closed using the mechanical key.  $(\rightarrow P.475)$
- The power windows can be closed using the entry function.  $(\rightarrow P. 26)$
- Operating the power windows after turning the "ENGINE START STOP" switch OFF

The power windows can be operated for approximately 45 seconds even after the "ENGINE START STOP" switch is switched to ACCESSORY mode or turned OFF. They cannot, however, be operated once either front door is opened.

#### ■ Jam protection function

If an object becomes caught between the window and the window frame, window travel is stopped and the window is opened slightly.

## ■ Customization that can be configured at Lexus dealer

Settings (e.g. linked door lock operation) can be changed. (Customizable features →P. 511)

## **A** CAUTION

#### ■ Closing the windows

Observe the following precautions.

Failing to do so may result in death or serious injury.

- 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.
- Do not allow children to operate the power windows.
   Closing a power window on someone can cause serious injury, and in some instances, even death.

## ■ Jam protection function

- Never try jamming any part of your body to activate the jam protection function intentionally.
- The jam protection function may not work if something gets caught just before the window fully closes.

# 1-4. Opening and closing the windows and moon roof Moon roof

Use the overhead switches to open, close, and tilt the moon roof up and down.

- Opening and closing
- ► Standard type



1 Open

The moon roof stops slightly before the fully opened position. Push the switch again to fully open.

2 Close

Push the switch in the either direction to stop the moon roof partway.

▶ Glass type



- 1 Open
- Close (push and hold)

The moon roof stops once. Push and hold the switch again to fully close.

# ■ Tilting up and down

► Standard type



- 1 Tilt up
- 2 Tilt down

Push the switch to either side to stop the moon roof partway.

► Glass type



## 1 Tilt up

Push the switch to either side to stop the moon roof partway.

2 Tilt down (push and hold)

#### ■ The moon roof can be operated when

The "ENGINE START STOP" switch is in IGNITION ON mode.

#### ■ Linked door lock moon roof operation (standard type)

- The moon roof can be opened and closed using the mechanical key.  $(\rightarrow P.475)$
- The moon roof can be closed using the entry function.  $(\rightarrow P. 27)$

#### Operating the moon roof after turning the "ENGINE START STOP" switch OFF

The moon roof can be operated for approximately 45 seconds even after the "ENGINE START STOP" switch is switched to ACCESSORY mode or turned OFF. It cannot, however, be operated once either front door is opened.

#### ■ Jam protection function

If an object is detected between the moon roof and the frame while closing or tilting down, travel is stopped and the moon roof opens slightly.

#### ■ To reduce moon roof wind noise (standard type)

Drive with the moon roof opened to slightly before the fully open position as driving with the moon roof opened fully will cause wind noise.

#### ■ Sunshade

The sunshade can be opened and closed manually. However, the sunshade will open automatically when the moon roof is opened.

#### ■ Customization that can be configured at Lexus dealer

Settings (e.g. linked door lock operation) can be changed. (Customizable features →P. 511)

#### Opening the moon roof

Observe the following precautions.

Failing 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.

#### ■ Closing the moon roof

Observe the following precautions.

Failing to do so may result in death or serious injury.

- Check to make sure that all passengers do not have any part of their bodies in a
  position where they could be caught when the moon roof is being operated.
- Do not allow children to operate the moon roof.
   Closing the moon roof on someone can cause death or serious injury.

#### ■ Jam protection function

- Never try jamming any part of your body to activate the jam protection function intentionally.
- The jam protection function may not work if something gets caught just before the moon roof fully closes.

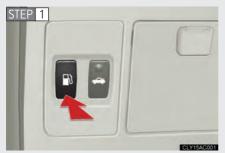
# Opening the fuel tank cap

Perform the following steps to open the fuel tank cap.

■ Before refueling the vehicle

Turn the "ENGINE START STOP" switch OFF and ensure that all the doors and windows are closed.

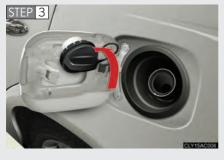
Opening the fuel tank cap



Open the fuel filler door.



Turn the fuel tank cap slowly to open.



Hang the fuel tank cap on the back of the fuel filler door.

# Closing the fuel tank cap



When replacing the fuel tank cap, turn it until a clicking sound is heard.

After releasing your hand, the cap will turn slightly to the opposite direction.

#### **■** Fuel types

Use unleaded gasoline. (Octane rating 91 [Research Octane Number 96] or higher)

#### ■ Fuel tank capacity

Approximately 18.5 gal. (70 L, 15.4 lmp. gal.)

#### ■ When the fuel filler door opener is inoperable





The lever can be used to open the fuel filler door if the fuel filler door cannot be opened using the inside switch because the battery is discharged or for any other reason.

#### ■ Refueling the vehicle

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

- Touch the vehicle or some other metal surface to discharge any static electricity.
   Sparks resulting from discharging static electricity may cause the fuel vapors to ignite.
- Always hold the grips on the fuel tank cap and turn it slowly to remove it. A whooshing sound may be heard when the fuel tank cap is loosened. Wait until the sound cannot be heard before fully removing the cap. In hot weather, pressurized fuel may spray out the filler neck and cause injury.
- Do not allow anyone that has not discharged static electricity from their bodies 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 replacing the fuel cap

Do not use anything but a genuine Lexus fuel tank cap designed for your vehicle. Failure to do so may cause a fire or other incident which may result in death or serious injury.

# **№** NOTICE

#### ■ Refueling

Do not spill fuel during refueling.

Failing to do so may damage the vehicle, such as causing the exhaust systems to operate abnormally or damaging fuel system components or the vehicle's painted surface.

#### 1-6. Theft deterrent system

# **Engine immobilizer system**

The vehicle's keys have built-in transponder chips that prevent the engine from starting if the 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.



The indicator light flashes after the "ENGINE START STOP" switch has been turned OFF to indicate that the system is operating.

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

#### System maintenance

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

#### ■ Conditions that may cause the system to malfunction

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

#### ■ Certifications for the engine immobilizer system

► For vehicles sold in the USA

#### FCC ID: NI4TMIMB-1

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

► For vehicles sold in Canada

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.

#### **A** CAUTION

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



# ■ To ensure the system correctly

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

#### **Alarm**

The system sounds the alarm and flashes lights when forcible entry is detected.



Close the moon roof and all windows. Stop the engine.

The engine immobilizer system causes the indicator light to flash.

After all people exit out of the vehicle, close the doors, trunk and hood, and lock all doors.

The indicator light comes on.

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

# Deactivating or stopping the alarm

Do one of the following:

- Unlock the doors or trunk using the entry function or the wireless remote door lock function.
- Turn the "ENGINE START STOP" switch to the 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 of alarm system.

### ■ Items to check before locking the vehicle

To prevent unintended triggering of the alarm, check that there is no one in the vehicle, and that all windows and moon roof are closed before locking the vehicle.

#### ■ Triggering of the alarm

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

- A person inside the vehicle opens a door, the trunk or hood.
- The battery is recharged or replaced when the vehicle is locked.

#### ■ Panic mode



When is pushed for longer than about one second, the headlights/tail lights/emergency flashers will flash, the front and rear interior lights will come on, and an alarm will sound for about 60 seconds to deter any person from trying to break into or damage your vehicle.

To stop the alarm, push any button on the wireless remote control.

#### ■ When the battery is disconnected

Be sure to cancel the alarm system.

If the battery is discharged before canceling the alarm, the system may be triggered when the battery is reconnected.

#### ■ Alarm-operated door lock

- When the alarm is operating, the doors are locked automatically to prevent intruders.
- Do not leave the key inside the vehicle when the alarm is operating, and make sure the key is not inside the vehicle when recharging or replacing the battery.

## ♠ NOTICE

#### ■ To ensure the system correctly

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

#### 1-6. Theft deterrent system

# Theft prevention labels (for USA)



These labels are attached to the vehicle to reduce vehicle theft by facilitating the tracing and recovery of parts from stolen vehicles. Do not remove under penalty of law.

# Drive in a good posture as follows:

Correct driving posture



- 11 Sit upright and well back in the seat.  $(\rightarrow P. 49)$
- Adjust the position of the seat forward or backward to ensure the pedals can be reached and easily depressed to the extent required. (—)P. 49)
  - Adjust the seatback so that the controls are easily operable.
  - Adjust the tilt and telescopic positions of the steering wheel downward so the airbag is facing your chest. (→P. 64)
- **5** Lock the head restraint in place with the center of the head restraint closest to the top of your ears. (→P. 56)
- **6** Wear the seat belt correctly. (→P.58)

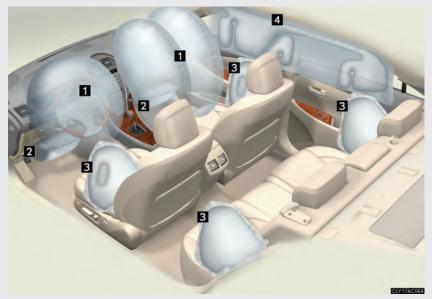
#### ■ While driving

- 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, increasing the risk of death or serious injury to the driver or passenger.
- 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. The adjustment mechanism may also be damaged.

#### 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.

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.

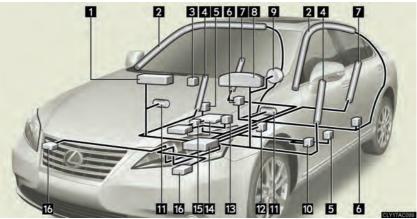


- ► Front airbags
- Driver airbag/front passenger airbag

  Can help protect the head and chest of the driver and front passenger from impact with interior components.
- Knee airbags
  Can help provide driver and front passenger protection.
- ► Side and curtain shield airbags
- Side airbags

  Can help protect the torso of the front seat occupants and rear seat outside occupants.
- Curtain shield airbags
  Can help protect primarily the head of outside occupants.

### Airbag system components



- 11 Front passenger airbag
- 2 Curtain shield airbags
- **B** AIR BAG ON and AIR BAG **D**river's seat position sensor OFF indicator lights
- 4 Side airbags for the front passengers
- Side and curtain shield airbag sensors
- 6 Curtain shield airbag sensors
- Side airbags for the rear outside passengers

- **8** SRS warning light
- Oriver airbag
- M Knee airbags
- Driver's seat belt buckle switch
- Front passenger's seat belt buckle switch
- Airbag sensor assembly
- **I** Occupant detection system (ECU and sensors)
- 16 Front airbag sensors

Your vehicle is equipped with ADVANCED AIRBAGS designed based on US motor vehicle safety standards (FMVSS208). The airbag system controls airbag deployment power for the driver and front passenger. The driver airbag system consists of the driver seat's position sensor etc. The front passenger's airbag system consists of the front passenger occupant classification sensor etc.

The main SRS airbag system components are shown above. The SRS airbag system is controlled by the airbag sensor assembly. The airbag sensor assembly consists of a safing sensor and an airbag sensor.

In certain types of severe frontal or side impacts, the SRS airbag system triggers the airbag inflators. 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)

- Bruising and slight abrasions may result from contact with a deploying (inflating) SRS airbag.
- A loud noise and white powder will be emitted.
- Parts of the airbag module (steering wheel hub, airbag cover and inflator) as well as the seats, and parts of the front pillar, rear pillar and roof side rail, may be hot for several minutes. The airbag itself may also be hot.
- The windshield may crack.
- For Safety Connect subscribers, if the SRS airbags deploy or in the event of a severe rear-end collision, 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. 346)

#### ■ SRS airbag deployment conditions (front airbags)

- The front SRS airbags will deploy in the event of an impact that exceeds the set threshold level (the level of force corresponding to a 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 if the vehicle strikes an object, such as a parked vehicle or sign pole, which can move or deform on impact, or if the vehicle is involved in an underride collision (e.g. a collision in which the front of the vehicle "underrides", or goes under, the bed of a truck, etc.).
- It is possible that in some collisions where the forward deceleration of the vehicle is very close to the designed threshold level, the SRS front airbags and the seat belt pretensioners may not activate together.

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

The SRS side 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 a 1500 kg [3300 lb.] vehicle colliding with the vehicle cabin from a direction perpendicular to the vehicle orientation at a speed of 12 - 18 mph [20 - 30 km/h]).

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

The SRS front 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 vehicle falling

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

The SRS front airbags are generally not designed to 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 rear.
- Collision from the side
- Vehicle rollover

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

The SRS side airbag and curtain shield airbag system 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 and curtain shield airbags are not generally designed to inflate if the vehicle is involved in a frontal or rear collision, if it rolls over, or if it is involved in a low-speed side collision.

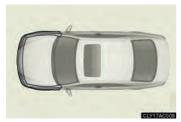


- Collision from the rear
- Collision from the front
- Vehicle rollover

#### ■ When to contact your Lexus dealer

In the following cases, contact your Lexus dealer as soon as possible. Do not disconnect the battery cables before contacting your Lexus dealer.

• 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 airbags to inflate.



A portion of the doors is damaged or deformed, or the vehicle was involved in an accident that was not severe enough to cause the SRS side airbags 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 portion of the containing the side airbag is scratched, cracked, or otherwise damaged.
- The portion of the front pillars, rear pillars or roof side rail garnishes (padding) containing the curtain shield airbags inside is scratched, cracked, or otherwise damaged.

#### ■SRS airbag precautions

Observe the following precautions regarding the 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 driver 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.

#### SRS airbag precautions



- If the seat belt extender has been connected to the driver's seat belt buckle but the seat belt extender has not also been fastened to the latch plate of the driver's seat belt, the SRS driver's airbag system will judge that the driver is wearing the seat belt even though the seat belt has not been connected. In this case, the driver's airbag may not activate correctly in a collision. resulting in death or serious injury in the event of 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 the safest for infants and children.  $(\to P. 101)$

#### ■SRS airbag precautions



 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 drive the vehicle while the driver or passenger have items resting 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.

#### SRS airbag precautions





- Do not attach anything to or lean anything against areas such as the dashboard, steering wheel pad or lower portion of the instrument panel.
  - These items can become projectiles when SRS driver, front passenger and knee airbags deploy.
- Do not attach anything to areas such as the door, windshield glass, side door glass, front and rear pillars, roof side rail or assist
- Do not hang coat hangers or other hard objects on the coat hooks. All of these items could become projectiles and seriously injure or kill you, should the SRS curtain shield airbag deploy.
- If the vinyl cover is put on the area where the SRS knee airbag will deploys, be sure to remove it.
- Do not use seat accessories which cover the parts where the SRS side airbags inflate as they may interfere with inflation of the airbags.
- Do not strike or apply significant levels of force to the area of the SRS airbag components shown on P. 86.
  - 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 airbag has 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 pillar garnish, are damaged or cracked, have them replaced by your Lexus dealer.

#### ■ Modification and disposal of SRS airbag system components

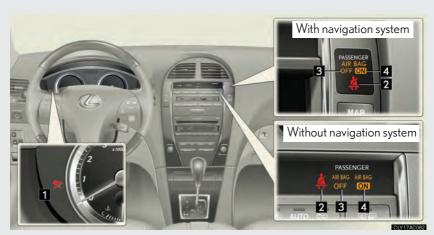
Do not dispose of your vehicle or perform any of the following modifications without consulting your Lexus dealer.

The SRS airbag 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 snow plows, winches, etc. to the front grille (bull bars, kangaroo bar etc.)
- Modifications to the vehicle's suspension system
- Installation of electronic devices such as mobile two-way radios or 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 devices for front passenger.



- 1 SRS warning light
- 2 Front passenger's seat belt reminder light
- (AIR BAG OFF" indicator light
- 4 "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	"AIR BAG
	lights	ON"
	SRS warning light	Off
	Front passenger's seat belt reminder light	Flashing*2
Devices	Front passenger airbag	- Activated
	Side airbag on the right side	
	passenger seats	
	Curtain shield airbag in the front passenger side	
	Front passenger knee airbag	
	Front passenger's seat belt pretensioner	

# ■ Child \*3 or child restraint system\*4

	-	
Indicator/ warning light	"AIR BAG ON" and "AIR BAG OFF" indicator	"AIR BAG
	lights	OFF" <sup>*5</sup>
	SRS warning light	Off
	Front passenger's seat belt reminder light	Flashing*2
Devices	Front passenger airbag	
	Side airbag on the right side	Deactivated
	passenger seats	
	Curtain shield airbag in the front passenger side	Activated
	Front passenger knee airbag	Deactivated
	Front passenger's seat belt pretensioner	Activated

### Unoccupied

Indicator/ warning light	"AIR BAG ON" and "AIR BAG OFF" indicator lights	Not illuminated
	SRS warning light	Off
	Front passenger's seat belt reminder light	Oli
Devices	Front passenger airbag	
	Side airbag on the right side	Deactivated
	passenger seats	
	Curtain shield airbag in the front passenger side	Activated
	Front passenger knee airbag	Deactivated
	Front passenger's seat belt pretensioner	

### ■ 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	Off
Devices	Front passenger airbag	
	Side airbag on the right side	Deactivated
	passenger seats	
	Curtain shield airbag in the front passenger side	Activated
	Front passenger knee airbag	Deactivated
	Front passenger's seat belt pretensioner	Activated

<sup>\*1:</sup> The system judges a person of adult size as an adult. When a smaller adult sits in the front passenger seat, the system may recognize him/her as a child depending on his/her physique and posture.

<sup>\*2:</sup> In the event the front passenger does not wear a seat belt.

<sup>\*3:</sup> When a larger child who has outgrown a child restraint system sits in the front passenger seat, the system may recognize him/her as an adult depending on his/her physique or posture.

- \*4: 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. 101)
- \*5: In case the indicator is not illuminated, consult this manual as for installing the child restraint system properly.  $(\rightarrow P. 105)$

#### ■ Front passenger occupant classification system precautions

Observe the following precautions regarding 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 tab 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, then 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 front passenger airbag, side airbag on the front passenger side and front passenger knee airbag may not activate correctly, which could cause death or serious injury in the event of collision.
- 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 passenger's airbags will not deploy 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.

#### Front passenger occupant classification system precautions

- 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 remain 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 the forward-facing child restraint system on the front passenger seat, install the child restraint system on the front passenger seat in the proper order. ( $\rightarrow$ P. 105)
- 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 detection 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 or seat cover, that covers the seat cushion surface.
- Do not modify or replace the upholstery of the front seat.

# **Child** restraint systems

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.

The laws of the Canada and all 50 states of the USA now require the use of child restraint systems.

#### Points to remember

Studies have shown that installing a child restraint on a rear seat is much safer than installing one to the front passenger seat.

- Choose a child restraint system that suits your vehicle and is appropriate to the age and size of the child.
- For installation details, follow the instructions provided with the child restraint system.

General installation instructions are provided in this manual.  $(\rightarrow P. 105)$ 

# Types of child restraints

Child restraint systems are classified into the following 3 types according to the age and size of the child.

▶ Rear facing — Infant seat/convertible seat



# ► Forward facing — Convertible seat



#### ▶ Booster seat



#### ■ Selecting an appropriate child restraint system

- Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belt.
- If the child is too large for a child restraint system, sit the child on a rear seat and use the vehicle's seat belt.  $(\rightarrow P. 58)$

#### ■ Child restraint precautions

- For effective protection in automobile accidents and sudden stops, a child must be properly restrained, using a seat belt or child restraint system depending on the age and size of the child. Holding a child in your arms is not a substitute for a child restraint system. In an accident, the child can be crushed against the windshield, or between you and the vehicle's interior.
- Lexus strongly urges the use of a proper child restraint system that conforms to the 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.
- Never install a rear-facing child restraint system on the front passenger seat even if "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 allowed to 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. Adjust the seat-back as upright as possible and always move the seat as far back as possible even if "AIR BAG OFF" indicator light is illuminated, because the front passenger air-bag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.
- Do not use the seat belt extender when installing a child restraint system on the front or rear passenger seat. If installing a child restraint system with the seat belt extender connected to the seat belt, 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 a sudden stop, sudden swerve or accident.
- 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 pillar or roof side rail from which the side airbags or curtain shield airbags deploy even if the child is seated in the child restraint system. It is dangerous if the side airbags and curtain shield airbags inflate, and the impact could cause death or serious injury to the child.

#### Child restraint precautions

 Make sure you have complied with all installation instructions provided by the child restraint manufacturer and that the system is properly secured. If it is not secured properly, it may cause death or serious injury to the child in the event of a sudden stop, sudden swerve or accident.

#### ■ Child restraint lock function belt precaution

Do not allow children to play with the child restraint lock function belt. If the belt becomes twisted around a child's neck, it will not be possible to pull the belt out leading 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.

#### ■ When the child restraint system is not in use

- Keep the child restraint system properly secured on the seat even if it is not in use. Do not store the restraint unsecured in the passenger compartment.
- If it is necessary to detach the child restraint system, remove it from the vehicle or store it securely in the trunk. This will prevent it from injuring passengers in the event of a sudden stop, sudden swerve or accident.

# Installing child restraints

Follow the child restraint system manufacturer's instructions. Firmly secure child restraints to the outside rear seats using the LATCH anchors or a seat belt. Attach the top tether strap when installing a child restraint.

The lap/shoulder belt can be used if your child restraint system is not compatible with the LATCH (Lower Anchors and Tethers for Children) system.

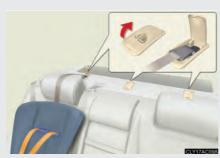


Child restraint LATCH anchors

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



Seat belts equipped with a child restraint locking mechanism (ALR/ELR belts except driver's seat belt) (→P. 58)

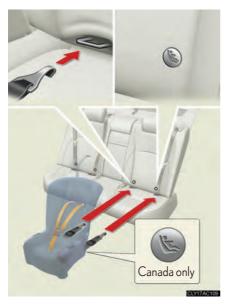


Anchor bracket (for top tether strap)

Anchor brackets are provided for all rear seats.

# Installation with LATCH system

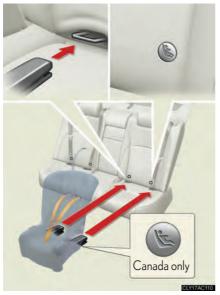
## ► Type A



- the seat cushion and seatback slightly.
- STEP 2 Latch the hooks of lower straps onto the LATCH anchorages.
- step 3 If the child restraint has a top tether strap, the top tether strap should be latched onto the top tether strap anchor.

For owners in Canada: A symbol on a child restraint system indicates the presence of a lower connector system.

# ▶ Type B



- the seat cushion and seatback slightly.
- STEP 2 Latch the buckles onto the LATCH anchors.
- STEP 3 If the child restraint has a top tether strap, the top tether strap should be latched onto the top tether strap anchor.

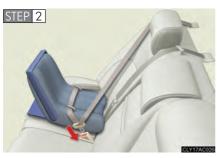
For owners in Canada: A symbol on a child restraint system indicates the presence of a lower connector system.

### Installing child restraints using a seat belt (child restraint lock function belt)

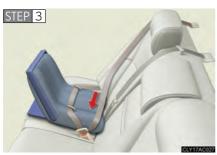
# ■ Rear facing — Infant seat/convertible seat



Place the child seat on the rear seat facing the rear of the vehicle.

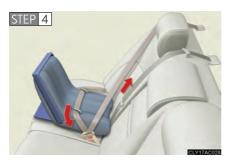


Run the seat belt through the child seat and insert the plate into the buckle. Make sure that the belt is not twisted.



Fully extend the shoulder belt and then allow it to retract slightly in order to activate the ALR lock mode.

Lock mode allows the seat belt to retract only.



While pushing the child seat down into the rear seat, allow the shoulder belt to retract until the child seat 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.

# ■ Forward facing — Convertible seat



Place the child seat on the seat facing the front of the vehicle.



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



Fully extend the shoulder belt and then allow it to retract slightly into the ALR lock mode.

Lock mode allows the seat belt to retract only.



While pushing the child seat into the rear seat, allow the shoulder belt to retract until the child seat 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.

STEP 5 If the child restraint has a top tether strap, the top tether strap should be latched onto the top tether strap anchor.

#### ■ Booster seat



Place the booster seat on the seat facing the front of the vehicle.



Sit the child in the booster seat. Fit the seat belt to the booster seat 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.  $(\rightarrow P. 58)$ 

# Removing a child restraint installed with a seat belt



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

# Child restraint systems with a top tether strap



Secure the child restraint using a seat belt or a lower anchors, and lock the head restraint in place at the lowest position.



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.

#### ■ Laws and regulations pertaining to anchorages

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 the SAE J1819.

# **A** CAUTION

#### ■ When installing a booster seat

Do not fully extend the shoulder belt to prevent the belt from going to ALR lock mode:  $(\rightarrow P. 60)$ 

ALR mode causes the belt to tighten only which could cause injury or discomfort to the child.

#### ■When installing a child restraint system

Follow the directions given in the child restraint system installation manual and fix the child restraint system securely in place.

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



 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.



- Only put a forward facing or booster child seat on the front seat when unavoidable. When installing a forward facing or booster child seat on the front passenger seat, move the seat as far back as possible even if AIR BAG OFF indicator light is illuminated. Failing to do so may result in death or serious injury if the airbags deploy (inflate).
- 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. Failing to do so may result in death or serious injury in the event of sudden braking, sudden swerving or an accident.
- Ensure that the belt and tab are securely locked and the seat belt is not twisted.
- Push and pull the child seat from side to side and forward to be sure it is secure.
- After securing a child restraint system, never adjust the seat.
- Follow all installation instructions provided by the child restraint system manufacturer.

#### 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.

#### ■ To correctly attach a child restraint system to the anchors

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. Make sure the child restraint system is securely attached, or it may cause death or serious injury to the child or other passengers in the event of a sudden stop, sudden swerve or accident.

# When driving

# 2

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### 2-1. Driving procedures

# Driving the vehicle

The following procedures should be observed to ensure safe driving.

- Starting the engine ( $\rightarrow$ P. 124)
- Driving
- STEP 1 With the brake pedal depressed, shift the shift lever to D.

 $(\to P. 128)$ 

STEP 2 Release the parking brake.

 $(\to P.132)$ 

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

# **■** Stopping

- STEP 1 With the shift lever in D, depress the brake pedal.
- STEP 2 If necessary, set the parking brake.

  When the vehicle is stopped for an extended period of time, shift the shift lever to P or N. (→P.128)

### ■ Parking the vehicle

STEP 1 With the shift lever in D, depress the brake pedal.

STEP 2 Set the parking brake.

 $(\to P.132)$ 

STEP 3 Shift the shift lever to P.

 $(\to P.128)$ 

- STEP 4 Press the "ENGINE START STOP" switch and stop the engine.
- STEP 5 Lock the door, making sure that you have the electronic key on your person.

### Starting on a steep uphill

- STEP 1 Firmly set the parking brake and shift the shift lever to D.
- STEP 2 Gently depress the accelerator pedal.
- STEP 3 Release the parking brake.

#### ■ Driving in the rain

- Drive carefully when it is raining, because visibility will be reduced, the windows may become fogged-up, and the road will be slippery.
- Drive carefully when it starts to rain, because the road surface will be especially slippery.
- Refrain from high speeds when driving on an expressway in the rain, because there may be a layer of water between the tires and the road surface, preventing the steering and brakes from operating properly.

#### ■ Breaking in your new Lexus

To extend the life of the vehicle, the following precautions are recommended to observe:

- For the first 200 miles (300 km): Avoid sudden stops.
- For the first 600 miles (1000 km):
  - Do not drive at extremely high speeds.
  - · Avoid sudden acceleration.
  - Do not drive continuously in the low gears.
  - Do not drive at a constant speed for extended periods.

### ■ Drum-in-disc type parking brake system

Your vehicle has a drum-in-disc type parking brake system. This type of brake system needs bedding-down of the brake shoes periodically or whenever the parking brake shoes and/or drum are replaced. Have your Lexus dealer perform the bedding down.

### Operating your vehicle in a foreign country

Comply with the relevant vehicle registration laws and confirm the availability of the correct fuel.  $(\rightarrow P. 488)$ 

#### ■ When starting the vehicle

Always keep your foot on the brake pedal while stopped with the engine running. This prevents the vehicle from creeping.

#### ■ When driving the vehicle

- Do not drive if you are unfamiliar with the location of the brake and accelerator pedals to avoid depressing the wrong pedal.
  - Accidentally depressing the accelerator pedal instead of the brake pedal will result in sudden acceleration that may lead to an accident that could result in death or serious injury.
  - · When backing up, you may twist your body around, leading to a difficulty in operating the pedals. Make sure to operate the pedals properly.
  - Make sure to keep a correct driving posture even when moving the vehicle only slightly, allowing you to depress the brake and accelerator pedals properlv.
  - 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.
- Do not let the vehicle roll backwards 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.
- If the smell of exhaust is noticed inside the vehicle, open the windows and check that the trunk is closed. Large amounts of exhaust in the vehicle can cause driver drowsiness and an accident, resulting in death or a serious health hazard. Have the vehicle inspected by your Lexus dealer immediately.
- Do not under any circumstances shift the shift lever to P, R or N while the vehicle is moving.
  - Doing so can cause significant damage to the transmission system and may result in a loss of vehicle control.
- Do not shift the shift lever to N while the vehicle is moving. Doing so may cause the engine brake to not operate properly and lead to an accident.

- Do not turn the engine off while driving.
   The power steering and brake booster systems will not operate properly if the engine is not running.
- 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. 128)
- When stopped on an inclined surface, use the brake pedal and parking brake to prevent the vehicle from rolling backward or forward and causing an accident.
- Do not adjust the position 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 that can cause accidents that may result in death or serious injury.
- Always check that all passengers' arms, heads or other parts of their bodies are not outside the vehicle, as this may result in death or serious injury.
- 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, resulting in an accident.
- Sudden changes in engine speed, such as engine braking caused by up-shifting or down-shifting, may cause the vehicle to skid, resulting in an accident.
- 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, resulting in an accident.

# ■ 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 and result in death or serious injury.

#### ■ When the vehicle is stopped

- Do not race the engine.
   If the vehicle is in any gear other than P or N the vehicle may accelerate suddenly and unexpectedly, and may cause an accident.
- 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 check that exhaust fumes do not enter the vehicle interior.
- In order to prevent accidents due to the vehicle rolling away, always keep depressing the brake pedal while the engine is running, and apply the parking brake as necessary.
- If the vehicle is stopped on an incline, in order to prevent accidents caused by the vehicle rolling forward or backward, always depress the brake pedal and securely apply the parking brake as needed.
- Avoid revving or racing the engine.
   Running the engine at high speed while the vehicle is stopped may cause the exhaust system to overheat, which could result in a fire if combustible material is nearby.

#### ■ When the vehicle is parked

- Do not leave glasses, cigarette lighters, spray cans, or soft drink cans in the vehicle when it is in the sun.
  - Failure to do 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 eye 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.

• 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.

- Do not touch the exhaust pipe while the engine is running or immediately after turning the engine off.
  - Doing so may cause burns.
- 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. This may lead to death or a serious health hazard.

#### ■ Exhaust gases

Exhaust gases include harmful carbon monoxide (CO) that is colorless and odorless. Inhaling exhaust gases may lead to death or a serious health hazard.

- If the vehicle is in a poorly ventilated area, stop the engine. In a closed area, such as a garage, exhaust gases may collect and enter the vehicle. This may lead to death or a serious health hazard.
- The exhaust should be checked occasionally. 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. Failure to do so may allow exhaust gases to enter the vehicle, resulting in death or a serious health hazard.

### ■ When taking a nap in the vehicle

Always turn the engine off. Otherwise, you may accidentally move the shift lever or depress the accelerator pedal, which 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 the vehicle

 When the brakes are wet, drive more cautiously.
 Braking distance increases when the brakes are wet, and 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 power brake assist function does not operate, do not follow other vehicles closely and avoid downhills or sharp turns that require braking.
  In this case, braking is still possible, but it will require more force on the pedal than usual. Braking distance may also increase.
- 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 braking distance becomes longer.
  Do not drive your vehicle with only a single brake system. Have your brakes fixed immediately.

# **↑** NOTICE

#### ■ While driving the vehicle

Do not use the accelerator pedal or depress accelerator and brake pedals together to hold the vehicle on a hill.

#### ■ When parking the vehicle

Always put the shift lever in P. Failure to do so may cause the vehicle to move or the vehicle may accelerate suddenly if the accelerator pedal is accidentally depressed.

# Avoiding damage to vehicle parts

- Do not turn the steering wheel fully in either direction and hold it there for a long time.
  - Doing so may damage the power steering pump
- When driving over bumps in the road, drive as slowly as possible to avoid damaging the wheels, underside of the vehicle, etc.

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

Have your Lexus dealer check and replace the brake pads as soon as possible. The rotor damage can 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

It is dangerous to drive the vehicle when the wear limits of the brake pads and/or that of the brake discs are exceeded.

# **↑** NOTICE

#### 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 press the brake pedal to slow down the vehicle.

- It may be difficult to control your vehicle.
- The vehicle will make abnormal sounds.
- The vehicle will behave abnormally.

Replace a flat tire with a new one.  $(\rightarrow P. 464)$ 

#### ■ 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 engine oil, transaxle fluid, etc.
- Lubricant condition for the bearings and suspension joints (where possible) and the function of all joints, bearings, etc.

### 2-1. Driving procedures

# Engine (ignition) switch

Performing the following operations when carrying the electronic key on your person starts the engine or changes "ENGINE START STOP" switch modes.

# ■ Starting the engine

STEP 1 Check that the parking brake is set.

STEP 2 Check that the shift lever is set in P.

STEP 3 Sit in the driver's seat and firmly depress the brake pedal.

The "ENGINE START STOP" switch indicator turns green.



Press the "ENGINE START STOP" switch.

The engine can be started from any mode.

# ■ Changing "ENGINE START STOP" switch mode

Modes can be changed by pressing the "ENGINE START STOP" switch with the brake pedal released. (The mode changes each time the switch is pressed.)



#### 1 OFF\*

Emergency flashers can be used.

# 2 ACCESSORY mode

Some electrical components such as the audio system can be used.

The "ENGINE START STOP" switch indicator turns amber.

#### **3** IGNITION ON mode

All electrical components can be used.

The "ENGINE START STOP" switch indicator turns amber.

\*: If the shift lever is in a position other than P when turning off the engine, the "ENGINE START STOP" switch will be turned to ACCESSORY mode, not to OFF.

#### ■ If the engine does not start

The engine immobilizer system may not have been deactivated.  $(\rightarrow P.78)$ 

#### ■ When the "ENGINE START STOP" switch indicator flashes

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

#### ■ Auto power OFF function

If the vehicle is left in ACCESSORY mode for more than an hour with the shift lever in P, the "ENGINE START STOP" switch will automatically turn off.

- Electronic key battery depletion
  - $\rightarrow$ P.32
- When the electronic key battery is discharged
  - $\rightarrow$ P. 404
- Conditions affecting operation
  - $\rightarrow$ P.30
- Note for the entry function
  - $\rightarrow$ P.33

# **A** CAUTION

#### ■ When starting the engine

Always start the engine while sitting in the driver's seat. Do not press the accelerator pedal while starting the engine under any circumstances.

Doing so may cause an accident resulting in death or serious injury.

#### ■ Stopping the engine in an emergency

If you want to stop the engine in an emergency while driving the vehicle, push and hold the "ENGINE START STOP" switch for more than 3 seconds.

However, do not touch the "ENGINE START STOP" switch while driving except in an emergency. If the engine stops while the vehicle is being driven, this could lead to an unexpected accident.

# **⚠** NOTICE

#### ■ To prevent battery discharge

Do not leave the "ENGINE START STOP" switch in ACCESSORY or IGNITION ON mode for long periods without the engine running.

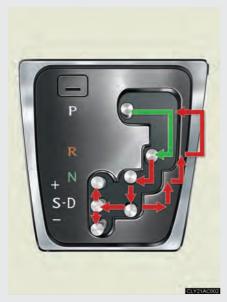
#### ■ When starting the engine

- Do not race a cold engine.
- If the engine becomes difficult to start or stalls frequently, have the engine checked immediately.

# **Automatic Transmission**

Select a shift position appropriate for the driving conditions.

# ■ Shifting the shift lever



While the "ENGINE START STOP" switch is in IGNITION ON mode, depress the brake pedal and move the shift lever.

# ■ Shift position uses

Shift position	Function	
Р	Parking the vehicle or starting the engine	
R	Reversing	
Ν	Neutral	
D	Normal driving*1	
S	S mode driving $^{*2}$ ( $\rightarrow$ P. 129)	

- \*1: Shifting to the D position allows the system to select a gear suitable for the driving conditions. Setting the shift lever to the D position is recommended for normal driving.
- \*2: Selecting shift ranges using S mode restricts the upper limit of the possible gear ranges, controls engine braking forces, and prevents unnecessary upshifting.

# Changing shift ranges in S mode

Shift the shift lever to the S mode driving position and operate the shift lever.



- Upshifting
- 2 Downshifting

The initial shift range in S mode is set automatically to 5 or 4 according to vehicle speed. However, the initial shift range may be set to 3 if Al-SHIFT has operated while the shift lever was in the D position.  $(\rightarrow P. 130)$ 

#### Shift ranges and their functions

- Automatically selecting gears between 1 and 6 according to vehicle speed and driving conditions. However, the gear is limited according to selected shift range.
- You can choose from 6 levels of engine braking force.
- A lower shift range will provide greater engine braking force than a higher shift range, and the engine speed will also increase.

#### ■ Downshifting restrictions warning buzzer (in the S mode)

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. (The warning buzzer will sound twice.)

■ When driving with the cruise control system or dynamic radar cruise control system

The engine brake will not operate in the S mode, even when downshifting to 5 or 4.  $(\rightarrow P. 152, 155)$ 

#### ■ If the shift lever cannot be shifted from P

 $\rightarrow$ P. 473

# If the sindicator does not come on even after shifting the shift lever to S mode driving position

This may indicate a malfunction in the automatic transmission system. Have the vehicle inspected by your Lexus dealer immediately.

(In this situation, the transmission will operate in the same as manner as when the shift lever is in D.)

#### ■ S mode

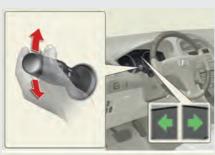
- When the shift range is 5 or lower, holding the shift lever toward "+" sets the shift range to 6.
- To prevent excessive engine speed, a function was adopted that automatically selects a higher shift range before engine speed becomes too high.
- To protect the automatic transmission, a function is adopted that automatically selects a higher shift range when the fluid temperature is high.

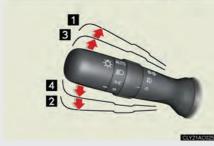
#### ■ AI-SHIFT

Al-SHIFT automatically selects the suitable gear according to driver performance and driving conditions.

Al-SHIFT automatically operates when the shift lever is in the D position. (Shifting the shift lever to the S mode driving position cancels the function.)

# Turn signal lever





- Right turn
- 2 Left turn
- Move and hold the lever partway to signal a lane change

The right hand signal will flash until you release the lever.

4 Move and hold the lever partway to signal a lane change

The left hand signal will flash until you release the lever.

■ Turn signals can be operated when

The "FNGINE START STOP" switch is in IGNITION ON mode.

■ If the indicators flash faster than usual

Check that a light bulb in the front or rear turn signal lights has not burned out.

### 2-1. Driving procedures

# Parking brake



- Sets the parking brake\* (Depressing the pedal again releases the parking brake.)
- \*: Fully depress the parking brake pedal with your left foot while depressing the brake pedal with your right foot.

#### ■ Usage in winter time

See "Winter driving tips" for parking brake usage in winter time.  $(\rightarrow P. 184)$ 

# **↑** NOTICE

#### ■ Before driving

Fully release the parking brake.

Driving the vehicle with the parking brake set will lead to brake components overheating, which may affect braking performance and increase brake wear.

# Horn



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

# Gauges and meters



The units used on the speedometer and the tachometer gauge display may differ depending on the model/type.

The following gauges, meters and display illuminate when the "ENGINE START STOP" switch is in IGNITION ON mode.

- Tachometer
  Displays the engine speed in revolutions per minute.
- Multi-information display→P. 140
- Speedometer
  Displays the vehicle speed.
- Odometer/trip meter and trip meter reset button Switches between odometer and trip meter displays. Pushing and holding the button will reset the trip meter when the trip meter is being displayed.
- **5** Fuel gauge Displays the quantity of fuel remaining in the tank.

- 6 Odometer and trip meter
  - 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.

▼ Engine coolant temperature gauge
Displays the engine coolant temperature.

# Instrument panel light control

The brightness of the instrument panel lights can be adjusted.



- 1 Brighter
- 2 Darker

When the headlight switch is turned to ON, the brightness will be reduced slightly unless the control dial is turned fully up.

# **↑** 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 temperature gauge is in the red zone (H). In this case, immediately stop the vehicle in a safe place, and check the engine after it has cooled completely. (→P. 480)

# Indicators and warning lights

The indicator and warning lights on the instrument cluster and center panel inform the driver of the status of the vehicle's various systems.

► Instrument cluster



The units used on the speedometer and the tachometer gauge display may differ depending on the model/type.

► Center panel (without navigation system)



► Center panel (with navigation system)



#### ■ Indicators

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



Turn signal indicator  $(\rightarrow P. 131)$ 



AFS OFF indicator light  $(\rightarrow P. 146)$ 



Headlight high beam indicator  $(\rightarrow P. 145)$ 



Slip indicator ( $\rightarrow$ P. 171)



Headlight indicator  $(\rightarrow P. 145)$ 



VSC off indicator  $(\rightarrow P. 172)$ 



Tail light indicator  $(\rightarrow P. 145)$ 



navigation system)

SRS airbag on-off indicator  $(\rightarrow P. 96)$ 



Front fog light indicator  $(\rightarrow P.148)$ 



gation system) SRS airbag on-off indicator ( $\rightarrow$ P. 96)



Eco Driving Indicator Light  $(\rightarrow P. 144)$ 



Cruise control indicator  $(\rightarrow P.152,155)$ 



Cruise control "SET" indicator ( $\rightarrow$ P. 152, 155)



Radar cruise control indicator  $(\rightarrow P. 155)$ 



Shift position and shift range indicators ( $\rightarrow$ P. 128)

# ■ Warning lights

Warning lights inform the driver of malfunctions or suspected problem in any of the vehicle's systems.  $(\rightarrow P. 439)$ 



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

# **A** CAUTION

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

Should a safety system light such as the ABS and SRS airbag warning lights 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.

# Multi-information display

The multi-information display presents the driver with a variety of drivingrelated data, including the current outside air temperature.



• Trip information  $(\rightarrow P. 141)$ 

Displays driving range, fuel consumption and other cruising related information.

Intuitive parking assist display (if equipped)

 $(\rightarrow P. 165)$ 

Automatically displayed when using intuitive parking assist.

Dynamic radar cruise control display (if equipped)
 (→P. 155)

Automatically displayed when using dynamic radar cruise control.

Warning messages

 $(\rightarrow P.449)$ 

Automatically displayed when a malfunction occurs in one of the vehicle's systems.

# Trip information

# ► Type A



Display items can be switched by pushing the "DISP" switch.

► Type B



Display items can be switched by pushing the "DISP" switch.

► Type C



Display items can be switched by pushing the "DISP" switch.

### Outside temperature



Displays the outside air temperature.

The temperature range that can be displayed in the following range.

USA: from -40 to 122 °F Canada: from -40 to 50 °C

#### Driving 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.
- When only a small amount of fuel is added to the tank, the display may not be updated.

# Average fuel consumption



Displays the average fuel consumption since the function was reset.

The function can be reset by pushing the "DISP" switch for longer than one second when the average fuel consumption is displayed.

### Average fuel consumption after refueling



Displays the average fuel consumption since the vehicle was last refueled.

### ■ Current fuel consumption



Displays the current rate of fuel consumption.

- Eco Driving Indicator Zone Display
  - $\rightarrow$ P.144
- Eco Driving Indicator Light customization



Eco Driving Indicator Light can be disabled. This customization can only be performed when the vehicle is stopped.

Eco Driving Indicator Light can be enabled or disabled by pressing the "DISP" switch for longer than 1 second when Eco Driving Indicator Light customization screen is displayed.

## Average vehicle speed



Displays the average vehicle speed since the engine was started or the function was reset.

#### ■ Elapsed time



Displays the elapsed time since the engine was started.

## ■ System check display

After switching the "ENGINE START STOP" switch to IGNITION ON mode, **CHECK** is displayed while system operation is checked. When the system check is complete, **COMPLETED** is displayed before returning to the normal screen.

#### ■ Eco Driving Indicator



- Eco Driving Indicator Light
  During environmentally-friendly acceleration operation (Eco driving), Eco Driving
  Indicator Light will turn on.
- Eco Driving Indicator Zone Display Suggests Zone of Eco driving with current Eco driving ratio based on accelerator pedal operation.
- 3 Zone of Eco driving
- Eco driving ratio based on accelerator pedal operation Vehicle to exceed the Zone of Eco driving, the right of Eco Driving Indicator Zone Display will blink and Eco Driving Indicator Light will turn off.

Eco Driving Indicator will operate when the vehicle is being driven with the shift lever in D.

#### ■ 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.)

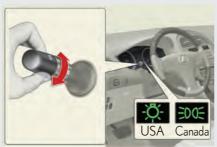


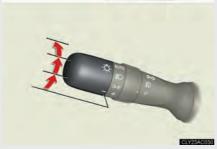
## ■ The multi-information display at low temperatures

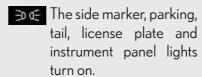
Allow the interior of the vehicle to warm up before using the liquid crystal information display. At extremely low temperatures, the information display monitor may respond slowly, and display changes may be delayed.

## 2-3. Operating the lights and windshield wipers **Headlight switch**

## The headlights can be operated manually or automatically.





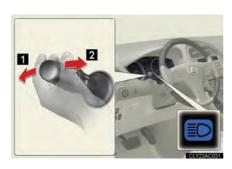




AUTO The headlights and parking lights turn on and off automatically.

(When the "ENGINE START STOP" switch is in IGNITION ON mode)

## Turning on the high beam headlights



With the headlights on, push the lever forward to turn on the high beams.

Pull the lever back to the center position to turn the high beams off.

Pull the lever toward you to turn on the high beams.

Release to turn them off. You can flash the high beams with the head-lights on or off.

## AFS (vehicles with discharge headlights)

AFS (Adaptive Front lighting System) improves visibility at intersections and on curves by automatically adjusting the direction of light axis of the headlights according to vehicle speed and the degree of the tire angle that are controlled by steering input.

Operates at speeds of 6 mph (10 km/h) or higher.

## ■ Deactivating AFS



Turn the switch OFF to deactivate AFS

- 1 OFF
- **2** ON

#### ■ Daytime running light system

To make your vehicle more visible to other drivers, the headlights turn on automatically (at a reduced intensity) whenever the engine is started and the parking brake is released. Daytime running lights are not designed for use at night.

#### ■ Headlight control sensor



The sensor may not function properly if an object is placed on the sensor, or anything that blocks the sensor is affixed to the windshield.

Doing so interferes with the sensor detecting the level of ambient light and may cause the automatic headlight control system to malfunction.

## ■ Automatic light off system

- When the headlights come on: The headlights and tail lights turn off 30 seconds after all doors are closed with the "ENGINE START STOP" switch switched to ACCESSORY mode or turned OFF. (The light turns off immediately if the button on the key is pressed after all doors are locked.)
- When only the tail lights come on: The tail lights turn off automatically if the "ENGINE START STOP" switch is switched to ACCESSORY mode or turned OFF and driver's door is opened.

To turn the lights on again, switch to IGNITION ON mode, or turn the light switch OFF once and then back to the sec or position.

■ Automatic headlight leveling system (vehicles with discharge headlights)

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.

■ If the OFF indicator flashes... (vehicles with discharge headlights)

It may indicate a malfunction in the system. Contact your Lexus dealer.

■ Customization that can be configured at Lexus dealer

Settings (e.g. light sensor sensitivity) can be changed. (Customizable features  $\rightarrow$  P. 511)

## **№** NOTICE

## ■ To prevent battery discharge

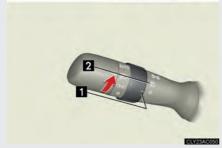
Do not leave the lights on longer than necessary when the engine is not running.

# 2-3. Operating the lights and windshield wipers Fog light switch

The fog lights improve visibility in difficult driving conditions, such as in rain or fog. They can be turned on only when the headlights are on low beam.



- 1 To turn the front fog lights off
- To turn the front fog lights on



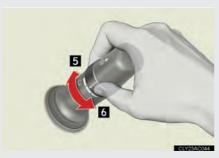
## 2-3. Operating the lights and windshield wipers Windshield wipers and washer

With "AUTO" 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.



- Rain-sensing windshield wiper operation
- 2 Low speed windshield wiper operation
- High speed windshield wiper operation
- 4 Temporary operation





- **5** Sensor sensitivity (high)
- 6 Sensor sensitivity (low)



## 7 Wash/wipe operation

Wipers operate automatically. (With "AUTO" selected, after operating several times, the wipers operate one more time after a short delay to prevent dripping.)

- The windshield wiper and washer can be operated when
  The "ENGINE START STOP" switch is in IGNITION ON mode.
- Rain drop sensor



• The sensor judges the amount of raindrops.

• 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",

#### ■ AUTO mode

If the wiper switch is turned to AUTO position while the "ENGINE START STOP" switch is in IGNITION ON mode, the wiper will operate once to show that AUTO mode is activated.

## ■ If no windshield washer fluid sprays

Check that the washer nozzles are not blocked if there is washer fluid in the windshield washer fluid reservoir.

## **A** CAUTION

### ■ Caution regarding the use of windshield wipers in AUTO mode

The windshield wipers may operate unexpectedly if the sensor is touched or the windshield is subjected to vibration in AUTO mode. Take care that your fingers or anything else do not become caught in the windshield wipers.

## ♠ NOTICE

■ When the windshield is dry

Do not use the wipers, as they may damage the windshield.

■ When there is no washer fluid spray from the nozzle

Damage to the washer fluid pump may be caused if the lever is pulled toward you and held continually.

## Cruise control\*

Use the cruise control to maintain a set speed without using the accelerator.

## ■ Set the vehicle speed



Turn the "ON-OFF" button ON.

Push the button once more to deactivate the cruise control.



Accelerate or decelerate to the desired speed and press the lever down to set the cruise control speed.

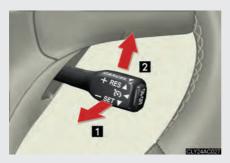
## Adjusting the speed setting



- 1 Increase speed
- 2 Decrease speed

Hold the lever until the desired speed setting is obtained.

## ■ Canceling and resuming regular acceleration



#### 1 Cancel

Pull the lever towards you to cancel cruise control.

The speed setting is also canceled when the brakes are applied.

#### 2 Resume

To resume cruise control and return to the set speed, push the lever up.

#### Fine adjustment of the set speed

Fine adjustment of the set speed (approximately 1.0 mph [1.6 km/h]) can be made by lightly pressing the lever up or down and releasing it.

#### ■ Cruise control can be set when

- The shift lever is in the D or 4, 5, or 6 range of S.
- Vehicle speed is above approximately 25 mph (40 km/h).

### ■ Accelerating

The vehicle can be accelerated normally. After acceleration, the set speed resumes.

#### ■ Automatic cruise control cancellation

The set speed is automatically cancelled in any of the following situations.

- lacktriangle Actual vehicle speed falls more than approximately 10 mph (16 km/h) below the preset vehicle speed
  - At this time, the memorized set speed is not retained.
- Actual vehicle speed is below approximately 25 mph (40km/h)
- VSC is activated

#### ■ If the cruise control indicator light flashes

Turn the ON-OFF button off once, and then reactivate the system.

If the cruise control speed cannot be set or if the cruise control cancels immediately after being activated, there may be a malfunction in the cruise control system. Have the vehicle inspected by your Lexus dealer.

## **A** CAUTION

#### ■ To avoid inadvertent cruise control activation

Keep the ON-OFF button off when not in use.

#### ■ Situations unsuitable for cruise control

Do not use cruise control in any of the following situations.

Doing so may result in control of the vehicle being lost and could cause an accident resulting in death or serious injury.

- In heavy traffic
- On roads with sharp bends
- On slippery roads, such as those covered with rain, ice or snow
- On steep hills
- On winding roads
- When towing a trailer or emergency towing

## Dynamic radar cruise control\*

Dynamic radar cruise control supplements conventional cruise control with a vehicle-to-vehicle distance control. In the vehicle-to-vehicle distance control mode, the vehicle automatically accelerates or decelerates in order to maintain a set following distance from vehicles ahead.

#### ■ Select cruise mode





Selecting vehicle-to-vehicle distance control mode

11 Turn the "ON-OFF" button ON.

Push the button once more to deactivate.



Selecting conventional constant speed control mode

Turn the "ON-OFF" button ON.

Push the button once more to deactivate.

Vehicle-to-vehicle distance control mode is always reset when the "ENGINE START STOP" switch is switched to IGNITION ON mode.

Switch to constant speed control mode. (push and hold for approximately one second)

## ■ Driving in the selected cruise control mode



Accelerate or decelerate to the desired speed and press the lever down to set.

## Adjusting the speed setting



- 1 Increase speed
- 2 Decrease speed

Hold the lever until the desired speed setting is displayed.

## ■ Canceling and resuming the speed setting



#### 1 Cancel

Pull the lever towards you to cancel cruise control.

The setting is also canceled when the brakes are applied.

## 2 Resume

To resume cruise control and return to the set speed, push the lever up.

## ■ Changing the vehicle-to-vehicle distance



Each push of the switch changes the vehicle-to-vehicle distance

- 1 Long
- 2 Medium
- 3 Short

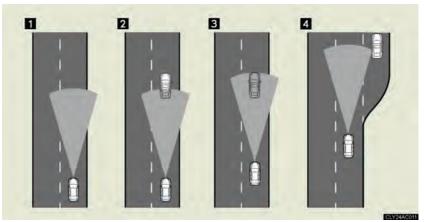
The vehicle-to-vehicle distance is automatically set to the long mode when the "ENGINE START STOP" switch is switched to IGNITION ON mode.

A mark will be displayed to indicate the presence of the vehicle if a vehicle is running ahead of you.

## Driving in vehicle-to-vehicle distance control mode

This mode employs a radar sensor to detect the presence of vehicles within 400 ft. (120 m) ahead and to judge the distance between your vehicle and those vehicles.

Note that vehicle-to-vehicle distance will close when traveling on long downhill slopes.



- Example of constant speed cruising (when there are no vehicles ahead): When set to 62 mph (100 km/h)
  - The vehicle travels at the speed set by the driver. The desired vehicle-to-vehicle distance can also be set by operating the vehicle-to-vehicle distance switch.
- Example of deceleration cruising (when the vehicle ahead is driving slower than the set speed): When fixed speed cruising is set at 62 mph (100 km/h) and the vehicle ahead is driving at 50 mph (80 km/h)
  - When a vehicle is detected running ahead of you, in the same lane, the system automatically decelerates your vehicle. When a greater reduction in vehicle speed is necessary, the system applies the brakes. A warning tone warns you when the system cannot decelerate sufficiently to prevent your vehicle from closing on the vehicle ahead.
- Example of follow-up cruising (when following a vehicle driving slower than the set speed): When the speed is set to 62 mph (100 km/h) and the vehicle ahead is driving at 50 mph (80 km/h)
  - The system continues follow-up cruising while adjusting for changes in the speed of the vehicle ahead in order to maintain the vehicle-to-vehicle distance set by the driver.

Example of acceleration (when there are no longer vehicles driving slower than the set speed in the lane ahead): When the speed is set to 62 mph (100 km/h) and the vehicle ahead driving at 50 mph (80 km/h) is out of the lane

When the vehicle ahead of you executes a lane change, the system slowly accelerates until the set vehicle speed is reached. The system then returns to fixed speed cruising.

#### Fine adjustment of the set speed

Adjustment of the set speed by the following speed can be made by lightly pressing the lever up or down and releasing it.

In the constant speed control mode: Approximately 1.0 mph (1.6 km/h)

In the vehicle-to-vehicle distance control mode:

USA: Approximately 5 mph (8 km/h) Canada: Approximately 3 mph (5 km/h)

#### ■ Dynamic radar cruise control warning lights, messages and buzzers

Warning lights, messages and buzzers are used to indicate a system malfunction or to alert you to the need for caution while driving.  $(\rightarrow P. 449)$ 

## ■ Dynamic radar cruise control can be set when

- The shift lever is in D or the 4, 5 or 6 range of S.
- Vehicle speed is above approximately 30 mph (50 km/h).

## Accelerating

The vehicle can accelerate normally. After acceleration, 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 vehicle ahead.

## ■ Automatically canceling vehicle-to-vehicle distance control

Vehicle-to-vehicle distance control driving is automatically canceled in the following situations.

- Vehicle speed falls below 25 mph (40 km/h)
- VSC is activated
- The sensor cannot operate correctly because it is covered in some way.\*

- The windshield wipers are operating at high speed.\*
- \*: Vehicle-to-vehicle distance control driving must be reset by turning the ON-OFF button on again.

If vehicle-to-vehicle distance control driving is automatically canceled for any other reason, there may be a malfunction in the system. Contact your Lexus dealer.

#### ■ Automatically cancelling constant speed control

The set speed is automatically canceled in the following situations.

- Actual vehicle speed is more than approximately 10 mph (16 km/h) below the preset vehicle speed
  - At this time, the memorized set speed is not retained.
- Vehicle speed falls below approximately 25 mph (40 km/h)
- VSC is activated

#### ■ Vehicle-to-vehicle distance settings

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.

Distance options	Vehicle-to-vehicle distance
Long	Approximately 164 ft. (50 m)
Medium	Approximately 132 ft. (40 m)
Short	Approximately 100 ft. (30 m)

#### ■ Radar sensor and grille cover

Always keep the sensor and grille cover clean to ensure that the vehicle-to-vehicle distance control operates properly. (Some obstructions, such as snow, ice or plastic objects, cannot be detected by the obstruction sensor.)

Dynamic radar cruise control is canceled if an obstruction is detected.



- 1 Grille cover
- 2 Radar sensor

#### ■ Certification

► For vehicles sold in U.S.A.

#### FCC ID: HYQDNMWR005

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.

Radio frequency radiation exposure Information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

► For vehicles sold in Canada

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.

## **A** CAUTION

#### ■ Before using dynamic radar cruise control

Do not overly rely on vehicle-to-vehicle distance control.

Be aware of the set vehicle speed. If automatic deceleration/acceleration is not appropriate, adjust the vehicle speed, as well as the distance between your vehicle and vehicles ahead by applying the brakes, etc.

#### ■ To avoid inadvertent cruise control activation

Keep the "ON-OFF" button off when not in use.

#### ■ Situations unsuitable for dynamic radar cruise control

Do not use dynamic radar cruise control in any of the following situations.

Doing so may result in control of the vehicle being lost and could cause an accident resulting in death or serious injury.

- In heavy traffic
- On roads with sharp bends
- On winding roads
- On slippery roads, such as those covered with rain, ice or snow.
- On steep downhills, or where there are sudden changes between sharp up and down gradients
- At entrances to expressways
- When weather conditions are bad enough that they may prevent the sensors from functioning correctly (fog, snow, sandstorm, etc.)
- Where buzzer can be heard often
- When towing a trailer or emergency towing

## ■ When the radar sensor may not be correctly detecting the vehicle ahead

Apply the brakes as necessary when any of the following types of vehicles are in front of you.

As the sensor may not be able to correctly detect these types of vehicles, the proximity alarm  $(\rightarrow P. 449)$  will not be activated, and an accident may result.

- Vehicles that cut in suddenly
- Vehicles traveling at low speeds
- Vehicles that are not moving
- Vehicles with small rear ends (trailers with no load on board etc.)

## **A** CAUTION

- Motorcycles traveling in the same lane
- Conditions under which the vehicle-to-vehicle distance control may not function correctly

Apply the brakes as necessary in the following conditions as the radar sensor may not be able to correctly detect vehicles ahead, and an accident may result.

- When water or snow thrown up by the surrounding vehicles hinders the functioning of the sensor
- When your vehicle is pointing upwards (caused by a heavy load in the trunk, etc.)
- 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

#### ■ Handling the radar sensor

Observe the following to ensure the cruise control system can function effectively:

- Keep the sensor and front grille clean at all times.
   Clean the sensor and front grille with a soft cloth so you do not mark or damage them
- Do not subject the sensor or surrounding area to a strong impact. If the sensor moves even slightly off position, the system may malfunction. If the sensor or surrounding area is subject to a strong impact, always have the area inspected and adjusted by a Lexus dealer.
- Do not disassemble the sensor.
- Do not attach accessories or stickers to the sensor, grille or surrounding area.
- Do not modify or paint the sensor and grille.

## ■ To ensure the radar sensor functions correctly

Do not do the following to the sensor or grille cover as doing so may cause the sensor not to function correctly and could result in an accident.

- Stick or attach anything to them
- Leave them dirty
- Disassemble, subject them to strong shocks
- Modify or paint them
- Replace them with non-genuine parts

## 2-4. Using other driving systems Intuitive parking assist\*

The distance to obstacles measured by the sensors is communicated via the multi-information display and a buzzer when parallel parking or maneuvering into a garage. Always check the surrounding area when using this system.

For vehicles equipped with a navigation system, refer to the separate "Navigation System Owner's Manual" for further details.

## ■ Types of sensors



- Front corner sensors
- 2 Rear corner sensors
- **B** Back sensors

## ■ Multi-information display ( $\rightarrow$ P. 140)



- Front corner sensor operation
- 2 Rear corner sensor operation
- Back sensor operation

## ■ Intuitive parking assist switch



#### **ON/OFF**

When ON, an indicator on the switch comes on to inform the driver that the function is operational.

## The display and buzzer system

■ Corner sensor operation display and distance to an obstacle

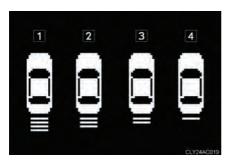
The system operates when the vehicle approaches within approximately 1.6 ft. (50 cm) of an obstacle.



- Approximately 1.6 ft. (50 cm) to 1.2 ft. (37.5 cm) from the obstacle
- Approximately 1.2 ft. (37.5 cm) to 0.8 ft. (25 cm) from the obstacle
- Flashing: Within 0.8 ft. (25 cm) of the obstacle

## ■ Back sensor operation display and distance to an obstacle

The system operates when the vehicle approaches within approximately 4.9 ft. (150 cm) of an obstacle.



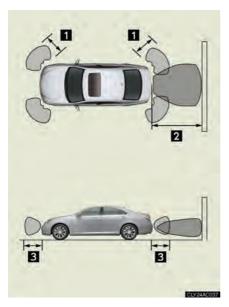
- Approximately 4.9 ft. (150 cm) to 2.0 ft. (60 cm) from the obstacle
- Approximately 2.0 ft. (60 cm) to 1.5 ft. (45 cm) from the obstacle
- Approximately 1.5 ft. (45 cm) to 1.2 ft. (35 cm) from the obstacle
- 4 Flashing: Within 1.2 ft. (35 cm) of the obstacle

## Buzzer operation and distance to the obstacle

A buzzer sounds when the corner sensors and back sensor are operating.

- The buzzer beeps faster as the vehicle approaches an obstacle. When the vehicle comes within the following distance of the obstacle, the buzzer sounds continuously.
  - Corner sensors: Approximately 0.8 ft. (25 cm)
  - Back sensors: Approximately 1.2 ft. (35 cm)
- When two or more obstacles are detected simultaneously, the buzzer system responds to the nearest obstacle.
- If multiple obstacles are detected within 0.8 ft. (25 cm) in front and behind the vehicle at the same time, the warning buzzer will change in the following manner:
  - If a continuous beep is sounding, and a new obstacle is detected near a different area of the vehicle, the warning buzzer will sound 6 beeps then one continuous beep.
  - If a continuous beep is sounding, and a new obstacle is detected within 0.8 ft. (25 cm) of a different area of the vehicle, the warning buzzer will sound 2 beeps then one continuous beep.

## Detection range of the sensors



- Approximately 1.6 ft. (50 cm)
- 2 Approximately 4.9 ft. (150 cm)
- 3 Approximately 1.6 ft. (50 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.

#### ■ Sensor detection information

- Certain vehicle conditions and the surrounding environment may affect the ability of the sensor to correctly detect obstacles. Particular instances where this may occur are listed below.
  - There is dirt, snow or ice on the sensor.
  - The sensor is frozen.
  - 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.
  - The vehicle is approaching a tall or curved curb.
  - · In harsh sunlight or intense cold weather

In addition to the examples above, there are instances in which, because of their shapes, signs and other objects may be judged by the sensor to be closer than they are.

- The shape of the obstacle may prevent the sensor from detecting it. Pay particular attention to the following obstacles.
  - Wires, fences, ropes etc.
  - · Cotton, snow and other materials that absorb radio waves
  - Sharply-angled objects
  - Low obstacles
  - Tall obstacles with upper sections projecting outwards in the direction of your vehicle

#### ■ When the display flashes and a message is displayed

 $\rightarrow$ P. 449

#### ■ Certification

► For vehicles sold in U.S.A.

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.

► For vehicles sold in Canada

This ISM device complies with Canadian ICES-001.

Cet appareil ISM est conforme a la norme NMB-001 du Canada.

#### ■ Customization that can be configured at Lexus dealer

Settings (e.g. buzzer volume) can be changed. (Customizable features  $\rightarrow$  P. 511)

## **A** CAUTION

#### ■ Caution when using the intuitive parking assist

Observe the following precautions.

Failing to do so may result in the vehicle being unable to be driven safely and possibly cause an accident.

- Do not use the sensor at speeds in excess of 6 mph (10 km/h).
- Do not attach any accessories within the sensor range.

## **↑** NOTICE

### ■ 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.

## **Driving assist systems**

To help enhance 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.

### ■ 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.

## ■ TRAC (Traction Control)

Maintains drive power and prevents the front wheels from spinning when starting the vehicle or accelerating on slippery roads.

## ■ PCS (Pre-Collision System) (if equipped)

 $\rightarrow$ P. 176

## When the VSC/TRAC systems are operating



If the vehicle is in danger of slipping, or if the front wheels spin, the slip indicator light flashes to indicate that the VSC/TRAC systems have been engaged.

## Disabling the TRAC/VSC systems

If the vehicle gets stuck in fresh snow or mud, the TRAC/VSC systems may reduce power from the engine to the wheels. You may need to turn the system off to enable you to rock the vehicle in order to free it.

## ■ Turning off the TRAC system only



To turn the TRAC system off, quickly press and release the button.

A message will be shown on the multi-information display.

Press the button again to turn the system back on.

## ■ Turning off both TRAC and VSC systems



To turn the TRAC and VSC systems off, press and hold the button for more than 3 seconds while the vehicle is stopped.

A message will be shown on the multi-information display and VSC off indicator light will come on.

Press the button again to turn the systems back on.

#### ■ Sounds and vibrations caused by the ABS, brake assist, VSC and TRAC systems

- A sound may be heard from the engine compartment 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 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.

#### ■ Reactivation of the TRAC /VSC systems after turning off the engine

Turning off the engine after turning off the TRAC/VSC systems will automatically reactivate them.

#### ■ Reactivation of the TRAC system linked to vehicle speed

When only the TRAC system is turned off, the TRAC system will turn on when vehicle speed increases. However, when both TRAC and VSC systems are turned off, the systems will not turn on even when vehicle speed increases.

#### ■ If the slip indicator comes on

It may indicate a malfunction in the VSC and TRAC function. Contact your Lexus dealer.

## **A** CAUTION

Any of the following conditions may result in an accident which could cause death or serious injury:

- The ABS does not operate effectively when
  - The limits of tire gripping performance have been exceeded.
  - The vehicle hydroplanes while driving at high speed on the wet or slick road.
- Stopping distance when the ABS is operating will 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 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 roads with uneven roads
- ■TRAC may not operate effectively when

Directional control and power may not be achievable while driving on slippery road surfaces, even if the TRAC system is operating.

Do not drive the vehicle in conditions where stability and power may be lost.

## **A** CAUTION

#### ■ When the slip indicator flashes

This situation occurs immediately while VSC is activated. Always drive carefully. Reckless driving may cause an accident. Exercise particular care when the indicator light flashes.

#### ■ When the TRAC/VSC systems are turned off

Be especially careful and drive at a speed appropriate to the road conditions. As these are the systems to help enhance vehicle stability and driving force, do not turn the TRAC/VSC systems off unless necessary.

## ■Replacing tires

Make sure that all tires are of the same size, brand, tread pattern and total load capacity. In addition, make sure that the tires are inflated to the recommended tire pressure level.

The ABS and VSC systems will not function correctly if different tires are fitted on the vehicle.

Contact your Lexus dealer for further information when replacing tires or wheels.

## PCS (Pre-Collision System)\*

When the radar sensor detects an unavoidable frontal collision, safety systems such as the brakes and seat belts are automatically engaged in an attempt to lessen damage.

#### ■ Pre-collision seat belts

If the pre-collision sensor detects that a collision is unavoidable, the pre-collision system will retract the seat belt before the collision occurs. The same will happen if the driver makes an emergency braking or loses control of the vehicle.  $(\rightarrow P. 59)$ 

However, when the TRAC/VSC systems are disabled, the system will not operate in the event of skidding.

#### Pre-collision brake assist

Applies greater braking force in relation to how strongly the brake pedal is depressed.

#### Radar sensor



Detects vehicles or other obstacles on or near the road ahead and determines whether a collision is imminent based on the position, speed, and heading of the obstacles.

- 1 Grille cover
- 2 Radar sensor

#### ■ Obstacles not detected

The sensor cannot detect plastic obstacles such as pylons. There may also be occasions when the sensor cannot detect pedestrians, animals, bicycles, motorcycles, trees, or snowdrifts.

#### ■ The pre-collision system is operational when

- Pre-collision seat belt (linked to the radar sensor)
  - Vehicle speed is above 3 mph (5 km/h).
  - The speed at which your vehicle is approaching the obstacle or oncoming vehicle exceeds 18 mph (30 km/h).
  - The front occupants are wearing a seat belt.
- Pre-collision seat belts (linked to brake operation)
  - Vehicle speed is above 9 mph (15 km/h).
  - The system detects sudden braking or skidding.
  - The front occupants are wearing a seat belt.
- Pre-collision brake assist
  - Vehicle speed is above 18 mph (30 km/h).
  - The speed at which your vehicle is approaching the obstacle or the vehicle is greater than about 18 mph (30 km/h).
  - The brake pedal is depressed.

#### Conditions that may trigger the system even if there is no danger of collision

- When there is an object by the roadside at the entrance to a curve
- When passing an oncoming vehicle on a curve
- When driving over a narrow iron bridge
- When there is a metal object on the road surface
- When there is a metal plate in the road in front of the vehicle on a downhill slope
- When there is a metal object such as a sign board in front of the vehicle on an uphill slope
- When driving on an uneven road surface
- When passing an oncoming vehicle on a left-turn
- When your vehicle rapidly closes on the vehicle in front
- When your vehicle is skidding with the VSC system off

When the system is activated in the situations described above there is also a possibility that the seat belts will retract quickly and the brakes will be applied with a force greater than normal. When the seat belt is locked in the retracted position, stop the vehicle in a safe place, release the seat belt and refasten.

## ■ When there is a malfunction in the system

Warning lights and/or warning messages will turn on or flash.  $(\rightarrow P. 439, 449)$ 

#### ■ Certification

► For vehicles sold in U.S.A.

#### FCC ID: HYQDNMWR005

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.

Radio frequency radiation exposure Information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

► For vehicles sold in Canada

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.

## **A** CAUTION

#### ■ Handling the radar sensor

Observe the following to ensure the pre-collision system can function effectively.

- Keep the sensor and front grille clean at all times.
   Clean the sensor and front grille with a soft cloth so you do not mark or damage them.
- Do not subject the sensor or surrounding area to a strong impact. If the sensor moves even slightly off position, the system may malfunction. If the sensor or surrounding area are subject to a strong impact, always have the area inspected and adjusted by a Lexus dealer.
- Do not disassemble the sensor.
- Do not attach accessories or stickers to the sensor, grille guard or surrounding area.
- Do not modify or paint the sensor and grille cover.

#### ■ Limitations of the pre-collision system

Do not rely on the pre-collision system. Always drive safely, taking care to observe your surroundings and checking for any obstacles or other road hazards.

## Cargo and luggage

Take notice of the following information about storage precautions, cargo capacity and load.

- Stow cargo and luggage in the trunk whenever possible. Be sure all items are secured in place.
- Be careful to keep the vehicle level. Placing the weight as far forward as possible helps maintain vehicle balance.
- For better fuel economy, do not carry unnecessary weight.

## Capacity and distribution

Cargo capacity depends on the total weight of the occupants.

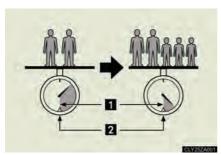
(Cargo capacity) = (Total load capacity) - (Total weight of occupants)

#### 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.  $(1400-750 (150 \times 5) = 650$  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. 190)

### Example on your vehicle



- Cargo capacity
- 2 Total load capacity

When 2 people with the combined weight of 366 lb. (166 kg) are riding in your vehicle, which has a total load capacity of 900 lb. (410 kg), the available amount of cargo and luggage load capacity will be as follows:

900 lb. 
$$-366$$
 lb.  $=534$  lb.  $(410 \text{ kg} -166 \text{ kg} = 244 \text{ kg})$ 

In this condition, if 3 more passengers with the combined weight of 388 lb. (176 kg) get on, the available cargo and luggage load will be reduced as follows:

As shown in the above example, if the number of occupants increases, the cargo and luggage load equaling the combined weight of the occupants who got on later, by an amount. 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.  $(\rightarrow P. 183)$ 

## **A** CAUTION

#### ■ Storage precautions

Observe the following precautions.

Failing to do so may result in death or serious injury.

- Do not place cargo or luggage in or on the following locations as the item may get under the brake or accelerator pedal and prevent the pedals from being depressed properly, block the driver's vision, or hit the driver or passengers, causing an accident.
  - · Driver's feet
  - Front passenger or rear seats (when stacking items)
  - Package tray
  - Instrument panel
  - Dashboard
- Secure all items in the occupant compartment, as they may shift and injure someone during sudden braking, sudden swerving or an accident.

#### ■ 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.

Vehicle load limits include total load capacity, seating capacity, towing capacity and cargo capacity.

■ Total load capacity: 900 lb. (410 kg)

Total load capacity means the combined weight of occupants, cargo and luggage.

■ Seating capacity: 5 occupants (Front 2, Rear 3)

Seating capacity means the maximum number of occupants whose estimated average weight is 150 lb. (68 kg) per person.

- Towing capacity: 1000 lb. (450 kg)
- 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.  $(\rightarrow P.396)$ 

## **A** CAUTION

## 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.

# 2-5. Driving information 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.

#### ■ Pre-winter preparations

- Use fluids that are appropriate to the prevailing outside temperatures.
  - · Engine oil
  - · Engine coolant
  - Washer fluid
- Have a service technician inspect the level and specific gravity of battery electrolyte.
- 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 inflation pressure falls in winter as the outside temperature falls. Add 2.9 to 4.3 psi (20 to 30 kPa, 0.2 to 0.3 kgf/cm<sup>2</sup> or bar) to the standard tire inflation pressure.

## ■ 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.
- Remove any ice that has accumulated on the vehicle chassis.
- Periodically check for and remove any excess ice or snow that may have accumulated in the wheel well or on the brakes.

## ■ When driving the vehicle

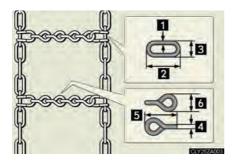
Accelerate the vehicle slowly and drive at a reduced speed suitable to road conditions.

## ■ 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 necessary, block the wheels to prevent inadvertent sliding or creeping.

### Selecting snow chains

Use the correct snow chain size when mounting the snow chains. Chain size is regulated for each tire sizes.



Side chain

- 1 0.12 in. [3 mm] in diameter
- 2 1.18 in. [30 mm] in length
- **3** 0.39 in. [10 mm] in width

#### Cross chain

- 4 0.16 in. [4 mm] in diameter
- **5** 0.98 in. [25 mm] in length
- 6 0.55 in. [14 mm] in width

## Regulations on the use of snow chains

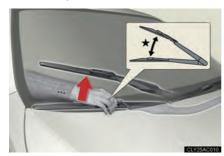
- Regulations regarding the use of tire chains vary according to location and type of road. Always check local regulations before installing chains.
- Install the chains on the front tires.
- Retighten the chains after driving 1/4 1/2 mile (0.5 1.0 km).

## Shifting the windshield wiper position

You can shift the wipers to the rest position manually. (In heavy snow or icy condition etc.)

Grip the hook section of the wiper arm firmly when shifting the wiper position.

## ▶ To rest position



Raise the wiper in line with the windshield.

You can stand the wipers up for the rest position.

\*: More than 3.9 in. (10 cm)

## ▶ To retract position



Lower the wipers by pressing on the upper part of the hook section.

#### ■ Snow chain installation

Observe the following precautions when installing and removing chains.

- Install and remove tire chains in a safe location.
- Install tire chains on the front tires only. Do not install tire chains on rear tires.
- Install the 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 in the accompanying instructions.

## **A** CAUTION

#### Driving with snow tires

Observe the following precautions to reduce the risk of accidents. Failing to do so may result in a loss of vehicle control and cause death or serious injury.

- Use tires of the size specified for your vehicle.
- 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 snow chains

Observe the following precautions to reduce the risk of accidents.

Failing 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 turns and braking, as use of chains may adversely affect vehicle handling.
- Slow down sufficiently before entering a curve to ensure that vehicle control is maintained.

## **⚠** NOTICE

#### ■ Repairing or replacing snow tires

Request repairs of and obtain replacement 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.

## ■ Fitting tire chains

The tire pressure warning valves and transmitters may not function correctly when tire chains are fitted.

## 2-5. Driving information

## **Trailer towing**

Your vehicle is designed primarily as a passenger-carrying vehicle, thus towing a trailer will have an adverse effect on handling, performance, braking, durability, and fuel consumption. For your safety and the safety of others, do not overload the vehicle or trailer.

Lexus warranties do not apply to damage or malfunction caused by towing a trailer for commercial purposes

## ■ Weight limits

Confirm the total trailer weight, gross vehicle weight, gross axle weight and trailer tongue load are all within the limits.

## ■ Gross vehicle weight

The gross vehicle weight must not exceed the Gross Vehicle Weight Rating (GVWR) indicated on the Certification Label. The gross vehicle weight is the sum weight of the unloaded vehicle, driver, passengers, luggage, hitch and trailer tongue load. Also included is the weight of any special equipment installed on your vehicle.

## ■ Gross axle weight

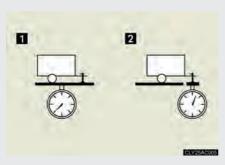
The load on either the front or rear axle resulting from distribution of the gross vehicle weight on both axles must not exceed the Gross Axle Weight Rating (GAWR) listed on the Certification Label.



Certification label

## ■ Trailer tongue load

The trailer cargo load should be distributed so that the tongue load is 9 to 11% of the total trailer weight, not exceeding the maximum 100 lb. (45 kg). (Tongue load / Total trailer weight x 100 = 9 to 11%) The total trailer weight and tongue load can be measured with platform scales found at a highway weighing stations, building supply company, trucking company, junk yards, etc.



- 1 Total trailer weight
- 2 Tongue load

## Towing a trailer

Consult your Lexus dealer for further information on additional requirements such as a towing kit, etc.

#### ■ Before towing

- Ensure that your vehicle's tires are properly inflated.  $(\rightarrow P.396)$
- Trailer tires should be inflated according to the trailer manufacturer's recommendation.
- All trailer lights work to be legal.
- Confirm all lights work each time you connect them.
- Check that your vehicle remains level when a loaded or unloaded trailer is hitched. Do not drive if the vehicle is not level, and check for improper tongue load, overloading, worn suspension, or other possible causes.
- Make sure the trailer cargo is securely loaded.
- Check that your rear view mirrors conform to any federal, state/provincial or local regulations. If they do not, install rear view mirrors appropriate for towing purposes.

#### ■ Break-in schedule

Lexus recommends that you do not use a new vehicle or a vehicle with any new power train components (engine, transmission, differential, wheel bearings, etc.) to tow a trailer for the first 500 miles (800 km) of driving.

#### ■ 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/ Scheduled Maintenance".)
- Retighten the fixing bolts of the towing ball and bracket after approximately 600 miles (1000 km) of trailer towing.

## **A** CAUTION

## ■ To avoid accident or injury

- The total trailer weight (trailer weight plus the weight of cargo) must not exceed 1000 lb. (450 kg).
- Do not exceed the trailer hitch assembly weight, gross vehicle weight, gross axle weight and trailer tongue load capacities.
- Never load more weight in the back than in the front of the trailer. About 60% of the load should be in the front half of the trailer, and the remaining 40% in the rear.

## **A** CAUTION

#### ■ Hitches

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 never exceed the maximum weight rating specified for the trailer hitch.

- If you wish to install a trailer hitch, your Lexus dealer should be consulted.
- Use only a hitch that conforms to the total trailer weight requirement.
- Follow the directions supplied by the hitch manufacturer.
- Lubricate the hitch ball with a light coat of grease.
- Remove the trailer hitch whenever you are not towing a trailer. After removing
  the hitch, seal any mounting holes in the vehicle body to prevent entry of any substances into the vehicle.

#### ■ When towing a trailer

- Never tap into your vehicle's hydraulic system, as this will lower the vehicle's braking effectiveness.
- 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.
- Do not use cruise control/dynamic radar cruise control.
   Doing so may result in inappropriate control of speed and could cause serious or fatal accident.

## **⚠** 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 use axle-mounted hitches, as they can cause damage to the axle housing, wheel bearings, wheels or tires.

#### ■ Brakes

Lexus recommends trailers with brakes that conform to any applicable federal and state/provincial regulations.

## **↑** NOTICE

#### ■ Safety chain

A safety chain must always be used between the towing vehicle and the trailer. Leave sufficient slack in the chain for turns. The chain should cross under the trailer tongue to prevent the tongue from dropping to the ground in the case that it becomes damaged or separated. For the correct safety chain installation procedure, ask your Lexus dealer.

#### ■ Do not directly splice trailer lights

Directly splicing may damage your vehicle's electrical system and cause a malfunction.

#### Trailer towing tips

Your vehicle will handle differently when towing a trailer. The three main causes of vehicle-trailer accidents are driver error, excessive speed and improper trailer loading. Keep these in mind when towing.

- Before starting out, check the trailer's lights 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
- 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 the 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 jackknifing and loss of 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 a 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 larger than normal turning radius.
- Crosswinds and rough roads will adversely affect handling of your vehicle and trailer, causing sway. Periodically check the rear to prepare for being passed by large trucks or buses, which may cause your vehicle and trailer to sway. If swaying occurs, firmly grip the steering wheel, reduce speed immediately but gradually, and steer straight ahead. Never increase speed. If you make no extreme correction with the steering or brakes, your vehicle and trailer will stabilize.
- 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.
- In order to maintain efficient engine braking and electrical charging performance, do not use overdrive. Transmission shift range position must be in 4, in the S mode.
- 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. See "If you vehicle overheats". (→P. 480)

- Always place wheel blocks under both the vehicle and the trailer wheels when parking. Apply the parking brake firmly, and put the transmission in P. Avoid parking on a slope, but if unavoidable, do so only after performing the following:
- STEP 1 Apply the brakes and keep them applied.
- STEP 2 Have someone place wheel blocks under both the vehicle and trailer wheels.
- When the wheel blocks are in place, release the brakes slowly until the blocks absorb the load.
- STEP 4 Apply the parking brake firmly.
- STEP 5 Shift into P and turn off the engine.
- When restarting after parking on a slope:
- With the transmission in the P position, start the engine. Be sure to keep the brake pedal pressed.
- STEP 2 Shift into 3, 2, 1, or the R position (if reversing).
- Release the parking brake and brake pedal, and slowly pull or back away from the wheel blocks.

  Stop and apply the brakes.
- STEP 4 Have someone retrieve the blocks.

## **A** CAUTION

#### ■ To avoid an accident

- Do not exceed 45 mph (72 km/h) or posted towing speed limit, whichever is lower. As instability (swaying) of the towing vehicle-trailer combination increases as speed increases, exceeding 45 mph (72 km/h) may cause loss of control.
- Slow down and downshift before descending steep or long downhill grades. Do not make sudden downshifts.
- Avoid holding the brake pedal down too long or too frequently. This could cause
  the brakes to overheat and result in reduced braking efficiency.

## **Dinghy towing**

Your vehicle is not designed to be dingly 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 four wheels on the ground.

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## 3-1. Using the air conditioning system and defogger

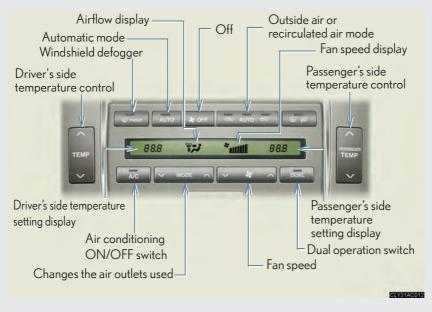
## Automatic air conditioning system

Airflow and outlets are automatically adjusted according to the temperature setting.

▶ With navigation system

Owners of models equipped with a navigation system should refer to the "Navigation System Owner's Manual".

➤ Without navigation system



#### Using the automatic mode



→ The air conditioning system will begin to operate. Air outlets and fan speed are automatically adjusted according to the temperature setting.

STEP 2 Press to switch to automatic mode.

Automatically switches between outside air and recirculated air modes.

STEP 3 Press " $\wedge$ " to increase the temperature and " $\vee$ " to decrease the temperature on the switch.

The temperature for the driver and passenger seats can be set separately.

#### Adjusting the settings

## Adjusting the temperature setting

Press " $\land$ " to increase the temperature and " $\lor$ " to decrease the temperature on the switch.

Press " $\wedge$ " (increase) or " $\vee$ " (decrease) on the

adjust the temperature for the passenger and driver sides (dual mode). Press to return the driver and passenger side temperatures to the same setting (simultaneous mode).

The air conditioning system switches between individual and simultaneous modes each time with is pressed.

## Adjusting the fan speed

Press " $\wedge$ " (increase) or " $\vee$ " (decrease) on  $\square$ 

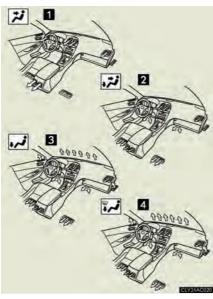
Press of to turn the fan off.

## ■ Changing the air outlets



Press " $\wedge$ " or " $\vee$ " on the switch.

The air outlets switch each time the switch is pressed.



- Air flows to the upper body.
- 2 Air flows to the upper body and feet.
- Air flows to the feet.
- 4 Air flows to the feet and the windshield defogger operates.

## ■ Switching between outside air and recirculated air modes

Press auto .

The mode switches between (recycles air inside the vehicle), AUTO and (introduces air from outside the vehicle) modes each time the switch is pressed.

When the system is switched to automatic mode, the air conditioning system operates automatically.

## Defogging the windshield



## Defogging

The air conditioning system operates automatically.

Recirculated air mode will automatically switch to outside air mode. It is not possible to return to recirculated air mode when the switch is on.

## Adjusting the sensitivity of the air intake control in automatic mode



Press for 2 or more seconds.



Press " $\wedge$ " (increase) or " $\vee$ " (decrease) on the switch.

From -3 (low) to 3 (high) can be set.

## Adjusting the position of and opening and closing the air outlets

► Center outlets



Direct air flow to the left or right, up or down

► Front outlets (right and left side)



- Direct air flow to the left or right, up or down
- Turn the knob right to open the vent and left to close the vent

► Rear outlets



- Direct air flow to the left or right, up or down
- 2 Turn the knob up to open the vent and down to close the vent

#### ■Using the automatic mode

Fan speed is adjusted automatically in accordance with the temperature setting and ambient conditions. As a result, the following may occur.

- Immediately after the switch is pressed, the fan may stop for a while until warm or cool air is ready to flow.
- Cool air may flow to the area around the upper body when the heater is on.

#### Using the system in recirculated air mode

The windows will fog up more easily if the recirculated air mode is used for an extended period.

#### ■ Switching between outside air and recirculated air modes

Recirculated air mode or outside air mode may be automatically switched to in accordance with the temperature setting and the inside temperature.

#### ■ Window defogger feature

Recirculated air mode may automatically switch to (outside air) mode in situations where the windows need to be defogged.

#### Outside air temperature approaches $32^{\circ}F(0^{\circ}C)$ .

The air conditioning system may not operate even when \_\_\_\_\_ is pressed.

## ■ When the indicator light on \_\_\_\_\_ flashes

Press and turn off the air conditioning system before turning it on once more. There may be a problem in the air conditioning system if the indicator light continues to flash. Turn the air conditioning system off and have it inspected by your Lexus dealer.

#### Automatic mode for air intake control

In automatic mode, the system detects exhaust gas and other pollutants and automatically switches between outside air and recirculated air modes.

## **A** CAUTION

#### ■ To prevent the windshield from fogging up

Do not use 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.



## ♠ NOTICE

### ■ To prevent battery discharge

Do not leave the automatic air conditioning system on longer than necessary when the engine is stopped.

These features are used to defog the rear window, and to remove raindrops, dew and frost from the outside rear view mirrors.

► Without navigation system



#### ON/OFF

The defoggers will automatically turn off after 15 to 60 minutes. The operation time changes according to the ambient temperature and vehicle speed.

▶ With navigation system



#### ON/OFF

The defoggers will automatically turn off after 15 to 60 minutes. The operation time changes according to the ambient temperature and vehicle speed.

#### **A** CAUTION

## ■ When the outside rear view mirror defoggers are on

Do not touch the outside surface of the rear view mirror, as it can become very hot and burn you.

## Audio system type

▶ With navigation system

Owners of models equipped with a navigation system should refer to the "Navigation System Owner's Manual".

Without navigation system (type A)CD player with changer and AM/FM radio



Without navigation system (type B)CD player with changer and AM/FM radio



Title	Page
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Playing back MP3 and WMA discs	P. 226
Operating an iPod <sup>®</sup> player	P. 233
Operating a USB memory player	P. 241
Optimal use of the audio system	P. 250
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Using the steering wheel audio switches	P. 253

#### ■Using mobile phones

Interference may be heard through the audio system's speakers if a mobile phone is being used inside or close to the vehicle while the audio system is operating.

#### **A** CAUTION

#### For vehicles sold in USA and Canada

Part 15 of the FCC Rules

#### FCC Warning:

Any unauthorized changes or modifications to this equipment will void the user's authority to operate this device.

- Laser products
  - Do not take this unit apart or attempt to make any changes yourself. This is an intricate unit that uses a laser pickup to retrieve information from the surface of compact discs. The laser is carefully shielded so that its rays remain inside the cabinet. Therefore, never try to disassemble the player or alter any of its parts since you may be exposed to laser rays and dangerous voltages.
  - This product utilizes a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

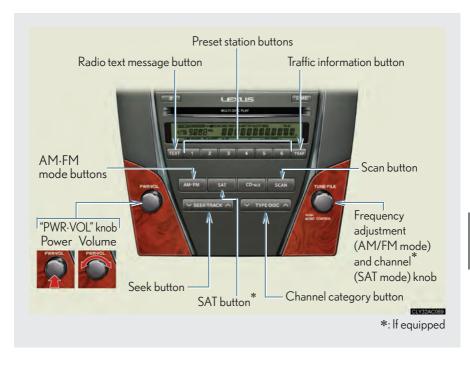


### ■ To prevent battery discharge

Do not leave the audio system on longer than necessary with the engine off.

## ■ To avoid damaging the audio system

Take care not to spill drinks or other fluids over the audio system.



## Setting station presets (excluding XM® Satellite Radio)

STEP 1 Search for desired stations by turning



or pressing "∧" or

"V" ON V SEEK-TRACK A

Press and hold the switch (from to be set to until you hear a beep.

## Scanning radio stations (excluding XM® Satellite Radio)

## ■ Scanning the preset radio stations

STEP 1 Press and hold scan until you hear a beep.

Preset stations will be played for 5 seconds each.

STEP 2 When the desired station is reached, press the switch once again.

## ■ Scanning all radio stations within range

STEP 1 Press SCAN.

All stations with reception will be played for 5 seconds each.

STEP 2 When the desired station is reached, press the switch once again.

## RDS (Radio Data System)

This feature allows your radio to receive station identification information and program information (classical, jazz, etc.) from radio stations which broadcast this information.

## ■ Receiving RDS broadcasts

STEP 1 Press "^" or "v" on very type-DISC A during FM reception.

The type of program changes each time the button is pressed.

- "ROCK"
- "EASY LIS" (Easy listening)
- "CLS/JAZZ" (Classical music and Jazz)
- "R & B" (Rhythm and Blues)
- "INFORM" (Information)
- "RELIGION"
- "MISC" (Miscellaneous)
- "ALERT" (Emergency messages)

If the system receives no RDS stations, "NO PTY" appears on the display.

STEP 2 Press scan , or " $\wedge$ " or " $\vee$ " on  $\vee$  seek-track  $\wedge$ .

The radio seeks or scans the station by the relevant program type.

## Displaying radio station names

Press TEXT.

## Displaying radio text messages

Press TEXT twice.

A text message is displayed when "MSG" is shown on the screen.

If the text continues past the end of the display, "

" is displayed. Press and hold TEXT until you hear a beep.

## XM® Satellite Radio (If equipped)

## ■ Receiving XM<sup>®</sup> Satellite Radio

STEP 1 Press SAT

The display changes as follows each time the button is pressed: "SAT1"  $\rightarrow$  "SAT2"  $\rightarrow$  "SAT3"





to select the desired channel in the all categories or

press "^" or "V" on SEEKTRACK \" to select the desired channel in the current category.

## ■ Setting XM<sup>®</sup> Satellite Radio channel presets

Select the desired channel. Press and hold the button (from to ) the channel is to be set to until you hear a beep.

■ Changing the channel category

Press "\" or "\" on \\_\_\_\_\_\_\_ TYPE-DISC \\_.

## ■ Scanning XM<sup>®</sup> Satellite Radio channels

Scanning the channels in the current category

STEP 1 Press SCAN

STEP 2 When the desired channel is reached, press the button again.

Scanning the preset channels

STEP 1 Press and hold scan until you hear a beep.

STEP 2 When the desired channel is reached, press the button again.

## ■ Displaying text information

Press TEXT.

The display will show up to 10 characters.

The display changes as follows each time the button is pressed.

- "CH NAME"
- "TITLE" (SONG/PROGRAM TITLE)
- "NAME" (ARTIST NAME/FEATURE)
- "CH NUMBER"

#### ■ When the battery is disconnected

All preset stations are erased.

#### ■ Reception sensitivity

- It is difficult to maintain perfect radio reception at all times due to the continually changing position of the antenna, differences in signal strength and surrounding objects, such as trains and transmitters.
- The radio antenna is mounted inside the rear window. To maintain clear radio reception, do not attach metallic window tinting or other metallic objects to the antenna wire mounted inside the rear window.

# ■ Receiving XM<sup>®</sup> Satellite Radio

An  $XM^{\circledR}$  Satellite Radio is a tuner designed exclusively to receive broadcasts provided under a separate subscription. Availability is limited to the 48 contiguous states and 10 Canadian provinces.

XM<sup>®</sup> subscriptions

For detailed information about  $XM^{\circledR}$  Satellite Radio or to subscribe:

U.S.A.—

Visit on the web at www.xmradio.com or call 1-877-515-3987.

Canada—

Visit on the web at <u>www.xmradio.ca</u> or call 1-877-515-3987.

Radio ID

You will need the radio ID when activating  $XM^{\circledR}$  service or reporting a problem. Select "CH000" using , and the receiver's 8-character ID number

will appear.

Satellite tuner

The tuner supports only Audio Services (Music and Talk) and the accompanying Text Information of  $XM^{\textcircled{R}}$  Satellite Radio.

#### ■ If the satellite radio does not operate normally

If a problem occurs with the  $XM^{\circledR}$  tuner, a message will appear on the display. Refer to the table below to identify the problem, and take the suggested corrective action.

"antenna"	The $XM^{\circledR}$ antenna is not connected. Check whether the $XM^{\circledR}$ antenna cable is attached securely.		
	There is a short-circuit in the antenna or the surrounding antenna cable. See a Lexus certified dealer.		
"UNAUTH"	You have not subscribed to the XM <sup>®</sup> Satellite Radio. The radio is being updated with the latest encryption code. Contact the XM <sup>®</sup> Satellite Radio for subscription information. When a contract is canceled, you can choose the "CHOOO" and all free-to-air channels.		
	The premium channel you selected is not authorized. Wait for about 2 seconds until the radio returns to the previous channel or "CH001". If it does not change automatically, select another channel. If you want to listen to the premium channel, contact the XM <sup>®</sup> Satellite Radio.		
"NO SIGNAL"	The XM <sup>®</sup> signal is too weak at the current location. Wait until your vehicle reaches a location with a stronger signal.		
"LOADING"	The unit is acquiring audio or program information.  Wait until the unit has received the information.		
"OFF AIR"	The channel you selected is not broadcasting any programming. Select another channel.		
""	There is no song/program title or artist name/feature associated with the channel at that time. No action needed.		

# "CH UNAVL"

The channel you selected is no longer available. Wait for about 2 seconds until the radio returns to the previous channel or "CH001". If it does not change automatically, select another channel.

Contact the XM<sup>®</sup> Listener Care Center at 1-877-515-3987.

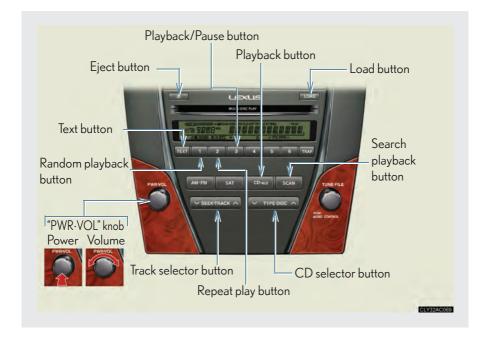
#### ■ Certifications for the radio tuner

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by trying one or more of the following:

- Reorienting or relocate the receiving antenna.
- Increasing the separation between the equipment and receiver.
- Connecting the equipment into an outlet on a circuit different from that to which
  the receiver is connected.
- Consulting the dealer or an experienced radio/TV technician for help.

# Using the CD player



#### Loading CDs

#### ■ Loading a CD

STEP 1 Press LOAD.

"WAIT" is shown on the display.

STEP 2 When the indicator on the slot turns from amber to green, insert a CD.

The display changes from "WAIT" to "LOAD".

### ■ Loading multiple CDs

STEP 1 Press and hold until you hear a beep.

"WAIT" is shown on the display.

STEP 2 When the indicator on the slot turns from amber to green, insert a CD.

The display changes from "WAIT" to "LOAD".

The indicator on the slot turns to amber when the  $\ensuremath{\mathsf{CD}}$  is being inserted.

When the indicator on the slot turns from amber to green, insert the next CD.

Repeat the procedure for the remaining CDs.

To cancel the operation, press LOAD. If you do not insert a disc within 15 seconds, loading will be canceled automatically.

# Ejecting CDs

#### ■ Ejecting a CD



To select the CD to be ejected, press " $\wedge$ " or " $\vee$ " on  $\boxed{\phantom{A}}$  TYPE-DISC  $\wedge$ .

The selected disc number is shown on the display.

STEP 2 Press and remove the CD.

#### ■ Ejecting all the CDs

Press and hold until you hear a beep, and then remove the CDs.

#### Selecting, fast-forwarding, rewinding, and scanning tracks

#### ■ Selecting a track

Press " $\wedge$ " to move up and " $\vee$ " to move down using  $\boxed{\phantom{a}}$  until the desired track number is displayed.

#### ■ Fast-forwarding and reversing tracks

To fast-forward or reverse, press and hold " $\wedge$ " or " $\vee$ " on vertical value of the variable o

# ■ Scanning tracks

STEP 1 Press SCAN.

To cancel, press SCAN again.

STEP 2 Press the button again when the desired track is reached.

#### Selecting a CD

#### ■ To select a CD to play

To select the desired CD, press "\" or "\" on \times type-disc \times

#### ■ Scanning loaded CDs

STEP 1 Press and hold scan until you hear a beep.

The first ten seconds of the first track on each CD will be played.

To cancel, press scan again.

STEP 2 Press the button again when the desired CD is reached.

#### Playing and pausing tracks

To play or pause a track, press ( ).

# Random playback

#### ■ Current CD

Press (RAND).

Songs are played in random order.

To cancel, press (RAND) again.

# ■ All CDs

Press and hold (RAND) until you hear a beep.

Tracks on all loaded CDs are played in random order.

To cancel, press (RAND) again.

#### Repeat play

#### ■ To repeat a track

Press (RPT).

To cancel, press (RPT) again.

#### ■ To repeat all of the tracks on a CD

Press and hold (RPT) until you hear a beep.

To cancel, press (RPT) again.

#### Switching the display

Press TEXT .

Each time the button is pressed, the display changes in the following order: Elapsed time  $\rightarrow$  CD title  $\rightarrow$  Track name

#### ■ CD player protection feature

To protect the internal components, playback is automatically stopped when a problem is detected.

#### ■ Display

Up to 12 characters can be displayed at a time.

If there are 13 or more characters, pressing and holding until you hear a beep enables to display the remaining characters.

A maximum of 24 characters can be displayed.

If **TEXT** is pressed for more than 1 second again or has not been operated for more than 6 seconds, the display will return to the first 12 characters.

Depending on the contents recorded, the characters may not be displayed properly or may not be displayed at all.

#### ■ When "ERROR" or "WAIT" is shown on the display

"ERROR": This indicates is a trouble either in the CD or inside the player. The CD may be dirty, damaged, or inserted up-side down.

"WAIT": Operation is stopped due to a high temperature inside the player. Wait for a while and then press CD-AUX. Contact your Lexus dealer if the CD still cannot be played back.

#### ■ Discs that can be used

Discs with the marks shown below can be used.

Playback may not be possible depending on recording format or disc features, or due to scratches, dirt or deterioration.









CDs with copy-protect features may not be used.

#### ■ Lens cleaners

Do not use lens cleaners. Doing so may damage the CD player.

If CDs are left inside the CD player or in the ejected position for extended periods

CDs may be damaged and may not play properly.



#### CDs and adapters that cannot be used

Do not use the following types of CDs, 3 in. (8 cm) CD adapters or Dual Disc. Doing so may damage the CD player and/or the CD insert/eject function.



CDs that have a diameter that is not 4.7 in.
 (12 cm)



Low-quality and deformed CDs



 CDs with a transparent or translucent recording area



 CDs that have had tape, stickers or CD-R labels attached to them, or that have had the label peeled off

# **↑** NOTICE

#### ■CD player precautions

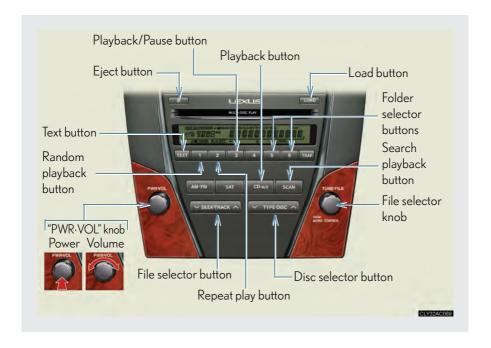
Failure to follow the precautions below may result in serious damage to the CDs or the player itself.

- Do not insert anything other than CDs into the CD slot.
- Do not apply oil to the CD player.
- Store CDs away from direct sunlight.
- Never try to disassemble any part of the CD player.



Do not insert more than one CD at a time.

# 3-2. Using the audio system Playing back MP3 and WMA discs



# Loading and ejecting MP3 and WMA discs

 $\rightarrow$  P. 218, 219

# Selecting MP3 and WMA discs

 $\rightarrow$ P. 221

#### Selecting a folder

- Selecting folders one at a time
  - Press  $(\land)$  or  $(\lor)$  to select the desired folder.
- Returning to the first folder

Press and hold  $(\lor)$  until you hear a beep.

■ Scanning the first file of all the folders

STEP 1 Press and hold scan until you hear a beep.

The first ten seconds of the first file in each folder will be played.

STEP 2 When the desired folder is reached, press scan again.

### Fast-forwarding and reversing files

To fast-forward or reverse, press and hold " $\wedge$ " or " $\vee$ " on until you hear a beep.

#### Selecting and scanning files

Selecting a file

Turn or press "^" or "\" on SEEK-TRACK or to select the desired file.

■ Scanning the files in a folder

Press SCAN .

The first ten seconds of each file will be played.

To cancel, press SCAN again.

When the desired file is reached, press scan again.

#### Playing and pausing files

To play or pause a file, press ( ).

#### Random playback

Playing files from a folder in random order

Press (RAND).

To cancel, press (RAND) again.

■ Playing all the files from a disc in random order

Press and hold (RAND) until you hear a beep.

To cancel, press (RAND) again.

### Repeat play

■ Repeating a file

Press (RPT).

To cancel, press (RPT) again.

■ Repeating all the files in a folder

Press and hold (RPT) until you hear a beep.

To cancel, press (RPT) again.

### Switching the display

Press TEXT .

Each time the button is pressed, the display changes in the following order: Folder no./File no./Elapsed time  $\rightarrow$  Folder name  $\rightarrow$  File name  $\rightarrow$  Album title (MP3 only)  $\rightarrow$  Track title  $\rightarrow$  Artist name

- ■CD player protection feature
  - $\rightarrow$ P. 222
- Display
  - $\rightarrow$ P. 222
- Canceling random, repeat and scan playback
  - Press (RAND), (RPT), or scan again.
- When "ERROR", "WAIT" or "NO MUSIC" is shown on the display.
  - "ERROR": This indicates is a trouble either in the CD or inside the player. The CD may be dirty, damaged, or inserted up-side down.
  - "WAIT": Operation is stopped due to a high temperature inside the player. Wait for a while and then press CD-AUX. Contact your Lexus dealer if the CD still cannot be played back.
  - "NO MUSIC": This indicates that the MP3/WMA file is not included in the CD.
- Discs that can be used
  - $\rightarrow$ P. 223
- Lens cleaners
  - $\rightarrow$ P. 223
- If discs are left inside the CD player or in the ejected position for extended periods of time
  - →P. 223

#### ■ MP3 and WMA files

MP3 (MPEG Audio LAYER 3) is a standard audio compression format.

Files can be compressed to approximately 1/10 of their original size by using MP3 compression.

WMA (Windows Media <sup>TM</sup>Audio) is a Microsoft audio compression format.

This format compresses audio data to a size smaller than that of the MP3 format.

There is a limit to the MP3 and WMA file standards and to the media/formats recorded by them that can be used.

- MP3 file compatibility
  - Compatible standards MP3 (MPEG1 LAYER3, MPEG2 LSF LAYER3)
  - Compatible sampling frequencies MPEG1 LAYER3: 32, 44.1, 48 (kHz) MPEG2 LSF LAYER3: 16, 22.05, 24 (kHz)
  - Compatible bit rates

MPEG1 LAYER3: 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 (kbps)

MPEG2 LSF LAYER3: 64, 80, 96, 112, 128, 144, 160 (kbps)

- \* Compatible with VBR
- Compatible channel modes: stereo, joint stereo, dual channel and monaural
- WMA file compatibility
  - Compatible standards WMA Ver. 7, 8, 9
  - Compatible sampling frequencies 32, 44.1, 48 (kHz)
  - Compatible bit rates

Ver. 7, 8: CBR 48, 64, 80, 96, 128, 160, 192 (kbps)

Ver. 9: CBR 48, 64, 80, 96, 128, 160, 192, 256, 320 (kbps)

\*Only compatible with 2-channel playback

#### Compatible media

Media that can be used for MP3 and WMA playback are CD-Rs and CD-RWs.

Playback in some instances may not be possible, depending on the status of the CD-R or CD-RW. Playback may not be possible or the audio may jump if the disc is scratched or marked with fingerprints.

#### Compatible disc formats

The following disc formats can be used.

- Disc formats: CD-ROM Mode 1 and Mode 2
   CD-ROM XA Mode 2, Form 1 and Form 2
- File formats: ISO9660 Level 1, Level 2, (Romeo, Joliet)
   MP3 and WMA files written in any format other than those listed above may not play correctly, and their file names and folder names may not be displayed correctly.

Items related to standards and limitations are as follows.

- Maximum directory hierarchy: 8 levels
- Maximum length of folder names/file names: 32 characters
- Maximum number of folders: 192 (including the root)
- Maximum number of files per disc: 255
- File names

The only files that can be recognized as MP3/WMA and played are those with the extension .mp3 or .wma.

Multi-sessions

As the audio system is compatible with multi-sessions, it is possible to play discs that contain MP3 and WMA files. However, only the first session can be played.

■ID3 and WMA tags

ID3 tags can be added to MP3 files, making it possible to record the track title and artist name, etc.

The system is compatible with ID3 Ver. 1.0, 1.1, and Ver. 2.2, 2.3 ID3 tags. (The number of characters is based on ID3 Ver. 1.0 and 1.1.)

WMA tags can be added to WMA files, making it possible to record the track title and artist name in the same way as with ID3 tags.

#### MP3 and WMA playback

When a disc containing MP3 or WMA files is inserted, all files on the disc are first checked. Once the file check is finished, the first MP3 or WMA file is played. To make the file check finish more quickly, we recommend you do not write in any files other than MP3 or WMA files or create any unnecessary folders.

Discs that contain a mixture of music data and MP3 or WMA format data cannot be played.

#### Extensions

If the file extensions .mp3 and .wma are used for files other than MP3 and WMA files, they will be mistakenly recognized and played as MP3 and WMA files. This may result in large amounts of interference and damage to the speakers.

#### Playback

- To play MP3 file with steady sound quality, we recommend a fixed bit rate of 128 kbps and a sampling frequency of 44.1 kHz.
- CD-R or CD-RW playback may not be possible in some instances, depending on the characteristics of the disc.
- There is a wide variety of freeware and other encoding software for MP3 and WMA files on the market, and depending on the status of the encoding and the file format, poor sound quality or noise at the start of playback may result. In some cases, playback may not be possible at all.
- When files other than MP3 or WMA files are recorded on a disc, it may take more time to recognize the disc and in some cases, playback may not be possible at all.
- Microsoft, Windows, and Windows Media are the registered trademarks of Microsoft Corporation in the USA and other countries.

# **↑** NOTICE

- ■CDs and adapters that cannot be used
  - $\rightarrow$ P. 224
- CD player precautions

 $\rightarrow$ P. 225

Connecting an  $\mathrm{iPod}^{\circledR}$  enables you to enjoy music from the vehicle speakers.

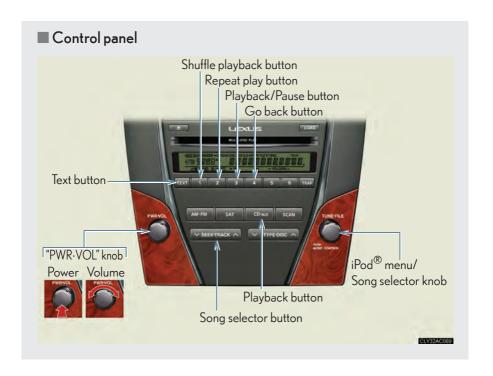
■ Connecting an iPod®



Connect an iPod® using an  $\mathsf{iPod}^{\mathbb{R}}\,\mathsf{cable}.$ 

STEP 2 Press CD-AUX





#### Selecting a play mode



to select iPod<sup>®</sup> menu mode.



STEP 2 Turning changes the play mode in the following order:

"PLAYLISTS"→"ARTISTS"→"ALBUMS"→"SONGS"→ "PODCASTS"→"GENRES"→"COMPOSERS"→ "AUDIOBOOKS"



STEP 3 Press to select the desired play mode.

### ■ Play mode list

Play mode	First selection	Second selection	Third selection	Fourth selection
"PLAYLISTS"	Playlists select	Songs select	-	-
"ARTISTS"	Artists select	Albums select	Songs select	-
"ALBUMS"	Albums select	Songs select	-	-
"SONGS"	Songs select	-	-	-
"PODCASTS"	Albums select	Songs select	-	-
"GENRES"	Genre select	Artists select	Albums select	Songs select
"COMPOSERS"	Composers select	Albums select	Songs select	-
"AUDIOBOOKS"	Songs select	-	-	-

# ■ Selecting a list





Pressing the knob changes to the second selection list.

STEP 3 Repeat the same procedure to select the desired song name. To return to the previous selection list, select "GO BACK" or press **4** ( **5** ).

#### Selecting songs



Turn or press "^" or "\" on SEEKTRACK \to select the desired



song.

# Playing and pausing songs

To play or pause a song, press ( ).

#### Fast-forwarding and rewinding songs

To fast-forward or rewind, press and hold "\" or "\" on \ seektrack > until you hear a beep.

### Shuffle playback

■ Playing songs from one playlist or album in random order Press (RAND).

To cancel, press (RAND) again.

■ Playing songs from all the playlists or albums in random order

Press and hold (RAND) until you hear a beep.

To cancel, press (RAND) again.

#### Repeat play

Press (RPT).

To cancel, press (RPT) again.

# Switching the display

Press TEXT.

Each time the button is pressed, the display changes in the following order: Elapsed time  $\rightarrow$  Album title  $\rightarrow$  Track title  $\rightarrow$  Artist name

# Adjusting sound quality and volume balance



to enter iPod<sup>®</sup> menu mode.



STEP 2 Pressing changes sound modes.  $(\rightarrow P. 250)$ 

#### ■ About iPod®

iPod is registered trademarks of Apple, Inc.

#### ■iPod<sup>®</sup> functions

- When an iPod<sup>®</sup> is connected and the audio source is changed to iPod<sup>®</sup> mode, the iPod<sup>®</sup> will resume play from the same point in which it was last used.
- Depending on the iPod<sup>®</sup> that is connected to the system, certain functions may not be available. Disconnecting the device and reconnecting it once again may resolve some malfunctions.

# ■iPod<sup>®</sup> problems

To resolve most problems encountered when using your iPod<sup>®</sup>, disconnect your iPod<sup>®</sup> from the vehicle iPod<sup>®</sup> connection and reset it. For instructions on how to reset your iPod<sup>®</sup>, refer to your iPod<sup>®</sup> Owner's Manual.

#### ■ Display

 $\rightarrow$ P.222

#### ■ Error messages

"ERROR": This indicates a problem in the iPod $^{\textcircled{R}}$  or its connection.

"NO MUSIC": This indicates that there is no music data in the iPod<sup>®</sup>.

"EMPTY": This indicates that some available songs are not found in a selected playlist.

"UPDATE": This indicates that the version of the iPod $^{\$}$  is not compatible. Upgrade your iPod $^{\$}$  software to the latest version.

#### ■ Compatible models

- ●iPod<sup>®</sup> 5th generation Ver. 1.2 or later
- •iPod<sup>®</sup> nano 3rd generation Ver. 1.0 or later
- •iPod<sup>®</sup> nano 2nd generation Ver. 1.1.2 or later
- ●iPod<sup>®</sup> nano Ver. 1.3 or later
- iPod<sup>®</sup> touch Ver. 1.1 or later
- iPod<sup>®</sup> classic Ver. 1.0 or later

iPhone $^{\mathbb{R}}$ , iPod $^{\mathbb{R}}$  mini, iPod $^{\mathbb{R}}$  shuffle, iPod $^{\mathbb{R}}$  photo and 4th generation and earlier models of iPod $^{\mathbb{R}}$  are not compatible with this system.

Items related to standards and limitations are as follows:

- Maximum number of lists in device: 9999
- ullet Maximum number of songs in device: 65535
- Maximum number of songs per list: 65535

# **A** CAUTION

#### ■ Caution while driving

Do not connect iPod<sup>®</sup> or operate the controls.

# **№** NOTICE

# ■ To prevent damage to iPod®

- ullet Do not leave iPod $^{\hbox{\scriptsize @}}$  in the vehicle. The temperature inside the vehicle may become high, resulting in damage to the player.
- Do not push down on or apply unnecessary pressure to the iPod<sup>®</sup> while it is connected as this may damage the iPod<sup>®</sup> or its terminal.
- Do not insert foreign objects into the port as this may damage the iPod<sup>®</sup> or its terminal.

# Operating a USB memory\*

Connecting a USB memory enables you to enjoy music from the vehicle speakers.

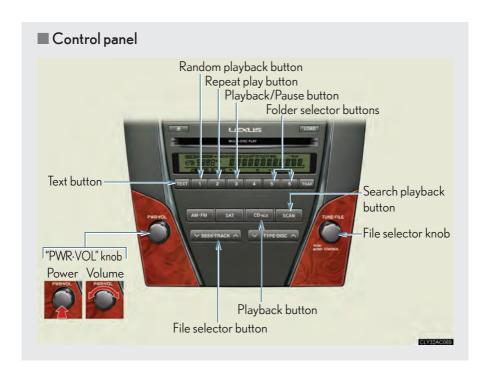
■ Connecting a USB memory



Connect a USB memory.







#### Selecting and scanning a folder

■ Selecting folders one at a time

Press  $(\lor)$  or  $(\land)$  to select the desired folder.

■ Returning to the first folder

Press and hold  $(\lor)$  until you hear a beep.

■ Scanning the first file of all the folders

STEP 1 Press and hold scan until you hear a beep.

The first ten seconds of the first file in each folder will be played.

STEP 2 When the desired folder is reached, press scan again.

### Selecting and scanning files

■ Selecting a file

Turn or press "^" or "V" on SEEKTRACK > to select the desired file.

■ Scanning the files in a folder

Press SCAN

The first ten seconds of each file will be played.

To cancel, press SCAN again.

When the desired file is reached, press scan again.

#### Playing and pausing files

To play or pause a file, press ( ).

#### Fast-forwarding and rewinding files

To fast-forward or rewind, press and hold " $\wedge$ " or " $\vee$ " on vertical volume of the vertical volume of vertical vertical volume of vertical vertic

#### Random playback

■ Playing files from a folder in random order

Press (RAND).

To cancel, press (RAND) again.

■ Playing all the files from a USB memory in random order

Press and hold (RAND) until you hear a beep.

To cancel, press (RAND) again.

#### Repeat play

■ Repeating a file

Press (RPT).

To cancel, press (RPT) again.

■ Repeating all the files in a folder

Press and hold (RPT) until you hear a beep.

To cancel, press (RPT) again.

#### Switching the display

Press TEXT.

Each time the button is pressed, the display changes in the following order: Elapsed time  $\rightarrow$  Folder name  $\rightarrow$  File name  $\rightarrow$  Album title (MP3 only)  $\rightarrow$  Track title  $\rightarrow$  Artist name

#### ■USB memory functions

Depending on the USB memory that is connected to the system, certain functions may not be available. Disconnecting the device and reconnecting it once again may resolve some malfunctions.

#### ■ Display

 $\rightarrow$ P. 222

#### ■ Error messages

"ERROR": This indicates a problem in the USB memory or its connection.

"NO MUSIC": This indicates that no MP3/WMA files are included in the USB memory.

#### **■USB** memory

- Compatible devices
  - USB memory that can be used for MP3 and WMA playback
- Compatible device formats

The following device formats can be used:

- USB communication formats: USB2.0 FS (12mbps)
- File formats: FAT16/32 (Windows)
- Correspondence class: Mass storage class

MP3 and WMA files written in any format other than those listed above may not play correctly, and their file names and folder names may not be displayed correctly.

Items related to standards and limitations are as follows:

- Maximum directory hierarchy: 8 levels
- Maximum number of folders in a device: 999 (including the root)
- Maximum number of files in a device: 65025
- Maximum number of files per folder: 255
- MP3 and WMA files

MP3 (MPEG Audio LAYER 3) is a standard audio compression format.

Files can be compressed to approximately 1/10 of their original size using MP3 compression.

WMA (Windows Media<sup>TM</sup> Audio) is a Microsoft audio compression format.

This format compresses audio data to a size smaller than that of the MP3 format.

There is a limit to the MP3 and WMA file standards that can be used and to the media/formats on which the files are recorded.

#### MP3 file compatibility

- Compatible standards MP3 (MPEG1 AUDIO LAYERII, III, MPEG2 AUDIO LAYERII, III, MPEG2.5)
- Compatible sampling frequencies MPEG1 AUDIO LAYERII, III: 32, 44.1, 48 (kHz) MPEG2 AUDIO LAYERII, III: 16, 22.05, 24 (kHz) MPEG2.5: 8, 11.025, 12 (kHz)
- Compatible bit rates (compatible with VBR) MPEG1 AUDIO LAYERII, III: 32-320 (kbps) MPEG2 AUDIO LAYERII, III: 32-160 (kbps) MPEG2.5: 32-160 (kbps)
- Compatible channel modes: stereo, joint stereo, dual channel and monaural
- WMA file compatibility
  - Compatible standards WMA Ver. 9
  - Compatible sampling frequencies HIGH PROFILE 32, 44.1, 48 (kHz)
  - Compatible bit rates HIGH PROFILE 32-320 (kbps, VBR)
- File names

The only files that can be recognized as MP3/WMA and played are those with the extension .mp3 or .wma.

ID3 and WMA tags

ID3 tags can be added to MP3 files, making it possible to record the track title, artist name, etc.

The system is compatible with ID3 Ver. 1.0, 1.1, and Ver. 2.2, 2.3, 2.4 ID3 tags. (The number of characters is based on ID3 Ver. 1.0 and 1.1.)

WMA tags can be added to WMA files, making it possible to record the track title and artist name in the same way as with ID3 tags.

#### MP3 and WMA playback

- When a USB memory containing MP3 or WMA files is connected, all files in the USB memory are checked. Once the file check is finished, the first MP3 or WMA file is played. To make the file check finish more quickly, we recommend that you do not include any files other than MP3 or WMA files or create any unnecessary folders.
- When the USB memory is connected and the audio source is changed to USB memory mode, the USB memory will start playing the first file in the first folder. If the same USB memory is removed and reinserted (and the contents have not been changed), the USB memory will resume play from the same point in which it was last used.

#### Extensions

If the file extensions .mp3 and .wma are used for files other than MP3 and WMA files, they will be skipped (not played).

#### Playback

- To play MP3 files with steady sound quality, we recommend a fixed bit rate of at least 128 kbps and a sampling frequency of 44.1 kHz.
- There is a wide variety of freeware and other encoding software for MP3 and WMA files on the market, and depending on the status of the encoding and the file format, poor sound quality or noise at the start of playback may result. In some cases, playback may not be possible at all.
- Microsoft, Windows, and Windows Media are registered trademarks of Microsoft Corporation in the U.S.A. and other countries.

# **A** CAUTION

#### ■ Caution while driving

Do not connect USB memory or operate the controls.

# **↑** NOTICE

#### ■ To prevent damage to USB memory

- Do not leave USB memory in the vehicle. The temperature inside the vehicle may become high, resulting in damage to the player.
- Do not push down on or apply unnecessary pressure to the USB memory while it is connected as this may damage the USB memory or its terminal.
- Do not insert foreign objects into the port as this may damage the USB memory or its terminal.

#### 3-2. Using the audio system

# Optimal use of the audio system





- Displays the current mode.
- Changes the following setting.
- Sound quality and volume balance
  - $\rightarrow$ P. 251

The sound quality and balance setting can be changed to produce the best sound.

- Automatic Sound Levelizer ON/OFF
  - $\rightarrow$ P. 251

# Adjusting sound quality and volume balance

■ Changing sound quality modes

Press



Pressing the button changes sound modes in the following order:

"BAS"→"MID"→"TRE"→"FAD"→"BAL"→"ASL"

## Adjusting sound quality

Turning



adjusts the level.

Mode displayed	Sound qual- ity mode	Level	Turn to the left	Turn to the right
"BAS"	Bass*	-5 to 5		
"MID"	Mid-range*	-5 to 5	Low	High
"TRE"	Treble*	-5 to 5		
"FAD"	Front/rear volume balance	F7 to R7	Shifts to rear	Shifts to front
"BAL"	Left/right volume balance	L7 to R7	Shifts to left	Shifts to right

<sup>\*:</sup> The sound quality level is adjusted individually in each audio mode.

## Turning the Automatic Sound Levelizer (ASL) on/off

Turning



clockwise turns on the ASL, and turning



counter-

clockwise turns off the ASL.

ASL automatically adjusts the volume and tone quality according to the noise level as you drive your vehicle.

## Using the AUX adapter

This adapter can be used to connect a portable audio device and listen to it through the vehicle's speakers.



Connect the portable audio device.





#### Operating portable audio devices connected to the audio system

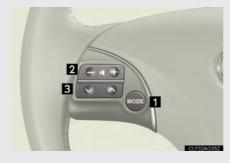
The volume can be adjusted using the vehicle's audio controls. All other adjustments must be made on the portable audio device itself.

■ When using a portable audio device connected to the power outlet

Noise may occur during playback. Use the power source of the portable audio device.

## Using the steering wheel audio switches

Some audio features can be controlled using the switches on the steering wheel.



- 1 Turns the power on, selects an audio source
- 2 Increases/decreases volume
- Radio mode: Selects a radio station

CD mode: Selects a track, file (MP3 and WMA) and disc

Bluetooth<sup>®</sup> audio mode:

Selects a track and
album

 $iPod^{\mathbb{R}}$  mode (if equipped):

Selects a song

USB memory mode (if equipped):

Selects a file and folder

## Turning on the power



The audio system can be turned off by holding the button down for 1 second or more.

## Changing the audio source

Press when the audio system is turned ON. The audio source changes as follows each time the switch is pressed. If no discs are inserted in the player, that mode will be skipped.

FM1
$$\rightarrow$$
FM2 $\rightarrow$ SAT1\* $\rightarrow$ SAT2\* $\rightarrow$ SAT3\* $\rightarrow$ CD player $\rightarrow$ Bluetooth<sup>®</sup> audio $\rightarrow$ AUX $\rightarrow$ iPod<sup>®</sup>\* or USB memory\* $\rightarrow$ AM $\rightarrow$ FM1

\*: If equipped

## Adjusting the volume

Press "+" on \_\_\_\_\_ to increase the volume and "-" to decrease the volume.

Hold down the switch to continue increasing or decreasing the volume.

## Selecting a radio station

- STEP 1 Press to select the radio mode.
- Press "\" or "\" on to select a radio station.

  To scan for receivable stations, press and hold "\" or "\" on the switch until you hear a beep.

## Selecting a track/file

or USB memory (if equipped) mode.

STEP 2 Press " $\wedge$ " or " $\vee$ " on was to select the desired track/file or song.

## Selecting an album

STEP 1 Press to select Bluetooth® audio mode.

STEP 2 Press and hold " $\wedge$ " or " $\vee$ " on until you hear a beep.

## Selecting a folder (if equipped)

STEP 1 Press to select USB memory mode.

STEP 2 Press and hold "\" or "\" on until you hear a beep.

## Selecting a disc in the CD player

STEP 1 Press to select the CD mode.

STEP 2 Press and hold " $\wedge$ " or " $\vee$ " on switch until you hear a beep.

■ Canceling automatic selection of a radio station

Press again.

## **A** CAUTION

■ To reduce the risk of an accident

Exercise care when operating the audio switches on the steering wheel.

# 3-3. Using the Bluetooth<sup>®</sup> audio system Bluetooth<sup>®</sup> audio system

The Bluetooth<sup>®</sup> audio system enables you to enjoy music played on a portable digital audio player (portable player) from the vehicle speakers via wireless communication.

This audio system supports Bluetooth $^{\mathbb{R}}$ , a wireless data system capable of playing portable audio music without cables. If your portable player does not support Bluetooth $^{\mathbb{R}}$ , the Bluetooth $^{\mathbb{R}}$  audio system will not function.

► Vehicles with a navigation system

Owners of models equipped with a navigation system should refer to the "Navigation System Owner's Manual".

► Vehicles without a navigation system

Title	Page
Using the Bluetooth <sup>®</sup> audio system	P. 259
Operating a Bluetooth <sup>®</sup> enabled portable player	P. 264
Setting up a Bluetooth <sup>®</sup> enabled portable player	P. 267
Bluetooth <sup>®</sup> audio system setup	P. 274

## ■ Conditions under which the system will not operate

- If using a portable player that does not support Bluetooth®
- If the portable player is switched off
- If the portable player is not connected
- If the portable player's battery is low
- If the portable player is behind the seat or in the glove box or console box
- If metal is covering or touching the portable player

## ■ When transferring ownership of the vehicle

Be sure to initialize the system to prevent personal data from being improperly accessed.  $(\rightarrow P. 300)$ 

■ About Bluetooth®



Bluetooth is a registered trademark of Bluetooth SIG. Inc.

## ■ Compatible models

- Bluetooth<sup>®</sup> specifications:
   Ver. 1.1, or higher (Recommended: Ver. 1.2 or higher)
- Following Profiles:
  - A2DP (Advanced Audio Distribution Profile) Ver. 1.0, or higher (Conformed: Ver. 1.2)
  - AVRCP (Audio/Video Remote Control Profile) Ver. 1.0 or higher (Conformed: Ver. 1.3)

Portable players must correspond to the above specifications in order to be connected to the Bluetooth  $^{\circledR}$  audio system. However, please note that some functions may be limited depending on the type of portable player.

## ■ Certification for the Bluetooth® audio system

FCC ID: AJDK018 IC ID: 775E-K018 MADE IN JAPAN

This device complies with Part 15 of the FCC Rules and RSS-Gen and RSS-210 of IC 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.

## **A** CAUTION

#### ■FCC WARNING

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

Radio Frequency Radiation Exposure. This equipment complies with FCC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated with at least 7.9 in. (20 cm) and more between the radiator and person's body (excluding extremities: hands, wrists, feet and ankles).

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

## ■ Caution while driving

Do not connect portable players or operate the controls.



#### ♠ NOTICE

## ■ To prevent damage to portable players

Do not leave portable players in the vehicle. The temperature inside the vehicle may become high, resulting in damage to the player.

## Audio unit



1 Display

A message, name, number, etc. is displayed.

Lower-case characters and special characters cannot be displayed.

- Displays information that is too long to be displayed at one time on the display (press and hold)
- Selects items such as menu and number Turn: Selects an item Press: Inputs the selected item
- Bluetooth<sup>®</sup> connection condition

If "BT" is not displayed, the Bluetooth<sup>®</sup> audio system cannot be used.

## Operating the system using voice commands

By following voice guidance instructions output from the speaker, voice commands enable to the operation of the Bluetooth  $^{\circledR}$  audio system with-

out the need to check the display or operate



Operation procedure when using voice commands
Press the talk switch and follow voice guidance instructions.

## Auxiliary commands when using voice commands

The following auxiliary commands can be used when operating the system using a voice command:

"Cancel": Exits the Bluetooth® audio system

"Repeat": Repeats the previous voice guidance instruction

"Go back": Returns to the previous procedure

"Help": Reads aloud the function summary if a help comment is registered for the selected function

## Using the Bluetooth® audio system for the first time

Before using the Bluetooth® audio system, it is necessary to register a Bluetooth<sup>®</sup> enabled portable player in the system. Follow the procedure below to register (pair) a portable player:



STEP 1 Press and select "BT•A MENU" using .



STEP 2 Press the talk switch or select "BT•A Setup" using



The introductory guidance and portable player name registration instructions are heard.

STEP 3 Select "Pair Audio Player (Pair Audio)" using a voice command



- STEP 4 Register a portable player name by either of the following methods:
  - a. Select "Record Name" using , and say the name to be registered.
  - b. Press the talk switch and say the name to be registered.

A voice guidance instruction to confirm the input is heard.

STEP 5 Select "Confirm" using a voice command or



A passkey is displayed and heard, and a voice guidance instruction for inputting the passkey into the portable player is heard.

STEP 6 Input the passkey into the portable player.

Refer to the manual that comes with the portable player for the operation of the portable player.

Guidance for registration completion is heard.

If the portable player has a Bluetooth  $^{\circledR}$  phone, the phone can be registered at the same time. A voice guidance instruction to register a Bluetooth  $^{\circledR}$  phone is heard.

STEP 7 Select "Yes" or "No" using a voice command or



(Bluetooth<sup>®</sup> phone  $\rightarrow$  P. 277)

## Menu list of the Bluetooth® audio system

## ■ Normal operation

First menu	Second menu	Third menu	Operation detail
"Setup"	"BT·A Setup"	"Pair Audio"	Registering a portable player
		"Connect"	Selecting a portable player to be used
		"Change Name"	Changing the registered name of a portable player
		"List Audios"	Listing the registered portable players
		"Set Passkey"	Changing the passkey
		"Delete Audio"	Deleting a registered portable player
	"System Setup"	"Guidance Vol"	Setting voice guidance volume
		"Device Name"	Displaying the Bluetooth <sup>®</sup> device address and name
		"Initialize"	Initializing the system

## ■ When using a voice command

For numbers, say a combination of single digits from zero to nine.

Say the command correctly and clearly.

#### ■ Situations that the system may not recognize your voice

- When driving on rough roads
- When driving at high speeds
- When air is blowing out of the vents onto the microphone
- When the air conditioning fan emits a loud noise

#### Operations that cannot be performed while driving

Operating the system with

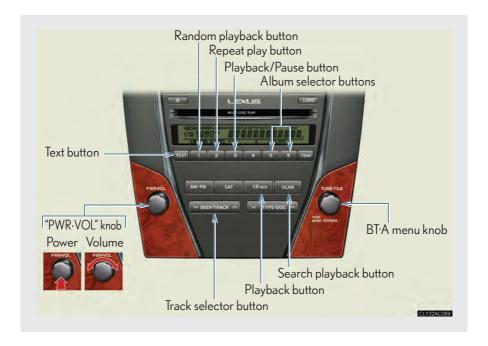


- Registering a portable player to the system
- Changing the passkey

 $\rightarrow$ P. 272

## 3-3. Using the Bluetooth® audio system

## Operating a Bluetooth® enabled portable player



## Selecting an album

To select the desired album, press  $(\lor)$  or  $(\land)$ .

## Selecting tracks

Press " $\wedge$ " or " $\vee$ " on  $\boxed{\phantom{a}}$  select the desired track.

## Playing and pausing tracks

To play or pause a track, press ( ).

## Fast-forwarding and rewinding tracks

To fast-forward or rewind, press and hold "\" or "\" on \" SEEKTRACK \" until you hear a beep.



## Random playback

Press (RAND).

To cancel, press (RAND) again.

## Repeat play

Press (RPT).

To cancel, press (RPT) again.

## Scanning tracks

Press SCAN

To cancel, press | SCAN again.

## Switching the display

Press TEXT.

Each time the button is pressed, the display changes in the following order: Elapsed time  $\rightarrow$  Album title  $\rightarrow$  Track title  $\rightarrow$  Artist name

## Using the steering wheel audio switches

 $\rightarrow$ P. 253

## $\blacksquare$ Bluetooth $^{\circledR}$ audio system functions

Depending on the portable player that is connected to the system, certain functions may not be available.

#### ■ Display

→P. 222

## ■ Error message

"Memory Error": This indicates a problem in the system.

3

## Setting up a Bluetooth® enabled portable player

Registering a portable player in the Bluetooth® audio system allows the system to function. The following functions can be used for registered portable players:

- Functions and operation procedures
- ► Pattern A

To enter the menu for each function, follow the steps below using a

voice command or :



- Registering a portable player
  - 1. "Setup"  $\rightarrow$  2. "Bluetooth Audio Setup (BT•A Setup)"  $\rightarrow$
  - 3. "Pair Audio Player (Pair Audio)"
- Selecting a portable player to be used
  - 1. "Setup"  $\rightarrow$  2. "Bluetooth Audio Setup (BT•A Setup)"  $\rightarrow$
  - 3. "Connect Audio Player (Connect)"
- Changing the registered name of a portable player
  - 1. "Setup"  $\rightarrow$  2. "Bluetooth Audio Setup (BT•A Setup)"  $\rightarrow$
  - 3. "Change Name"
- Listing the registered portable players
  - 1. "Setup"  $\rightarrow$  2. "Bluetooth Audio Setup (BT•A Setup)"  $\rightarrow$
  - 3. "List Audio Players (List Audios)"
- Changing the passkey
  - 1. "Setup"  $\rightarrow$  2. "Bluetooth Audio Setup (BT•A Setup)"  $\rightarrow$
  - 3. "Set Passkey"
- Deleting a registered portable player
  - 1. "Setup"  $\rightarrow$  2. "Bluetooth Audio Setup (BT•A Setup)"  $\rightarrow$
  - 3. "Delete Audio Player (Delete Audio)"

## ► Pattern B



to select "BT•A MENU".

STEP 2 Press the talk switch or select "BT•A Setup" using



STEP 3 Select one of the following functions using a voice command

- Registering a portable player "Pair Audio Player (Pair Audio)"
- Selecting a portable player to be used "Connect Audio Player (Connect)"
- Changing the registered name "Change Name"
- Listing the registered portable players "List Audio Players (List Audios)"
- Changing the passkey "Set Passkev"
- Deleting a registered portable player "Delete Audio Player (Delete Audio)"

## Registering a portable player

Select "Pair Audio Player (Pair Audio)" using a voice command or and perform the procedure for registering a portable player. ( $\rightarrow$ P. 261)



## Selecting a portable player to be used

STEP 1 Select "Connect Audio Player (Connect)" using a voice command or .

#### Pattern A

STEP 2 Select the portable player to be used by either of the following methods, and select "Confirm" by using a voice command or



- a. Press the talk switch and say the name of the desired portable player.
- b. Press the talk switch and say "List Audio Players". When the name of the desired portable player is read aloud, press the talk switch.

## Pattern B

STEP 2 Select the portable player to be used using



#### ▶ Pattern A

STEP 3 Press the talk switch and say "From Car" or "From Audio player", and select "Confirm" by using a voice command or



STEP 3 Select "From Car" or "From Audio", using



If "From Car" is selected, the portable player will be automatically connected whenever the "ENGINE START STOP" switch is in either ACCESSORY or IGNITION ON mode.

## Changing the registered name of a portable player

STEP 1 Select "Change Name" using a voice command or



#### Pattern A

STEP 2 Select the name of the portable player to be changed by either of the following methods, and select "Confirm" using a voice com-

mand or

- a. Press the talk switch and say the name of desired portable
- player. b. Press the talk switch and say "List Audio Players". When the
- name of the desired portable player is read aloud, press the talk switch

#### ► Pattern B

STEP 2 Select the desired portable player name to be changed using



STEP 3 Press the talk switch or select "Record Name" using say the new name.



STEP 4 Select "Confirm" using a voice command or



## Listing the registered portable players

Select "List Audio Players (List Audios)" using a voice command or



. The list of registered portable players will be read aloud.

When listing is complete, the system returns to "BT•A Setup".

Pressing the talk switch while the name of a portable player is being read aloud selects the portable player, and the following functions will become available:

- Selecting a portable player: "Connect Audio Player (Connect)"
- Changing a registered name: "Change Name"
- Deleting a portable player: "Delete Audio Player (Delete Audio)"

## Changing the passkey

STEP 1 Select "Set Passkey" using a voice command or



► Pattern A

Press the talk switch, say a 4 to 8-digit number, and select "Confirm" using a voice command or .

► Pattern B

STEP 2 Select a 4 to 8-digit number using



The number should be input 1 digit at a time.

STEP 3 When the entire number to be registered as a passkey has been

input, press



again

If the number to be registered has 8 digits, pressing of the knob is not necessary.

## Deleting a registered portable player

STEP 1 Select "Delete Audio Player (Delete Audio)" using a voice com-

mand or



#### Pattern A

STEP 2 Select the portable player to be deleted by either of the following

methods and select "Confirm" using a voice command or



- a. Press the talk switch and say the name of the desired portable player.
- b. Press the talk switch and say "List Audio Players". When the name of the desired portable player is read aloud, press the talk switch.

#### ► Pattern B

STEP 2 Select the desired portable player to be deleted using



If the portable player to be deleted is paired as a Bluetooth<sup>®</sup> phone, the registration of the mobile phone can be deleted at the same time. A voice guidance instruction to delete a mobile phone is heard.

STEP 3 Select "Yes" or "No" using a voice command or



(Bluetooth<sup>®</sup> phone  $\rightarrow$  P. 277)

## ■ The number of portable players that can be registered

Up to 2 portable players can be registered in the system.

# 3-3. Using the Bluetooth® audio system

## Bluetooth<sup>®</sup> audio system setup

## System setup items and operation procedures

► Pattern A

To enter the menu for each function, follow the steps below using a

voice command or :



 $(\to P. 297)$ 

► Pattern B



to select "BT•A MENU".

STEP 2 Select "System Setup" using .



STEP 3 Select one of the following items using :



- Setting voice guidance volume "Guidance Vol" (→P. 299)
- Displaying the Bluetooth® device address and name "Device Name" ( $\rightarrow$ P. 299)
- Initializing the system "Initialize" ( $\rightarrow$ P. 300)

## Hands-free system for mobile phones

The hands-free system is a function that allows you to use your mobile phone without touching it.

This system supports Bluetooth<sup>®</sup> mobile phones. Bluetooth<sup>®</sup> is a wireless data system that allows the mobile phone to wirelessly connect to the hands-free system and make/receive calls.

- ► Vehicles with a navigation system

  Owners of models equipped with a navigation system should refer to the "Navigation System Owner's Manual".
- ► Vehicles without a navigation system

Title	Page
Using the hands-free system	P. 279
Making a phone call	P. 287
Setting a mobile phone	P. 292
Security and system setup	P. 297
Using the phone book	P. 301

#### ■ Conditions under which the system will not operate

- If using a mobile phone that does not support Bluetooth<sup>®</sup>
- If the mobile phone is switched off
- If you are outside service range
- If the mobile phone is not connected
- If the mobile phone's battery is low
- If the mobile phone is behind the seat or in the glove box or console box
- If metal is covering or touching the phone

#### ■ When using the hands-free system

- The audio system and voice guidance are muted when making a call.
- If both parties speak at the same time, it may be difficult to hear.
- If the incoming call volume is overly loud, an echo may be heard.
- Try to face toward the microphone as much as possible when speaking.
- In the following circumstances, it may be difficult to hear the other party:
  - When driving on unpaved roads
  - · When driving at high speeds
  - When a window is open
  - $\bullet\,$  When the air conditioning is blowing directly on the microphone
  - When the air conditioning is set to high

## ■ When transferring ownership of the vehicle

Be sure to initialize the system to prevent the personal data from being improperly accessed.  $(\rightarrow P.300)$ 

## ■ About Bluetooth®



Bluetooth is a registered trademark of Bluetooth SIG. Inc.

#### ■ Compatible models

Compatible with HFP (Hands Free Profile) Ver. 1.0 or higher (Conformed: Ver. 1.5) and OPP (Object Push Profile) Ver. 1.1.

If your mobile phone does not support HFP, you cannot enter the Bluetooth  $^{\circledR}$  phone. If your mobile phone supports OPP alone, you cannot use the Bluetooth  $^{\circledR}$  phone.

#### ■ Certification for the hands-free system

FCC ID: AJDK018 IC ID: 775E-K018 MADE IN JAPAN

This device complies with Part 15 of the FCC Rules and RSS-Gen and RSS-210 of IC 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.

## **A** CAUTION

#### **■FCC WARNING**

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

Radio Frequency Radiation Exposure. This equipment complies with FCC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated with at least 7.9 in. (20 cm) and more between the radiator and person's body (excluding extremities: hands, wrists, feet and ankles).

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

## ■ Caution while driving

Do not use a mobile phone or connect the Bluetooth<sup>®</sup> phone.

## **♠** NOTICE

## ■ To prevent damage to mobile phone

Do not leave mobile phone in the vehicle. The temperature inside may become high resulting in damage to the phone.

## Audio unit



## 1 Display

A message, name, phone number, etc. is displayed.

Lower-case characters and special characters cannot be displayed.

- Displays information that is too long to be displayed at one time on the display (press and hold)
- 3 Selects speed dials
- 4 Selects items such as menu or number

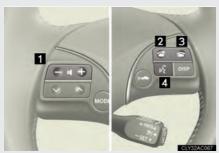
Turn: Selects an item
Press: Inputs the selected
item

- 5 Reception level
- 6 Bluetooth® connection condition

If "BT" is not displayed, the hands-free system cannot be used.

## ■ Steering wheel switches

## ► Type A



► Type B



■ Microphone



#### 1 Volume

During an incoming call: Adjusts the ring tone volume

During an ongoing call: Adjusts the receiver volume

The voice guidance volume cannot be adjusted using this button.

- Off-hook switch Turns the hands-free system on/starts a call
- On-hook switch
  Turns the hands-free system
  off/ends a call/refuses a call
- Italk switch
  Turns the voice command system on (press)/turns the voice command system off (press and hold)

## Operating the system using voice commands

By following voice guidance instructions output from the speaker, voice commands enable to the operation of the hands-free system without the

need to check the display or operate



■ Operation procedure when using voice commands

Press the talk switch and follow voice guidance instructions.

## Auxiliary commands when using voice commands

The following auxiliary commands can be used when operating the system using a voice command:

"Cancel": Exits the hands-free system

"Repeat": Repeats the previous voice guidance instruction

"Go back": Returns to the previous procedure

"Help": Reads aloud the function summary if a help comment is registered for the selected function

## Using the hands-free system for the first time

Before using the hands-free system, it is necessary to register a mobile phone in the system. The system will enter phone registration mode automatically when starting the system with no mobile phone registered. Follow the procedure below to register (pair) a mobile phone:

STEP 1 Press the off-hook switch or the talk switch.

The introductory guidance and phone name registration instructions are heard.

STEP 2 Select "Pair Phone" using a voice command or .........



STEP 3 Register a phone name by either of the following methods.

a. Select "Record Name" by using , and say a name to be reaistered.

b. Press the talk switch and say a name to be registered.

A voice guidance instruction to confirm the input is heard.



A passkey is displayed and heard, and voice guidance instruction for inputting the passkey into the mobile phone is heard.

STEP 5 Input the passkey into the mobile phone.

Refer to the manual that comes with the mobile phone for the operation of the phone.

Guidance for registration completion is heard.

If the mobile phone has a Bluetooth<sup>®</sup> audio player, the audio player can be registered at the same time. A voice guidance instruction to register a Bluetooth<sup>®</sup> audio player is heard.

STEP 6 Select "Yes" or "No" using a voice command or .



(Bluetooth<sup>®</sup> audio player  $\rightarrow$  P. 257)

## Menu list of the hands-free system

## ■ Normal operation

First menu	Second menu	Third menu	Operation detail
"Callback"	-	-	Dialing a number stored in the incoming history memory
"Redial"	-	-	Dialing a number stored in the outgoing history memory
"Phone- book"	"Add Entry"	-	Adding a new number
	"Change Name"	-	Changing the registered name in the phone book
	"Delete Entry"	-	Deleting the registered data
	"Del Spd Dial"	-	Deleting speed dial
	"List Names"	-	List the registered data
	"Speed Dial"	-	Setting speed dials

## 3-4. Using the hands-free system (for mobile phone)

First menu	Second menu	Third menu	Operation detail
"Setup"	"Security"	"Set PIN"	Setting a PIN code
		"Phbk Lock"	Locking the phone book
		"Phbk Unlock"	Unlocking the phone book
	"Phone Setup"	"Pair Phone"	Setting a mobile phone to be used
		"Connect"	Selecting a mobile phone to be used
		"Change Name"	Changing a registered name of a mobile phone
		"List Names"	Listing the registered mobile phones
		"Set Passkey"	Changing the passkey
		"Delete Phone"	Deleting a registered mobile phone
	"System Setup"	"Guidance Vol"	Setting voice guidance volume
		"Device Name"	Displaying the Bluetooth <sup>®</sup> device address and name
		"Initialize"	Initialization the system

## ■ Using a short cut key

First menu	Second menu	Operation detail
"Dial XXX (name)"	-	Dialing a name registered in the phone book
"Phone book add Entry"	-	Adding a new phone number
"Phone book Change name"	-	Changing a registered name in the phone book
"Phone book Delete Entry"	-	Deleting the registered data
"Phone book List names"	-	Listing the registered data
"Phone book Set Speed Dial"	-	Setting speed dials
"Phone book Delete Speed Dial"	-	Deleting speed dials
"Dial XXX (number)"	-	Dialing by inputting a number
"Phonebook"	"Phonebook Unlock"	Unlocking the phone book
Hollebook	"Phonebook Lock"	Locking the phone book

#### ■ Automatic volume adjustment

When vehicle speed reaches 50 mph (80 km/h) or more, the volume automatically increases. The volume returns to the previous volume setting when vehicle speed drops to 43 mph (70 km/h) or less.

#### ■ When using a voice command

For numbers, say a combination of single digits from zero to nine, # (pound), \* (star), and + (plus).

Say a command correctly and clearly.

#### ■ Situations that the system may not recognize your voice

- When driving on rough road
- When driving at high speeds
- When air is blowing out of the vents onto the microphone
- When the air conditioning fan emits a loud noise

#### Operations that cannot be performed while driving

Operating the system with



- Registering a mobile phone to the system
- Changing the passkey

 $\rightarrow$ P. 295

# ■ Making a phone call

Making a phone call

- Dialing by inputting a number "Dial by number"
- Dialing by inputting a name "Dial by name"
- Speed dialing
- Dialing a number stored in the outgoing history memory "Redial"
- Dialing a number stored in the incoming history memory "Call back"

## ■ Receiving a phone call

- Answering the phone
- Refusing the call
- Transferring a call
- Call waiting
- Using the call history memory
  - Dialing
  - Storing data in the phone book
  - Deleting

## Dialing by inputting a number

- STEP 1 Press the talk switch and say "Dial by number".
- STEP 2 Press the talk switch and say the phone number.

- STEP 3 Dial by one of the following methods:
  - a. Press the off-hook switch.
  - b. Press the talk switch and say "Dial".
  - c. Select "Dial" by using



## Dialing by inputting a name

- STEP 1 Press the talk switch and say "Dial by name".
- STEP 2 Select a registered name to be input by either of the following methods:
  - a. Press the talk switch and say a registered name.
  - b. Press the talk switch and say "List Names". Press the talk switch when the desired name is read aloud.
- STEP 3 Dial by one of the following methods:
  - a. Press the off-hook switch.
  - b. Press the talk switch and say "Dial".
  - c. Select "Dial" by using



#### Speed dialing

- STEP 1 Press the off-hook switch.
- STEP 2 Press the preset button in which the desired number is registered.
- STEP 3 Press the off-hook switch.

#### When receiving a phone call

Answering the phone

Press the off-hook switch.

■ Refusing the call

Press the on-hook switch.

## Transferring a call

A call can be transferred between the mobile phone and system while dialing, receiving a call, or during a call. Use one of the following methods:

- a. Operate the mobile phone.
  - Refer to the manual that comes with the mobile phone for the operation of the phone.
- b. Press the off-hook switch\*1.
- c. Press the talk switch and say "Call Transfer" \*2.
- \*1: This operation can be performed only when transferring a call from the mobile phone to the system during a call.
- \*2: While the vehicle is in motion, a call cannot be transferred from the system to the mobile phone.

#### Call waiting

When a call is interrupted by an incoming call from a third party, the following options will become available:

- Answer the incoming call: Press the off-hook switch. (Press the off-hook switch again as necessary to switch back and forth between calls.)
- Refuse the incoming call: Press the on-hook switch.

## Using a call history memory

Follow the procedure below to use number stored in the call history memory:

STEP 1 Press the talk switch and say "Redial" (when using a number stored in the outgoing history memory) or "Call back" (when using a number stored in the incoming history memory).

STEP 2 Select the number by either of the following methods:

- a. Say "Previous" or "Go back" until the desired number is displayed.
- b. Select the desired number by using



STEP 3 The following operations can be performed:

Dialing: Press the off-hook switch or select "Dial" by using a voice command or .

Storing the number in the phone book: Select "Store" by using a voice command or .

Deleting: Select "Delete" by using a voice command or



#### ■ Call waiting

- If your phone does not support HFP Ver. 1.5, this function cannot be used.
- Call waiting operation may differ depending on your mobile phone and service provider.

#### ■ Call history

Up to 5 numbers can be stored in each of the outgoing and incoming history memories.

#### ■ When talking on the phone

- Do not talk simultaneously with the other party.
- Keep the volume of the receiving voice down. Otherwise, voice echo will increase.

## 3-4. Using the hands-free system (for mobile phone)

# Setting a mobile phone

Registering a mobile phone in the hands-free phone system allows the system to function. The following function can be used for registered mobile phones:

#### ■ Functions and operation procedures

To enter menu for each function, follow the steps below by using a voice command or :

- Registering a mobile phone
   1. "Setup" → 2. "Phone Setup" → 3. "Pair Phone"
- Selecting a mobile phone to be used
   1. "Setup" → 2. "Phone Setup" → 3. "Connect Phone (Connect)"
- Changing a registered name
   1. "Setup" → 2. "Phone Setup" → 3. "Change Name"
- Listing the registered mobile phones 1. "Setup"  $\rightarrow$  2. "Phone Setup"  $\rightarrow$  3. "List Names"
- Changing the passkey
   1. "Setup" → 2. "Phone Setup" → 3. "Set Passkey"
- Deleting a mobile phone 1. "Setup"  $\rightarrow$  2. "Phone Setup"  $\rightarrow$  3. "Delete Phone"

#### Registering a mobile phone

Select "Pair Phone" by using a voice command or (-), and do the procedure for registering a mobile phone. (-)P. 282)

## Selecting a mobile phone to be used

STEP 1 Select "Connect Phone (Connect)" using a voice command or



#### ▶ Pattern A

STEP 2 Select a mobile phone to be used by either of the following meth-

ods, and select "Confirm" by using a voice command or



- a. Press the talk switch and say the name of the desired mobile phone.
- b. Press the talk switch and say "List Names". When the name of the desired mobile phone is read aloud, press the talk switch.

#### ► Pattern B

STEP 2 Select a mobile phone to be used by using



## Changing a registered name

STEP 1 Select "Change Name" by using a voice command or



#### ► Pattern A

STEP 2 Select the name of the mobile phone to be changed by either of the following methods, and select "Confirm" using a voice com-

mand or

- a. Press the talk switch and say the name of the desired mobile phone.
- b. Press the talk switch and say "List Names". When the name of the desired mobile phone is read aloud, press the talk switch.
- Pattern B
- STEP 2 Select the desired mobile phone name to be changed using
- STEP 3 Press the talk switch or select "Record Name" using say the new name.

STEP 4 Select "Confirm" using a voice command or



#### Listing the registered mobile phones

Selecting "List Names" by using a voice command or



begins read-

ing aloud the list of the registered mobile phones.

When listing is complete, the system returns to "Phone Setup".

Pressing the talk switch while the name of a mobile phone is being read aloud selects the mobile phone, and the following functions will become available:

- Selecting a mobile phone: "Connect Phone (Connect)"
- Changing a registered name: "Change Name"
- Deleting a mobile phone: "Delete Phone"

#### Changing the passkey

STEP 1 Select "Set Passkey" by using a voice command or



- ► Pattern A
- Firm" using a voice command or .
- ► Pattern B
- STEP 2 Select a 4 to 8-digit number by using



The number should be input 1 digit at a time.

When the entire number to be registered as a passkey has been input, press once again.

If the number to be registered has 8 digits, pressing of the knob is not necessary.

## Deleting a registered mobile phone

STEP 1 Select "Delete" by using a voice command or



#### Pattern A

STEP 2 Select a mobile phone to be deleted by either of the following methods and select "Confirm" using a voice command or ::

- a. Press the talk switch and say the name of the desired mobile phone.
- b. Press the talk switch and say "List Names". While the name of the desired mobile phone is being read aloud, press the talk switch.

#### Pattern B

STEP 2 Select a desired mobile phone to be deleted using



If the mobile phone to be deleted is paired as a Bluetooth<sup>®</sup> audio player. the registration of the audio player can be deleted at the same time. A voice guidance instruction to delete a Bluetooth<sup>®</sup> audio player is heard.

STEP 3 Select "Yes" or "No" using a voice command or



(Bluetooth<sup>®</sup> audio player  $\rightarrow$  P. 257)

## ■ The number of mobile phone that can be registered

Up to 6 mobile phones can be registered in the system.

# Security and system setup

## Security setting items and operation procedures

To enter the menu for each function, follow the steps below using a

voice command or ::



- Setting or changing the PIN (Personal Identification Number) 1. "Setup"  $\rightarrow$  2. "Security"  $\rightarrow$  3. "Set PIN"
- Locking the phone book 1. "Setup"  $\rightarrow$  2. "Security"  $\rightarrow$  3. "Phonebook Lock (Phbk Lock)"
- Unlocking the phone book 1. "Setup"  $\rightarrow$  2. "Security"  $\rightarrow$  3. "Phonebook Unlock (Phbk Unlock)"

## System setup items and operation procedure

To enter the menu for each function, follow the steps below using



- Setting voice guidance volume 1. "Setup"  $\rightarrow$  2. "System Setup"  $\rightarrow$  3. "Guidance Vol"
- Displaying the Bluetooth<sup>®</sup> device address and name 1. "Setup"  $\rightarrow$  2. "System Setup"  $\rightarrow$  3. "Device Name"
- Initializing the system 1. "Setup"  $\rightarrow$  2. "System Setup"  $\rightarrow$  3. "Initialize"

# Setting or changing the PIN

#### Setting a PIN

STEP 1 Select "Set PIN" by using a voice command or .



STEP 2 Enter a PIN by using a voice command or 2.



When using , input the code 1 digit at a time.

# ■ Changing the PIN

STEP 1 Select "Set PIN" by using a voice command or  $\square$ .



STEP 2 Enter the registered PIN using a voice command or .



STEP 3 Enter a new PIN by using a voice command or  $\bigcirc$ .





When using , input the code 1 digit at a time.

#### Locking or unlocking the phone book

STEP 1 Select "Phonebook lock (Phbk Lock)" or "Phonebook unlock 

STEP 2 Input the PIN and select "Confirm" by using a voice command or

#### Setting voice guidance volume

STEP 1 Select "Guidance Vol" using .



STEP 2 Change the voice guidance volume.

To decrease the volume: Turn counterclockwise.



To increase the volume: Turn clockwise.



# Displaying the Bluetooth® device address and name

STEP 1 Select "Device Name" using .





to display the Bluetooth<sup>®</sup> device address and name.

STEP 3 Select "Go Back" using to return to "System Setup".



## Initializing the system

STEP 1 Select "Initialize" and then "Confirm" using .



STEP 2 Select "Confirm" by using



#### ■ Initialization

- The following data in the system can be initialized:
  - Phone book
  - Outgoing and incoming call history
  - Speed dials
  - Registered mobile phone data
  - Security code
  - Registered Bluetooth<sup>®</sup> enabled portable player data
  - Passkey for the mobile phones
  - Passkey for the Bluetooth® audio players
  - Guidance volume
  - Receiver volume
  - · Ring tone volume
- Once the initialization has been completed, the data cannot be restored to its original state.

#### ■ When the phone book is locked

The following functions cannot be used:

- Dialing by inputting a name
- Speed dialing
- Dialing a number stored in the call history memory
- Using the phone book

3

# 3-4. Using the hands-free system (for mobile phone) Using the phone book

To enter the menu for each function, follow the steps below using a

voice command or



- Adding a new phone number
   1. "Phonebook" → 2. "Add Entry"
- Changing the registered name in the phone book
   1. "Phonebook" → 2. "Change Name"
- Listing the registered data
   1. "Phonebook" → 2. "List Names"
- Setting speed dials
   1. "Phonebook" → 2. "Set Speed Dial (Speed Dial)"
- Deleting the registered data
   1. "Phonebook" → 2. "Delete Entry"
- Deleting speed dials
   1. "Phonebook" → 2. "Delete Speed Dial (Del Spd Dial)"

## Adding a new phone number

The following methods can be used to add a new phone number:

- Inputting a phone number by using a voice command
- Transferring data from the mobile phone
- Inputting a phone number using



- Selecting a phone number from outgoing or incoming history
- Adding procedure

STEP 1 Select "Add Entry" by using a voice command or



STEP 2 Use one of the following methods to input a telephone number: Inputting a telephone number using a voice command

STEP2-1 Select "By Voice" using a voice command or



STEP2-2 Press the talk switch, say the desired number, and select "Confirm" using a voice command.

Transferring data from the mobile phone

STEP2-1 Select "By Phone" and then "Confirm" by using a voice command or .

STEP2-2 Transfer the data from the mobile phone. Refer to the manual that comes with the mobile phone for the details of transferring data.

- STEP2-3 Select the data to be registered by either of the following methods:
  - a. Say "Previous" or "Next" until the desired data is displayed, and select "Confirm" using a voice command.
  - b. Select the desired data using



Inputting a phone number using



STEP2-1 Select "Manual Input" using



STEP2-2 Input a phone number using , and press

again.





Input the phone number 1 digit at a time.

Selecting a phone number from outgoing or incoming call history:

STEP2-1 Select "Call History" using a voice command or



- STEP2-2 Select "Outgoing" or "Incoming" using a voice command or ...
- STEP2-3 Select the data to be registered by either of the following methods:
  - a. Say "Previous" or "Go back" until the desired data is displayed, and select "Confirm" using a voice command.
  - b. Select the desired data using



- ods, and select "Confirm" using a voice command or :
  - a. Press the talk switch and say the desired name.
  - b. Select "Record Name" using , and say the desired name.

STEP 4 Select "Confirm" using a voice command or again.

In STEP 4, selecting "Set Speed Dial (Speed Dial)" instead of "Confirm" registers the newly added phone number as speed dial.

# Changing a registered name in the phone book

STEP 1 Select "Change Name" using a voice command or



▶ Pattern A

STEP 2 Select the name to be changed by either of the following meth-

ods, and select "Confirm" using a voice command or ::



- a. Press the talk switch, say the desired name.
- b. Press the talk switch, and say "List Names". When the desired name is read aloud, press the talk switch.
- ► Pattern B

STEP 2 Select the desired name to be changed using ...



STEP 3 Press the talk switch or select "Record Name" using , and say the new name.



STEP 4 Select "Confirm" using a voice command or .



#### Listing the registered data

Select "List Names" using a voice command or



. The list of the reg-

istered data will be read aloud.

When listing is complete, the system returns to "Phonebook". Pressing the talk switch while a data is being read aloud selects the data, and the following function will be available.

- Dialing: "Dial"
- Changing a registered name: "Change Name"
- Deleting an entry: "Delete Entry"
- Setting speed dial: "Set Speed Dial (Speed Dial)"

#### Setting speed dial

STEP 1 Select "Set Speed Dial (Speed Dial)" using a voice command or



- ► Pattern A
- STEP 2 Select the data to be registered as a speed dial by either of the following methods, and select "Confirm" using a voice command



- a. Press the talk switch, say the desired name.
- b. Press the talk switch, and say "List Names". When the desired name is read aloud, press the talk switch.

#### ► Pattern B

STEP 2 Select the desired data using



- STEP 3 Select the desired preset button, and register the data into speed dial by either of the following methods:
  - a. Press the desired preset button, and select "Confirm" by using a voice command or .
  - b. Press and hold the desired preset button.

#### Deleting registered data

STEP 1 Select "Delete Entry" using a voice command or



#### Pattern A

- STEP 2 Select data to be deleted by either of the following methods, and select "Confirm" using a voice command or :
  - a. Press the talk switch, and say the name of the desired phone number to be deleted.
  - b. Press the talk switch, say "List Names". While the name of the desired phone number is being read aloud, press the talk switch.
- ► Pattern B

STEP 2 Select the desired data to be deleted using



## Deleting speed dial

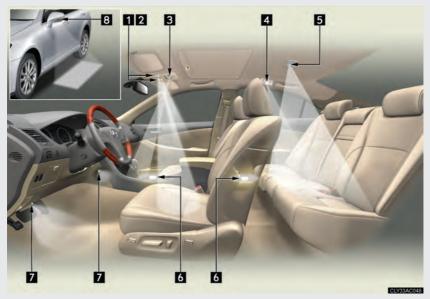
- STEP 1 Select "Delete Speed Dial (Del Spd Dial)" using a voice command or .
- Press the preset button in which the desired speed dial is registered, and select "Confirm" using a voice command or .

#### ■ Limitation of number of digits

A phone number that exceeds 24 digits cannot be registered.

# Interior lights list

Your Lexus is equipped with the illuminated entry system to assist in entering the vehicle. Owing to the function of the system, the lights shown in the following illustration automatically turn on/off according to the presence of the electronic key, whether the doors are locked/unlocked, whether the doors are opened/closed, and the "ENGINE START STOP" switch mode.



- 1 Front personal lights  $(\rightarrow P. 310)$
- **2** Front interior lights  $(\rightarrow P. 310)$
- Shift lever lighting

This light turns on or off depending on the darkness of the surroundings when the "ENGINE START STOP" switch is in ACCESSORY or IGNITION ON mode.

- 4 Rear personal lights  $(\rightarrow P.310)$
- **5** Rear interior light  $(\rightarrow P. 310)$
- 6 Door courtesy lighting
- Front foot well lighting
- 8 Outer foot lights

#### ■ To prevent the battery from being discharged

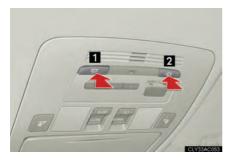
If the following lights remain ON when the door is not fully closed and the door position is ON, the lights will go off automatically after 20 minutes.

- Interior lights
- Front personal lights
- Front foot well lighting
- Rear door courtesy lighting

#### ■ Customization that can be configured at Lexus dealer

Settings (e.g. The time elapsed before lights turn off) can be changed. (Customizable features  $\rightarrow$ P. 511)

# Interior lights



- Front and rear interior lights ON/OFF
- Door position ON/OFF The illuminated entry system is activated when the switch is in the locked position (the door position is on).

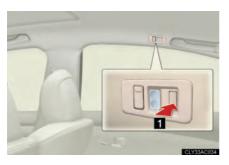
## Personal lights

#### ► Front

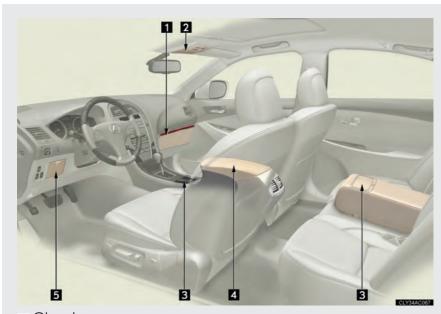


1 ON/OFF

► Rear

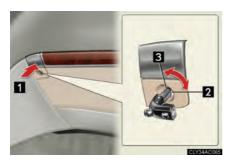


1 ON/OFF



- 1 Glove box
- 2 Overhead console
- **3** Cup holders
- 4 Console box
- **5** Auxiliary box

#### Glove box



- 1 Open (push button)
- 2 Lock with the mechanical key
- Unlock with the mechanical key

#### ■ Glove box light

The glove box light turns on when the tail lights are turned on.

#### ■ Trunk opener main switch

The trunk opener main switch is located in the glove box.  $(\rightarrow P.45)$ 

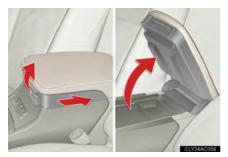
## **A** CAUTION

## ■ Caution while driving

Keep the glove box closed.

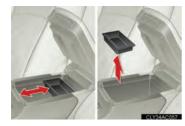
Injuries may result in the event of an accident or sudden braking.

#### Console box



Slide the armrest while pulling up the lever, and lift the armrest.

#### ■ Tray in the console box



The tray slides forward/backward and can be removed.

# ■ Console box light

The console box light turns on when the tail lights are turned on.



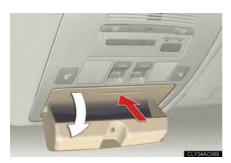
# **A** CAUTION

#### ■ Caution while driving

Keep the console box closed.

Injuries may result in the event of an accident or sudden braking.

#### Overhead console



The overhead console is useful for temporarily storing sunglasses and similar small items.

## **A** CAUTION

#### ■ Items that should not be left in the overhead console

Do not leave glasses or lighters in the console.

If the interior of the vehicle becomes hot, lighters may explode and glasses may warp or become cracked.

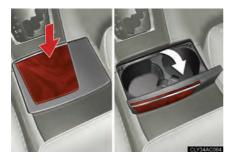
#### ■ Caution while driving

Do not leave the overhead console open while driving. Items may fall out and cause injury.

Cup holders

# Cup holders

# ► Front



To open, press down and release the front of the cup holder lid.

► Rear



#### ■ Using the cup holder (front) to store small items



Remove the holder.

#### ■ The cup holder (front) can be adjustable to the size of the cups or drink-cans



Change the holder position.



## ■ Items unsuitable for the cup holder

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 and cause injury. If possible, cover hot drinks to prevent burns.

#### ■ When not in use

Keep the cup holders closed.

Injuries may result in the event of an accident or sudden braking.

## Auxiliary box



To open, press down the knob.

# **A** CAUTION

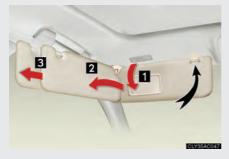
#### ■ Caution while driving

Keep the auxiliary box closed.

In the event of sudden braking, personal injury may result from contact due to movement of the open auxiliary box or items that may come out of the auxiliary box.

# 3-7. Other interior features

# Sun visors



- 1 Forward position: Flip down.
- Side position: Flip down, unhook, and swing to the side.
- Side extender:

  Place in side position, then slide backwards.

# Vanity mirror



The light turns on when the cover is opened.

# 3-7. Other interior features

# Clock

► Without navigation system



- 1 Adjusts the hour.
- 2 Adjusts the minutes.
- Rounds to the nearest hour.\*

\*: e.g. 1:00 to 1:29 
$$\rightarrow$$
 1:00  
1:30 to 1:59  $\rightarrow$  2:00

▶ With navigation system



- 1 Adjusts the hour.
- 2 Adjusts the minutes.
- Rounds to the nearest hour.\*

\*: e.g. 1:00 to 1:29 
$$\rightarrow$$
 1:00  
1:30 to 1:59  $\rightarrow$  2:00

## ■ The clock is displayed when

The "ENGINE START STOP" switch is in ACCESSORY or IGNITION ON mode.



Push the back part of the lid to open.

To remove, pull the ashtray upwards.

## **A** CAUTION

#### ■ When not in use

Keep the ashtray closed.

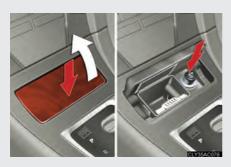
Injuries may result in the event of sudden braking, sudden swerving or an accident.

#### ■ To prevent fire

- Fully extinguish matches and cigarettes before putting them in the ashtray, then make sure the ashtray is fully closed.
- Do not place paper or any other type of flammable object in the ashtray.

### 3-7. Other interior features

# Cigarette lighter



Push the back part of the lid to open, and push the cigarette lighter down.

The cigarette lighter will pop up when it is ready for use.

#### ■ The cigarette lighter can be used when

The "ENGINE START STOP" switch is in ACCESSORY or IGNITION ON mode.

# **A** CAUTION

#### ■ To avoid burns or fires

- Do not touch the metal parts of the cigarette lighter.
- Do not hold the cigarette lighter down. It could overheat and cause a fire.
- Do not insert anything other than the cigarette lighter into the outlet.

## The power outlet can be used for $12\ V$ accessories that run on less than $10\ A$ .



#### ■ The power outlet can be used when

The "ENGINE START STOP" switch is in ACCESSORY or IGNITION ON mode.

### **↑** NOTICE

#### ■ To avoid damaging the power outlet

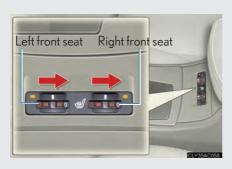
Close the power outlet lid when the power outlet is not in use. Foreign objects or liquids that enter the power outlet may cause a short circuit.

### ■ To prevent the fuse from being blown

Do not use an accessory that uses more than 12  $\,\mathrm{V}$  10  $\,\mathrm{A}.$ 

### ■ To prevent the battery from being discharged

Do not use the power outlet longer than necessary when the engine is not running.



#### Heats the seats

The indicator light comes on. The higher the number, the warmer the seats become.

#### ■ The seat heaters and ventilators can be used when

The "ENGINE START STOP" switch is in IGNITION ON mode.

#### ■ When not in use

Set the dial to 0. The indicator light turns off.

### **A** CAUTION

#### ■ Burns

- Use caution when seating the following persons in a seat with the seat heater on to avoid the possibility of burns:
  - Babies, small children, the elderly, the sick and the disabled
  - Persons with sensitive skin
  - Persons who are fatigued
  - Persons who have taken alcohol or drugs that induce sleep (sleeping drugs, cold remedies, etc.)
- Do not cover the seat with anything when using the seat heater.
   Using the seat heater with a blanket or cushion increases the temperature of the seat and may lead to overheating.

### **⚠** NOTICE

#### ■ To prevent seat heater damage

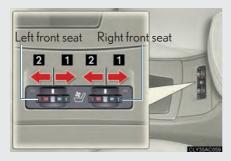
Do not put unevenly weighted objects on the seat and do not stick sharp objects (needles, nails, etc.) into the seat.

#### ■ To prevent battery discharge

Set the dial to 0 when the engine is not running.

### Seat heaters and ventilators\*

The seat heaters and ventilators heat the seats and maintain good airflow by blowing air from the seats.



Heats the seats

The indicator light (orange) comes on.

The higher the number, the warmer the seats become.

2 Blows air from the seats

The indicator light (green) comes on.

The higher the number, the stronger the airflow becomes.

#### ■ The seat heaters and ventilators can be used when

The "ENGINE START STOP" switch is in IGNITION ON mode.

#### ■ When not in use

Set the dial to 0. The indicator light turns off.

### **A** CAUTION

#### Burns

- Use caution when seating the following persons in a seat with the seat heater on to avoid the possibility of burns:
  - · Babies, small children, the elderly, the sick and the disabled
  - Persons with sensitive skin
  - Persons who are fatigued
  - Persons who have taken alcohol or drugs that induce sleep (sleeping drugs, cold remedies, etc.)
- Do not cover the seat with anything when using the seat heater.
   Using the seat heater with a blanket or cushion increases the temperature of the seat and may lead to overheating.

### **↑** NOTICE

#### ■ To prevent seat heater damage

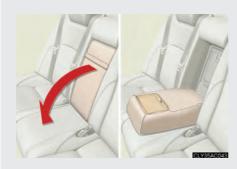
Do not put unevenly weighted objects on the seat and do not stick sharp objects (needles, nails, etc.) into the seat.

### ■ To prevent battery discharge

Set the dial to 0 when the engine is not running.

### 3-7. Other interior features

### **Armrest**



Pull the armrest down for use.

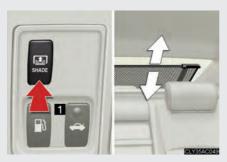
### **↑** NOTICE

■ To prevent damage to the armrest

Do not place too much strain on the armrest.

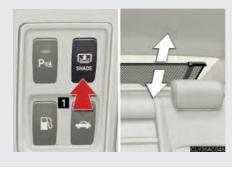
The rear sunshade can be raised and lowered by operating the switch shown below.

► Type A



1 Raise/lower

► Type B



1 Raise/lower

#### ■ The rear sunshade can be used when

The "FNGINE START STOP" switch is in IGNITION ON mode.

#### ■ Reverse operation feature

The rear sunshade automatically lowers when the shift lever is shifted into R. The rear sunshade rises when the shift lever is shifted out of R and vehicle speed reaches 9 mph (15 km/h).

#### ■ When the reverse operation feature does not operate

The rear sunshade may not lower or rise automatically. In this case, press the switch to lower or raise the rear sunshade.

### **A** CAUTION

#### ■ When the rear sunshade is being raised or lowered

Do not place fingers or other objects in the fastener section or in the opening. They may get caught, causing injury.

### **↑** NOTICE

### ■ To prevent the battery from being discharged

Do not operate the rear sunshade when the engine is not running.

### ■ To ensure normal operation of the sunshade

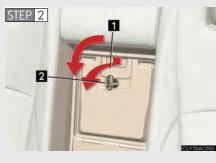
Observe the following precautions.

- Do not place excessive load on the motor or other components.
- Do not place objects where they may hinder opening and closing operations.
- Do not attach items to the rear sunshade.
- Keep the opening clean and clear of obstructions.
- Do not operate the rear sunshade continuously over long periods of time.

## Long objects can be loaded in the vehicle by utilizing the trunk space and rear seat area.



Pull down the armrest.



Open the armrest door.

The armrest door can be locked and unlocked using the mechanical key.

- 1 Lock
- 2 Unlock

## **A** CAUTION

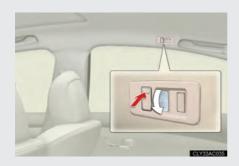
#### ■ When not in use

Ensure that the armrest door is closed.

In the event of sudden braking, items stored in the trunk may be thrown forward into the cabin, resulting in injury.

### Coat hooks

### Pull out the hooks to hang coats or other soft items.

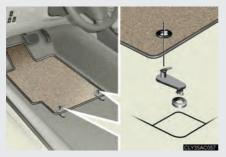


### **A** CAUTION

#### ■ Items that must not be hung on the hook

Do not hang a coat hanger or other hard or sharp object on the hook. If the SRS curtain shield airbags deploy, these items may become projectiles that cause death or serious injury.

#### Securely place a mat that matches the size of the space on the carpet.



Secure the driver's floor mat using the hooks provided.

### **A** CAUTION

#### ■ When inserting the floor mat

Observe the following precautions.

Failure to do so may result in the floor mat slipping and interfering with the movement of the pedals during driving, resulting in an accident.

- Make sure the floor mat is properly placed on the vehicle carpet and the correct side faces upward.
- Do not place floor mats on top of existing mats.

### **Trunk features**

### ■ Cargo hooks



Cargo hooks are provided for securing loose items.

■ Grocery bag hooks



■ Luggage mat



Pull the lever upwards when lifting the luggage mat up.



The lever can be hooked on the edge of the trunk.

### **A** CAUTION

### ■ When the cargo hooks are not in use

To avoid injury, always return the cargo hooks to their positions when they are not in use.

### **⚠** NOTICE

### ■ When closing the trunk

Do not leave the luggage mat lever hooked on the edge of the trunk.

The luggage mat may get damaged.

### Garage door opener

The garage door opener can be programmed to operate garage doors, gates, entry doors, door locks, home lighting systems, and security systems, and other devices.

The garage door opener (HomeLink  $^{\! \rm I\!R}$  Universal Transceiver) is manufactured under license from HomeLink  $^{\! \rm I\!R}$  .

### Programming the HomeLink®

The HomeLink<sup>®</sup> compatible transceiver in your vehicle has 3 buttons which can be programmed to operate 3 different devices. Refer to the programming method below appropriate for the device.



- Buttons
- 2 Indicator

■ Programming the HomeLink® (for U.S.A. owners)



Point the remote control transmitter for the device 1 to 3 in. (25 to 75 mm) from the HomeLink<sup>®</sup> buttons.

Keep the  $\mathsf{HomeLink}^{\texttt{®}}$  indicator light in view while programming.



Press and hold one of the HomeLink<sup>®</sup> buttons and the transmitter button. When the HomeLink<sup>®</sup> indicator light changes from a slow to a rapid flash, you can release both buttons.

If the HomeLink<sup>®</sup> indicator light comes on but does not flash, flashes rapidly for 2 seconds and remains lit, the HomeLink<sup>®</sup> button is already programmed. Use the other buttons or follow the "Reprogramming a HomeLink<sup>®</sup> button" instructions. (→P. 339)



Test the HomeLink<sup>®</sup> operation by pressing the newly programmed button.

If a  $HomeLink^{\mathbb{R}}$  button has been programmed for a garage door, check to see if the garage door opens and closes. If the garage door does not operate, see if your remote control transmitter is of the rolling code type. Press and hold the programmed HomeLink® button. The remote control transmitter is of the rolling code type if the HomeLink<sup>®</sup> indicator light flashes rapidly for 2 seconds and then remains lit. If your transmitter is of the rolling code type, proceed to the heading "Programming a rolling code system".

Repeat the steps above to program another device for each of the remaining HomeLink<sup>®</sup> buttons.

### ■ Programming a Rolling Code system (for U.S.A. owners)

If your device is Rolling Code equipped, follow the steps under the heading "Programming the HomeLink®" before proceeding with the steps listed below.

opener motor. The exact location and color of the button may vary by brand of garage door opener motor.

Refer to the operation manual supplied with the garage door opener motor for the location of the learn button.

STEP 2 Press the learn button.

Following this step, you have 30 seconds in which to initiate step 3 below.

Press and hold the vehicle's programmed HomeLink<sup>®</sup> button for 2 seconds and release it. Repeat this step once again. The garage door may open.

If the garage door opens, the programming process is complete. If the door does not open, press and release the button a third time. This third press and release will complete the programming process by opening the garage door.

The ceiling mounted garage door opener motor should now recognize the  $\mathsf{HomeLink}^{\mathbb{B}}$  transceiver and operate the garage door.

STEP 4 Repeat the steps above to program another rolling code system for any of the remaining HomeLink<sup>®</sup> buttons.

## ■ Programming an entry gate (for U.S.A. owners)/Programming all devices in the Canadian market

STEP 1 Place your transmitter 1 to 3 in. (25 to 75 mm) away from the surface of the HomeLink  $^{\circledR}$ .

Keep the  $\mathsf{HomeLink}^{\texttt{®}}$  indicator light in view while programming.

- STEP 2 Press and hold the selected HomeLink® button.
- STEP 3 Repeatedly press and release (cycle) the device's remote control button for two seconds each until step 4 is complete.
- When the indicator light on the HomeLink® compatible transceiver start to flashing rapidly, release the buttons.

- Test the operation of the HomeLink<sup>®</sup> by pressing the newly programmed button. Check to see if the gate/device operates correctly.
- STEP 6 Repeat the steps above to program another device for each of the remaining HomeLink<sup>®</sup> buttons.

### ■ Programming other devices

To program other devices such as home security systems, home door locks or lighting, contact your authorized Lexus dealer for assistance.

### ■ Reprogramming a button

The individual HomeLink<sup>®</sup> buttons cannot be erased but can be reprogrammed. To reprogram a button, follow the "Reprogramming a Homel ink<sup>®</sup> button" instructions.

### Operating the HomeLink®

Press the appropriate  $\mathsf{HomeLink}^{\texttt{®}}$  button. The  $\mathsf{HomeLink}^{\texttt{®}}$  indicator light should come on.

The HomeLink<sup>®</sup> compatible transceiver in your vehicle continues to send a signal for up to 20 seconds as long as the button is pressed.

### Reprogramming a HomeLink® button

Press and hold the desired HomeLink button. After 20 seconds, the HomeLink indicator light will start flashing slowly. Next, while still pressing and holding the HomeLink button, press and hold the button on the transmitter until the HomeLink indicator light changes from a slow to a rapid flash.

### Erasing the entire HomeLink® memory (all three programs)



Press and hold the 2 outside buttons for 10 seconds until the indicator light flashes.

If you sell your vehicle, be sure to erase the programs stored in the HomeLink<sup>®</sup> memory.

#### ■ Before programming

- Install a new battery in the remote control transmitter.
- The battery side of the remote control transmitter must be pointed away from the HomeLink<sup>®</sup> button.

#### ■ Certification for the garage door opener

► For vehicles sold in the U.S.A.

FCC ID: CB2070AHL4

#### NOTF:

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:

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.

#### ■ When support is necessary

Visit on the web at www.homelink.com or call 1-800-355-3515.

### **A** CAUTION

#### ■ When programming a garage door or other remote control device

The garage door on other devices may operate, so ensure people and objects are out of danger to prevent potential harm.

#### ■ Conforming to federal safety standards

Do not use the HomeLink<sup>®</sup> Compatible Transceiver with any garage door opener or device that lacks safety stop and reverse features as required by federal safety standards.

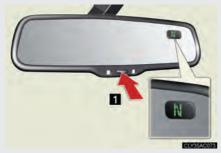
This includes any garage door that cannot detect an obstruction object. A door or device without these features increases the risk of death or serious injury.

### 3-7. Other interior features

### Compass

The compass on the inside rear view mirror indicates the direction in which the vehicle is heading.

### ■ Operation

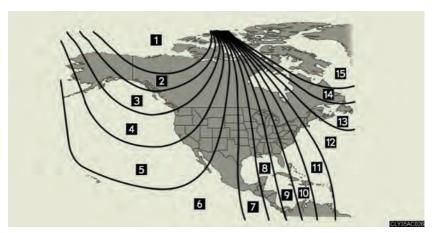


■ To turn the compass on or off, push and hold "AUTO" for 3 seconds.

### ■ Displays and directions

Display	Direction
N	North
NE	Northeast
Е	East
SE	Southeast
S	South
SW	Southwest
W	West
NW	Northwest

### Calibrating the compass



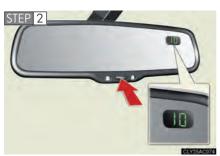
The direction display deviates from the true direction determined by the earth's magnetic field. The amount of deviation varies according to the geographic position of the vehicle.

If you cross over a map boundary shown in illustration, the compass will deviate.

To obtain higher precision or perfect calibration, refer to the following.

#### ■ Deviation calibration

STEP 1 Stop the vehicle where it is safe to drive in a circle.



Push and hold "AUTO" for 6 seconds.

A number (1 to 15) appears on the compass display.

STEP 3 Press "AUTO", and referring to the map above, select the number of the zone where you are.

If the direction is displayed several seconds after adjustment, the calibration is complete.

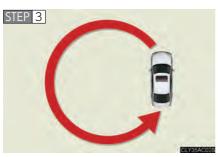
### ■ Circling calibration

STEP 1 Stop the vehicle where it is safe to drive in a circle.



Push and hold "AUTO" for 9 seconds.

C appears on the compass display.



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 the direction is displayed.

### ■ 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.

### **A** CAUTION

#### ■ While driving the vehicle

Do not adjust the display. Be sure to adjust the display only when the vehicle is stopped.

#### ■ When doing the circling calibration

Be sure to secure a wide space, and watch out for people and vehicles in the neighborhood. Do not violate any local traffic rules while performing circling calibration.

### **♠** NOTICE

### ■ To avoid compass malfunctions

Do not place magnets or any metal objects near the inside rear view mirror. Doing this may cause a malfunction of the compass sensor.

### ■ To ensure normal operation of the compass

- Do not perform 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.

# 3-7. Other interior features Safety Connect\*

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



- "SOS" button
- 2 Microphone
- 3 LED light indicators

#### Services

Subscribers have the following Safety Connect services available:

- Automatic Collision Notification\*
  Helps drivers receive necessary response from emergency service providers. (→P. 349)
  - \*: U.S. Patent No. 7,508,298 B2
- Stolen Vehicle Location
   Helps drivers in the event of vehicle theft. (→P. 350)
- Emergency Assistance Button (SOS)
   Connects drivers to response-center support. (→P. 350)
- Enhanced Roadside Assistance
   Provides drivers various on-road assistance. (→P. 350)

### **■** 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 1-800-25-LEXUS (1-800-255-3987) or push the "SOS" button in your vehicle for further subscription details.

#### ■ 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. 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.
- Safety Connect services will function in the United States, including Hawaii and Alaska, and in Canada. The services will not function outside of the United States in countries other than Canada. For details about the service, contact your Lexus dealer.
- 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 and Spanish. 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 START STOP" 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) 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 Enhanced 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 before using Safety Connect.

### ■ Exposure to radio frequency signals

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 physicians 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.

#### License

Licensed by QUALCOMM Incorporated under one or more of the following United States Patents and/or their counterparts in other nations:

4,901,307 5,490,165 5,056,109 5,504,773 5,101,501 5,506,865 5,109,390 5,511,073 5,228,054 5,535,239 5,267,261 5,544,196 5,267,262 5,568,483 5,337,338 5,600,754 5,414,796 5,657,420 5,416,797 5,659,569 5,710,784 5,778,338

### ■ Certification for Lexus Enform with Safety Connect

FCC ID: O9EGTM1

FCC ID: O6Y-CDMRF101

#### 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.

Maintenance and care

4

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## Cleaning and protecting the vehicle exterior

## Perform the following to protect the vehicle and maintain it in prime condition.

- 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.

#### Automatic car washes

- Fold the mirrors back before washing the vehicle.
- Brushes used in automatic car washes may scratch the vehicle surface and harm your vehicle's paint.

### ■ High pressure car washes

- Do not allow the nozzles of the car wash to come within close proximity of the windows.
- Before car wash, check that the fuel filler door on your vehicle is closed properly.

### ■ Touch-up paint (if equipped)

Touch-up paint may be used to cover small chips or scratches.

Apply the paint soon after the damage occurs or corrosion may set in. To apply the touch-up paint so it is hardly noticeable the trick is to apply it only to the bare spots. Apply only the smallest amount possible and do not paint the surface around the scratch or chip.

#### ■ Aluminum wheels

Remove any dirt immediately by using a neutral detergent. Do not use hard brushes or abrasive cleaners. Do not use strong or harsh chemical cleaners. Use the same mild detergent and wax as used on the paint.

#### ■ Bumpers and side moldings

Do not scrub with abrasive cleaners.

#### ■ To prevent deterioration and body corrosion

- Wash the vehicle immediately in the following cases:
  - · After driving near the sea coast
  - · After driving on salted roads
  - If you see coal tar or tree sap on the paint surface
  - · If you see dead insects or insect droppings on the paint
  - After driving in an area contaminated with soot, oily smoke, mine dust, iron powder or chemical substances
  - · If the vehicle becomes heavily soiled in 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.

### **A** CAUTION

### ■ Caution about 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.

### **⚠** NOTICE

#### ■ To protect your vehicle's painted surfaces

Do not use organic cleaners such as benzene or gasoline.

#### ■ 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 on the surfaces of the lights.
   Wax may cause damage to the lenses.
- When using an automatic car wash (vehicles equipped with the 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.

### Cleaning and protecting the vehicle interior

The following procedures will help protect your vehicle's interior and keep it in top condition:

### Protecting the vehicle interior

Remove dirt and dust using a vacuum cleaner. Wipe dirty surfaces with a cloth dampened with lukewarm water.

### Cleaning the leather areas

- Remove dirt and dust using a vacuum cleaner.
- Wipe 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 shaded and ventilated area.

### Synthetic leather areas

- Remove loose dirt using a vacuum cleaner.
- Apply a mild soap solution to the synthetic leather using a sponge or soft cloth.
- Allow the solution to soak in for a few minutes. Remove the dirt and wipe off the solution with a clean, damp cloth.

#### ■ 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.

#### ■ 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 apply water. The excellent results are obtained by keeping the carpet as dry as possible.

#### ■ 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.

### **A** CAUTION

#### ■ 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.
- $\bullet$  Do not get any of the SRS components or wiring in the vehicle interior wet.  $(\rightarrow P. 85)$

Electrical malfunction may cause the airbags to deploy or not function properly, resulting in death or severe 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, or bleach.
- Seats: Acidic solutions, such as thinner, benzene, or 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 on 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 that contain 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 under the floor of the vehicle, and may also cause the body to rust.

### ■ 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. 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.

### Maintenance requirements

To ensure safe and economical driving, day-to-day care and regular maintenance is essential. It is the owner's responsibility to perform regular checks. Lexus recommends the following maintenance.

#### ■ General maintenance

Should be performed on a daily basis. This can be done by yourself or by a Lexus dealer.

#### 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 Services Guide/Owner's Manual Supplement/Scheduled Maintenance".

### ■ Do-it-yourself maintenance

You can perform some maintenance procedures 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, see the separate "Owner's Guide", "Warranty and Services Guide", "Owner's Manual Supplement" or "Warranty Booklet".

### ■ Repair and replacement

It is recommended that genuine Lexus parts be used for repair 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 operations 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.

### **A** CAUTION

### ■ Warning in handling of 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. 383)

### General maintenance

Listed below are the general maintenance items that should be performed at the intervals specified in the "Warranty and Service Guide" or "Owners 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.

### **Engine compartment**

ltems	Check points
Battery	Maintenance-free. $(\rightarrow P.383)$
Brake fluid	At the correct level? $(\rightarrow P.380)$
Engine coolant	At the correct level? $(\rightarrow P.378)$
Engine oil	At the correct level? $(\rightarrow P. 375)$
Exhaust system	No fumes or strange sounds?
Power steering fluid	At the correct level? ( $\rightarrow$ P. 381)
Radiator/condenser/hoses	Not blocked with foreign matter? $(\rightarrow P. 380)$
Washer fluid	At the correct level? $(\rightarrow P.386)$

### Vehicle interior

ltems	Check points
Accelerator pedal	<ul> <li>Moves smoothly (without uneven pedal effort or catching)?</li> </ul>
Automatic transmission "Park" mechanism	<ul> <li>Can the vehicle be hold securely on an incline with the shift lever in P?</li> </ul>
Brake pedal	<ul><li> Moves smoothly?</li><li> Does it have appropriate clearance and correct amount of free play?</li></ul>
Brakes	<ul><li>Not pull to one side when applied?</li><li>Loss of brake effectiveness?</li><li>Spongy feeling brake pedal?</li><li>Pedal almost touches floor?</li></ul>
Head restraints	<ul><li>Move smoothly and lock securely?</li></ul>
Indicators/buzzers	• Function properly?
Lights	<ul> <li>Do all the lights come on?</li> <li>Headlights aimed correctly?</li> <li>(→P. 415)</li> </ul>
Parking brake	<ul><li> Moves smoothly?</li><li> Can hold the vehicle securely on an incline?</li></ul>
Seat belts	<ul><li>Does the seat belt system operate smoothly?</li><li>Are the belts undamaged?</li></ul>
Seats	• Do the seat controls operate properly?

#### 4-2. Maintenance

ltems	Check points
Steering wheel	<ul><li> Moves smoothly?</li><li> Has correct free play?</li><li> No strange noises?</li></ul>

### Vehicle exterior

ltems	Check points
Door/trunk	• Operate smoothly?
Engine hood	• The lock system works properly?
Fluid leaks	• Is there any leakage after parking?
Tire	<ul> <li>Inflation pressure is correct?</li> <li>Tire surfaces not worn or damaged?</li> <li>Tires rotated according to the maintenance schedule?</li> <li>Wheel nuts are not loose?</li> </ul>

### **A** CAUTION

### ■ If the engine is running

Turn the engine off and ensure that there is adequate ventilation before performing maintenance checks.

### **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:

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 as a temporary malfunction and your vehicle may not pass the I/M test.

When the malfunction indicator lamp goes off 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 yourself, be sure to follow the correct procedure given in these sections.

ltems		Parts and tools
Battery condition	(→P. 383)	<ul><li>Warm water</li><li>Baking soda</li><li>Grease</li><li>Conventional wrench (for terminal clamp bolts)</li></ul>
Brake fluid level	(→P. 380)	<ul> <li>FMVSS No.116 DOT 3 or SAE J1703 brake fluid</li> <li>Rag or paper towel</li> <li>Funnel (used only for adding brake fluid)</li> </ul>
Engine coolant level	(→P. 378)	<ul> <li>"Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite and non-borate coolant with long-life hybrid organic acid technology.</li> <li>For the USA: "Toyota Super Long Life Coolant" is pre-mixed with 50% coolant and 50% deionized water.</li> <li>For Canada: "Toyota Super Long Life Coolant" is pre-mixed with 55% coolant and 45% deionized water.</li> <li>Funnel (used only for adding engine coolant)</li> </ul>

ltems		Parts and tools
Engine oil level	(→P. 375)	<ul> <li>"Toyota Genuine Motor Oil" or equivalent</li> <li>Rag or paper towel, funnel (used only for adding engine oil)</li> </ul>
Fuses	(→P. 406)	• Fuse with same amperage rating as original
Tire inflation pressure	(→P. 396)	<ul><li>Tire pressure gauge</li><li>Compressed air source</li></ul>
Headlight aim	(→P. 415)	Phillips-head screwdriver
Power steering fluid level	(→P. 381)	<ul> <li>Automatic transmission fluid DEXRON<sup>®</sup> II or III</li> <li>Rag or paper towel</li> <li>Funnel (used only for adding power steering fluid)</li> </ul>
Radiator and condenser	(→P. 380)	_
Washer fluid	(→P. 386)	<ul><li>Water washer fluid containing anti- freeze (for winter use)</li><li>Funnel</li></ul>

### **A** CAUTION

The engine compartment contains many mechanisms and fluids that may move suddenly, become hot, or become electrically energized. To avoid death or serious injury.

#### ■ 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 or 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.
- Take care because brake fluid can harm your hands or eyes and damage painted surfaces.

If fluid gets on your hands or in your eyes, flush the affected area with clean water immediately.

If you still experience discomfort, see a doctor.

### ■ When working near the electric cooling fan or radiator grille:

Be sure the "ENGINE START STOP" switch is OFF.

With the "ENGINE START STOP" switch in IGNITION ON mode, the electric cooling fan may automatically start to run if the air conditioning is on and/or the coolant temperature is high.  $(\rightarrow P. 380)$ 

### ■ Safety glasses

Wear safety glasses to prevent flying or falling material, fluid spray, etc. from getting in the eyes.

### **⚠** NOTICE

#### ■ If you remove the air cleaner:

Driving with the air filter removed may cause excessive engine wear due to dirt in the air. Also a backfire could cause a fire in the engine compartment.

#### ■ If the fluid level is low or high

It is normal for the brake fluid level to go down slightly as the brake pads wear or when the fluid level in the accumulator is high.

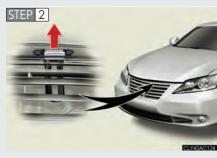
If the reservoir needs frequent refilling, it may indicate a serious problem.

### Release the lock from the inside of the vehicle to open the hood.



Pull the hood release lever.

The hood will pop up slightly.



Lift the hood catch and lift the hood.

### **A** CAUTION

### ■ 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.

# 4-3. Do-it-yourself maintenance

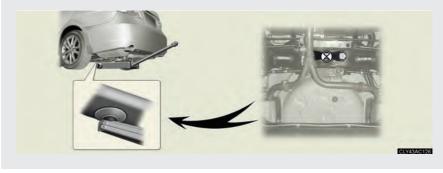
# Positioning a floor jack

When raising your vehicle with a floor jack, position the jack correctly. Improper placement may damage your vehicle or cause injury.

### Front



### Rear



### **A** CAUTION

#### ■ When raising your vehicle:

Make sure to observe the following to reduce the possibility of death or serious injury.



• Lift up the vehicle using a floor jack such as the one shown in the illustration.

- When using a floor jack, follow the instructions of the manual provided with the jack.
- Do not use the jack that was supplied with your vehicle.
- Do not put any part of your body or get underneath the vehicle supported only by the floor jack.

Always use floor jack and/or automotive jack stands on a solid, flat, level surface.

- Do not start the engine while the vehicle is supported by the floor jack.
- Stop the vehicle on level firm ground, firmly set the parking brake and put the shift lever in P.
- Make sure to set the floor jack properly at the jack point.
   Raising the vehicle with an improperly positioned floor jack will damage the vehicle and may cause the vehicle to fall off the floor jack.
- Do not raise the vehicle while someone is in the vehicle.
- When raising the vehicle, do not place any objects on top of or underneath the floor jack.

# 4-3. Do-it-yourself maintenance **Engine compartment**



- Power steering fluid reservoir (→P. 381)
- 2 Engine oil filler cap

 $(\to P.376)$ 

3 Engine oil level dipstick

 $(\rightarrow P.375)$ 

4 Brake fluid reservoir

(→P.380)

**5** Battery  $(\rightarrow P.383)$ 

- 6 Fuse box  $(\rightarrow P. 406)$
- Z Electric cooling fans
- 8 Condenser  $(\rightarrow P.380)$
- 9 Radiator  $(\rightarrow P.380)$
- Washer fluid tank

 $(\rightarrow P.386)$ 

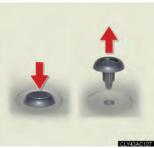
■ Engine coolant reservoir

 $(\rightarrow P.378)$ 

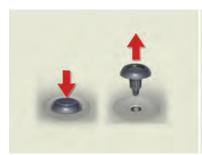
### Engine compartment cover

- Removing the engine compartment cover
- ► Front





### ► Right-hand side

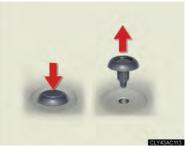




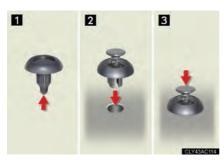
When installing the cover, make sure that the engine coolant reservoir hose positioned as shown in the illustration.

### ► Left-hand side





### ■ Installing the clips



- Press the tip of the clip against a hard surface, such as a desk, to allow the center part of the clip to be pushed up.
- 2 Insert
- 3 Press

### Engine oil

With the engine at operating temperature and turned off, check the oil level on the dipstick.

### Checking the engine oil

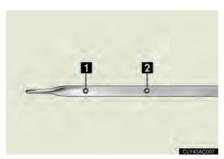
Park the vehicle on level ground. After turning off the engine, wait more than five minutes for the oil to drain back into the bottom of the engine.



Hold a rag under the end and pull the dipstick out.

- STEP 3 Wipe the dipstick clean.
- STEP 4 Reinsert the dipstick fully.
- STEP 5 Holding a rag under the end, pull the dipstick out and check the oil level.

STEP 6 Wipe the dipstick and reinsert it fully.



1 Low 2 Full

### Adding engine oil



If the oil level is below or near the low level mark, add engine oil of the same type as already in the engine.

Make sure to check the oil type and prepare the items needed before adding oil.

Engine oil selection	→P.489
Oil quantity $(Low \rightarrow Full)$	1.6 qt. (1.5 L, 1.3 lmp. qt.)
ltems	Clean funnel

STEP 1 Remove the oil filler cap.

STEP 2 Add engine oil slowly, checking the dipstick.

STEP 3 Install the filler cap, turning it clockwise.

#### ■ Engine oil consumption

- The amount of engine oil consumed depends on the oil viscosity, the quality of the oil and the way the vehicle is driven.
- More oil is consumed under driving conditions such as high speeds and frequent acceleration and deceleration.
- A new engine consumes more oil.
- When judging the amount of oil consumption, keep in mind that the oil may have become diluted, making it difficult to judge the true level accurately.
- Oil consumption: Max. 1.1 qt./600 miles, 0.9 lmp.qt./600 miles (1.0 L per 1000 km)
- If you consume more than 1.1 qt. (1.0 L, 0.9 lmp.qt.) every 600 miles (1000 km), contact your Lexus dealer.

#### ■ Changing the engine oil (USA only)

To reset the oil change system, follow the procedure below:

- Turn the "ENGINE START STOP" switch OFF with the trip meter A reading shown. (→P.134)
- STEP 2 While pressing the trip meter reset button, set the "ENGINE START STOP" switch to the IGNITION ON mode. Continue to press and hold the button until the trip meter displays "000000".

### **A** CAUTION

### ■ Used engine oil

- Used engine oil contains potentially harmful contaminants which may cause skin disorders such as inflammation or 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 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 retightened.

### Engine coolant

The coolant level is satisfactory if it is between the F and L lines on the reservoir when the engine is cold.



- 1 Full
- 2 Low

If the level is on or below the L line, add coolant up to the F line.

### ■ When adding the engine coolant



When installing the reservoir cap, make sure that the engine coolant reservoir hose positioned as shown in the illustration.

#### ■ If the coolant level drops within a short time after replenishing

Visually check the radiator, hoses, engine coolant filler cap, radiator cap, drain cock and water pump.

If you cannot find a leak, have your Lexus dealer pressure test the cap and check for leaks in the cooling system.

#### ■ Coolant selection

Only use "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology.

USA: "Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water. (Enabled: -31°F [-35°C])

Canada: "Toyota Super Long Life Coolant" is a mixture of 55% coolant and 45% deionized water. (Enabled: -44°F [-42°C])

For more details about engine coolant, contact your Lexus dealer.

### **A** CAUTION

### ■ When the engine is hot

Do not remove the radiator cap.

The cooling system may be under pressure and may spray hot coolant if the cap is removed, causing burns or other injuries.

### **№** NOTICE

### ■ When adding engine coolant

Coolant is neither plain water not straight antifreeze. The correct mixture of water and anti freeze 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 damage to parts or paint.

#### Radiator and condenser

Check the radiator and condenser and clear any foreign objects. If either of the above parts are extremely dirty or you are not sure of their condition, have your vehicle checked by your Lexus dealer.



### ■ When the engine is hot

Do not touch the radiator or condenser, as they may be hot and you may be burned.

### Brake fluid

### ■ Checking fluid level



The brake fluid level should be between the "MAX" and "MIN" lines on the tank.

Make sure to check the fluid type and prepare the necessary items.

### Adding fluid

Fluid type FMVSS No.116 DOT 3 or SAE J1703 brake fluid

Items Clean funnel

#### ■ Brake fluid can absorb moisture from the air.

Excess moisture in the fluid can cause a dangerous loss of braking efficiency. Use only newly opened brake fluid.

### **A** CAUTION

#### ■ When filling the reservoir

Take care because brake fluid can harm your hands or eyes and damage painted surfaces.

If fluid gets in your eyes, flush your eyes with clean water immediately.

If you still experience discomfort, see a doctor.

### **↑** NOTICE

#### If the fluid level is low or high

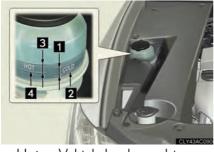
It is normal for the brake fluid level to go down slightly as the brake pads wear or when the fluid level in the accumulator is high.

If the reservoir needs frequent refilling, it may indicate a serious problem.

### Power steering fluid

#### ■ Fluid level

The fluid level should be within the appropriate range.



- 1 Full (when cold)
- 2 Add fluid (when cold)
- 3 Full (when hot)
- 4 Add fluid (when hot)

Hot: Vehicle has been driven around 50 mph (80 km/h) for 20 minutes, or slightly longer in frigid temperatures. (Fluid temperature,  $140^{\circ}F - 175^{\circ}F [60^{\circ}C - 80^{\circ}C]$ )

Cold: Engine has not been run for about 5 hours. (Room temperature,  $50^{\circ}F - 85^{\circ}F [10^{\circ}C - 30^{\circ}C]$ )

### Checking the fluid level

Make sure to check the fluid type and prepare the necessary items.

Fluid type

Automatic transmission fluid DEXRON® II or III

Items

Rag or paper towel and funnel (only for adding fluid)

- STEP 1 Clean all dirt off the reservoir.
- STEP 2 Remove the reservoir cap by turning it counterclockwise and wipe the dipstick clean.
- STEP 3 Reinstall the reservoir cap.
- STEP 4 Remove the reservoir cap again and look at the fluid level.

### **A** CAUTION

### ■ Checking the fluid level

Take care, as the reservoir may be hot.

### **↑** NOTICE

### ■ When adding fluid

Avoid overfilling, or the power steering may be damaged.

### After replacing the reservoir cap

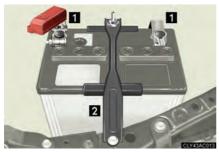
Check the steering box case, vane pump and hose connections for leaks or damage.

### **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.



- 1 Terminals
- 2 Hold-down clamp

Checking battery condition (vehicles with the battery indicator)
Check the battery condition using the indicator color.



- Blue: Good condition
- White: Charging is necessary. Have the vehicle inspected by your Lexus dealer.
- Red: Not working properly, have the battery checked by your Lexus dealer.

### ■ Before recharging

When recharging, the battery produces hydrogen gas which is flammable and explosive. Therefore, 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 the battery

The engine may not start. Follow the procedure below to initialize the system.

STEP 1 Shift the shift lever to P.

STEP 2 Open and close any of the doors.

STEP 3 Restart the engine.

### **A** CAUTION

#### ■Chemicals in the battery

A 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 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 safety 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 not sufficient ventilation.

#### ■ How to recharge the battery

Only perform a slow charge (5 A or less). The battery may explode if charged at a quicker rate.

### ■Emergency measures regarding electrolyte

- If electrolyte gets in your eyes
   Flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while traveling to the nearest medical facility.
- If electrolyte gets on your skin
   Wash the affected area thoroughly. If you feel pain or burning, get medical attention immediately.
- If electrolyte gets on your clothes
   It can soak through clothing on to your skin. Immediately take off the clothing and follow the procedure above if necessary.
- If you accidentally swallow electrolyte

  Drink a large quantity of water or milk. Follow with milk of magnesia, beaten raw
  egg or vegetable oil. Get emergency medical attention immediately.

### **⚠** NOTICE

#### ■ When recharging the battery

Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.

### Washer fluid



If any washer does not work or the warning message appears on the multi-information display, the washer tank may be empty. Add washer fluid.

### **A** CAUTION

### ■ When refilling the washer fluid

Do not refill the washer fluid when the engine is hot or running, as the 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 antifreeze instead of washer fluid. Doing so may cause streaking on the vehicle's painted surfaces.

### ■ Diluting washer fluid

Dilute washer fluid with water as necessary.

Refer to the freezing temperatures listed on the washer fluid tank.

### 4-3. Do-it-yourself maintenance

### **Tires**

Replace or rotate tires in accordance with maintenance schedules and treadwear.

■ Checking tires

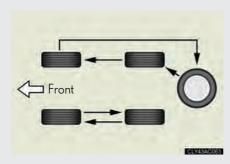


- New tread
- 2 Treadwear indicator
- **8** Worn tread

The location of treadwear indicators is shown by the "TWI" or " $\Delta$ " marks, etc., molded on the sidewall of each tire.

Check spare tire condition and pressure if not rotated.

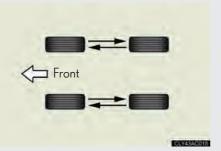
- Tire rotation
- ► If equipped with full-size spare tire



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.

### ▶ If equipped with compact spare tire



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.

### ■ The tire pressure warning system

Your Lexus is equipped with a tire pressure warning system that uses tire pressure warning valve and transmitters to detect low tire inflation pressure before serious problems arise.  $(\rightarrow P. 441)$ 

Vehicles with compact spare tire: The compact spare tire is not equipped with the tire pressure warning valve and transmitters.

### 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 tire pressure warning valve and transmitter ID codes must be registered in the tire pressure warning computer and tire pressure warning system must be initialized. Have tire pressure warning valve and transmitter ID codes registered by your Lexus dealer.  $(\rightarrow P.390)$ 

### Initializing the tire pressure warning system

- The tire pressure warning system must be initialized in the following circumstances:
  - When changing the tire inflation pressure by changing traveling speed or load weight, etc.

When the tire pressure warning system is initialized, the current tire inflation pressure is set as the pressure benchmark.

- How to initialize the tire pressure warning system
- STEP 1 Park the vehicle in safe place and turn the "ENGINE START STOP" switch OFF.

While the vehicle is moving, initialization is not performed.

STEP 2 Adjust the tire inflation pressure to the specified cold tire inflation pressure level. (→P. 493)

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.

Turn the "ENGINE START STOP" switch to IGNITION ON mode.



Push and hold the tire pressure warning reset switch until the tire pressure warning light blinks slowly 3 times.

STEP 5 Wait for a few minutes with the IGNITION ON mode, and then turn the "FNGINE START STOP" switch OFF.

### Registering and selecting ID codes

### Registering ID codes

2 sets of tire pressure warning valve and transmitter ID codes can be registered. Once a second set of tires is registered at "2nd", you can switch between tire set settings simply by pressing the tire pressure warning select switch.

### There are 2 settings:

"MAIN" position: The ID code of the tire pressure warning valve and transmitter on the tires originally installed on the vehicle is registered.

"2nd" position: The ID code is not registered. When you replace a new set of tires, purchase tire pressure warning valves and transmitters from your Lexus dealer and have the new ID code registered by your Lexus dealer.

### ■ Selecting ID codes

When replacing tires, make sure to select the ID code set that matches the new tire set. If the tire pressure warning select switch is set to the wrong tire setting, the tire pressure warning system will not operate properly. After driving for about 20 minutes, the tire pressure warning light comes on after blinking for 1 minute to indicate a system malfunction.



1 "MAIN" 2 "2nd"

#### ■ When to replace your vehicle's tires

Tires should be replaced if:

- You have tire damage such as cuts, splits, cracks deep enough to expose the fabric or 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.

#### ■ Replacing 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 comes on after blinking for 1 minute to indicate a system malfunction.

#### ■ Tire life

Any tire over 6 years old must be checked by a qualified technician even if they have seldom or never been used or damage is not obvious.

#### ■ If the tread wears down below 0.16 in. (4 mm) on snow tires

The effectiveness of snow tires is lost.

#### ■ 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.  $(\rightarrow P. 499)$ .

#### ■ Tire types

#### 1 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.

#### 2 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.

#### 3 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 restriction. Snow tires should be installed on all wheels.  $(\rightarrow P.184)$ 

### ■ Initializing the tire pressure warning system

Initialize the tire pressure warning system with the tire inflation pressure adjusted to the specified level.

### ■ If you push the tire pressure reset switch accidentally

If initialization is performed, adjust the tire inflation pressure to the specified level and initialize the tire pressure warning system again.

### ■ When the 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 operating the tire pressure warning reset switch, the tire pressure warning light does not flash 3 times.
- After carrying out the initialization procedure, the tire pressure warning light blinks for 1 minute then stays on after driving for about 20 minutes.

#### ■ Routine tire inflation pressure checks

The tire pressure warning system does not replace routine tire inflation pressure checks. Make sure to check tire inflation pressure as part of your routine of daily vehicle checks.

#### ■ Tire pressure warning system certification

FCC ID: PAXPMV107J

FCC ID: HYQ13BCX

IC ID: 3729A-PMV107J IC ID: 1551A-13BCX

#### ► For vehicles sold in the USA

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

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.

### **A** CAUTION

#### ■ 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 winter tires.
- Do not tow the vehicle with the compact spare tire installed.

#### ■ When initializing the tire pressure warning system

Do not push the tire pressure warning reset switch 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.

### **⚠** NOTICE

Repairing or replacing tires, wheels and tire pressure warning valves and transmitters

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.

- To avoid damaging the tire pressure warning valves and transmitters

  Do not use liquid sealants on flat tires.
- 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 pressures become low while driving

Do not continue driving, or your tires and/or wheels may be ruined.

## 4-3. Do-it-yourself maintenance

## Tire inflation pressure

### ■ Tire inflation pressure

The recommended cold tire inflation pressure and tire size is displayed on the tire and loading information label.  $(\rightarrow P. 493)$ 





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### ■ Inspection and adjustment procedure



- Tire valve
- 2 Tire pressure gauge

- STEP 1 Remove the tire valve cap.
- STEP 2 Press the tip of the tire pressure gauge onto the tire valve.
- STEP 3 Read the pressure using the graduations of the gauge.
- STEP 4 If the tire inflation pressure is not within the recommended levels, adjust inflate the tire.
  - If you add too much air, press the center of the valve to lower.
- STEP 5 After completing the tire inflation pressure measurement and adjustment, apply soapy water to the valve and check for leakage.
- STEP 6 Reinstall the tire valve cap.

#### ■ 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 efficiency
- Reduced driving comfort and tire life
- Reduced safety
- Damage to the drive train

If a tire needs frequent refilling, 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 and 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.
   The appearance of the tire can be misleading. In addition, tire inflation pressures that are even just a few pounds off can degrade ride and handling.
- Do not bleed or reduce tire inflation pressure after driving. It is normal for the tire inflation pressure to be higher after driving.
- Never exceed the vehicle capacity weight.
   Passengers and luggage weight should be placed so that the vehicle is balanced.

### **A** CAUTION

#### ■ Proper inflation is critical to save tire performance

Keep your tires properly inflated. Otherwise, the following conditions may occur and result in an accident causing death or serious injury.

- Excessive wear
- Uneven wear
- Poor handling
- Possibility of blowouts resulting from overheated tires
- Poor sealing of the tire bead
- Wheel deformation and/or tire separation
- A greater possibility of tire damage from road hazards

### **⚠** NOTICE

#### ■ When inspecting and adjusting tire inflation pressure

Be sure to reinstall the tire valve caps.

Without the valve caps, dirt or moisture could get into the valve and cause air leakage, which could result in an accident. If the caps have been lost, replace them as soon as possible.

#### Wheels

If a wheel is bent, cracked or heavily corroded, it should be replaced. Otherwise, the tire may separate from the wheel or cause 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:

- Wheels of different sizes or types
- Used wheels
- Bent wheels that have been straightened

#### 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.

#### ■ When replacing wheels

The wheels of your Lexus are equipped with tire pressure warning valves and transmitters that allow the tire pressure warning system to provide advanced warning in the event of a loss in tire inflation pressure. Whenever wheels are replaced, the tire pressure warning valves and transmitters must be installed.  $(\rightarrow P. 389)$ 

### **A** CAUTION

#### ■ 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 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.

### **↑** 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.

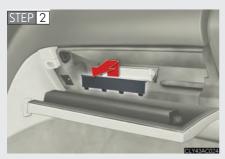
### 4-3. Do-it-yourself maintenance

### Air conditioning filter

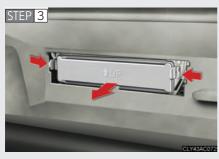
The air conditioning filter must be cleaned or changed regularly to maintain air conditioning efficiency.

#### ■ Replacement method

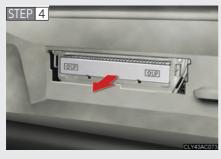
STEP 1 Turn the "ENGINE START STOP" switch OFF.



Open the glove box. Remove the glove box cover.



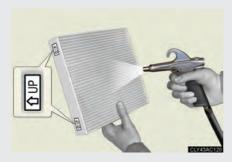
Remove the filter cover.



Remove the filter.

Be sure that the correct side of the filter faces up when installing it.

### ■ Cleaning method



If the filter is dirty, clean by blowing compressed air through the filter from the downward side.

Hold the air gun 2 in. (5 cm) from the filter and blow for approximately 2 minutes at 72 psi  $(500 \text{ kPa}, 5.0 \text{ kgf/cm}^2 \text{ or bar})$ .

If it is not available, have the filter cleaned by your Lexus dealer.

#### ■ Checking interval

Inspect, clean and replace the air conditioning filter according to the maintenance schedule. In dusty areas or areas with heavy traffic flow, more frequent cleaning or early replacement may be required. (For scheduled maintenance information, please refer to the "Warranty and Services Guide/Owner's Manual Supplement/ Scheduled Maintenance".)

#### ■ If air flow from the vents decreases dramatically

The filter may be clogged. Check the filter and replace if necessary.

### **↑** NOTICE

#### ■ To prevent damage to the system

- When using the air conditioning system, make sure that a filter is always installed.
- When cleaning the filter, do not clean the filter with water.

### 4-3. Do-it-yourself maintenance

### **Electronic key battery**

Replace the battery with a new one if it is discharged.

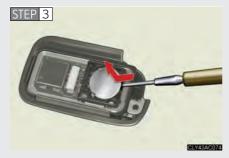
- You will need the following items:
  - Flathead screwdriver
  - Small Phillips-head screwdriver
  - Lithium battery (CR1632)
- Replacing the battery



Take out the mechanical key.



Remove the cover.



Remove the depleted battery.

Insert a new battery with the + terminal facing up.

#### ■ If the electronic key battery is discharged

The following symptoms may occur.

- The smart access system with push-button start and wireless remote control will not function properly.
- The operational range is reduced.

#### ■Use a CR1632 lithium battery

- Batteries can be purchased at your Lexus dealer, jewelers, or camera stores.
- Replace only with the same or equivalent type recommended by a Lexus dealer.
- Dispose of used batteries according to the local laws.

### **A** CAUTION

#### Removed battery and other parts

Keep away from children.

These parts are small and if swallowed by a child they can cause choking.

### ♠ 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 components 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.

STEP 1 Turn the "ENGINE START STOP" switch OFF.

STEP 2 Remove the engine compartment cover.  $(\rightarrow P. 374)$ 

STEP 3 Open the fuse box cover.

► Engine compartment



Push the tabs in and lift the lid off.

► Driver's side instrument panel



Remove the lid.

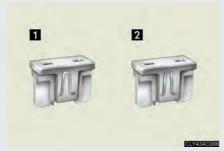
STEP 4 After a system failure, see "Fuse layout and amperage ratings"  $(\rightarrow P. 409)$  for details about which fuse to check.



Remove the fuse with the pullout tool.

STEP 6 Check if the fuse has blown.

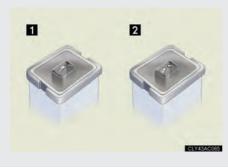
► Type A



- 1 Normal fuse
- 2 Blown fuse

Replace it with one of an appropriate amperage rating. The amperage rating can be found on the fuse box lid.

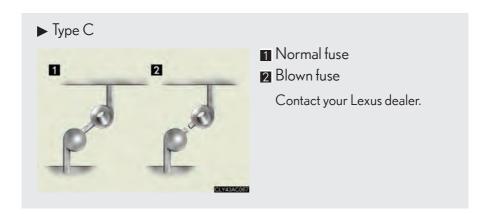
► Type B



- 1 Normal fuse
- 2 Blown fuse

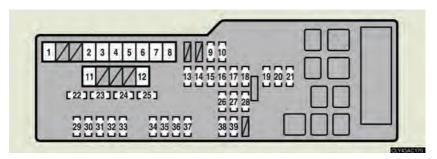
Replace it with one of an appropriate amperage rating.

### 4-3. Do-it-yourself maintenance



### Fuse layout and amperage ratings

#### ■ Engine compartment

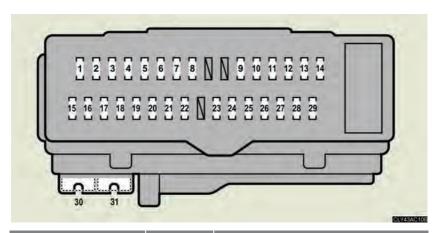


	Fuse	Ampere	Circuit
1	PSB	30 A	Pre-collision seat belt
2	H-LP CLN	30 A	<del></del>
3	P-P / SEAT	30 A	Power seat
4	RR DEF	50 A	Rear window defogger
5	ABS NO.2	30 A	Anti-lock brake system, vehicle stability control system
6	FAN MAIN	50 A	Electric cooling fans
7	ABS NO.1	50 A	Anti-lock brake system, vehicle stability control system
8	HTR	50 A	Air conditioning system
9	RR FOG	10 A	<del></del>
10	ALT-CDS	10 A	Alternator condenser
11	ST	30 A	Starting system

	Fuse	Ampere	Circuit
12	ALT	140 A	PSB, H-LP CLN, P-P/SEAT, RR DEF, ABS NO.2, FAN MAIN, ABS NO.1, HTR, RR FOG, RR DOOR RH, RR DOOR LH, FUEL OPN, FR FOG, OBD, STOP, TI & TE, A/C, PWR, DOOR NO.2, S/ROOF, GAUGE NO.2, POWER, P/SEAT
13	STRLOCK	20 A	Steering lock system
14	IG2	20 A	GAUGE NO.2, IGN, multiport fuel injection system/sequential multiport fuel injection system
15	HAZ	15 A	Turn signal lights
16	ETCS	10 A	Electronic throttle control system
17	E-ACM	10 A	Electric active control mount
18	A/C CTRL PNL	15 A	Air conditioning system
19	MAYDAY	10 A	Mayday system
20	ALT-S	7.5 A	Charging system
21	AM2	7.5 A	Starting system
22	EFI MAIN	30 A	EFI NO.2, EFI NO.3, fuel system, ECT system
23	AMP	30 A	Audio system
24	AMP2	30 A	Audio system
25	DOOR NO.1	25 A	Power door lock system
26	RADIO NO.1	15 A	Audio system
27	ECU-B NO.1	10 A	ECU powers
28	DOME	10 A	Interior lights, meters, vanity lights
29	H-LP (LH)	15 A	Left-hand headlight (high beam)

	Fuse	Ampere	Circuit
30	H-LP (RH)	15 A	Right-hand headlight (high beam)
31	H-LP (LL)	15 A	Left-hand headlight (low beam)
32	H-LP (RL)	15 A	Right-hand headlight (low beam)
33	HORN	10 A	Horns
34	EFI NO.1	10 A	Multiport fuel injection system/ sequential multiport fuel injection sys- tem, ECT system
35	MPX-B	10 A	Meters
36	A/F	20 A	Multiport fuel injection system/ sequential multiport fuel injection sys- tem
37	S-HORN	7.5 A	Horn
38	EFI NO.2	15 A	Multiport fuel injection system/ sequential multiport fuel injection sys- tem
39	EFI NO.3	10 A	Multiport fuel injection system/ sequential multiport fuel injection sys- tem

### ■ Driver's side instrument panel



	Fuse	Ampere	Circuit
1	RR DOOR RH	25 A	Power window
2	RR DOOR LH	25 A	Power window
3	FUEL OPN	7.5 A	Fuel filler door opener
4	FRFOG	15 A	Front fog lights
5	OBD	7.5 A	On-board diagnosis system
6	ECU-B NO.2	7.5 A	ECU powers
7	STOP	10 A	Stop lights
8	TI & TE	30 A	Tilt and telescopic steering
9	A/C	7.5 A	Air conditioning system
10	PWR	25 A	Power windows
11	DOOR NO.2	25 A	Main body ECU
12	S/ROOF	30 A	Moon roof
13	TAIL	10 A	Front and rear side marker lights, tail lights, license plate lights
14	PANEL	7.5 A	Switch illumination

	Fuse	Ampere	Circuit
15	ECU-IG NO.1	10 A	Moon roof, seat heaters, power windows, clock, automatic windshield wiper, electric cooling fans, driving position memory system, seat position memory system
16	ECU-IG NO. 2	7.5 A	Anti-lock brake system, vehicle stability control system, traction control system, brake assist system, cruise control system, stop lights, shift lock control system
17	A/C NO. 2	10 A	Air conditioning system, rear window defogger
18	WASH	10 A	Windshield washer
19	S-HTR	20 A	Seat heaters, air conditioning system
20	GAUGE NO.1	10 A	Emergency flashers, back-up lights, rear sunshade, charging system
21	WIP	25 A	Windshield wipers
22	H-LP LVL	7.5 A	Headlight leveling system
23	IGN	10 A	Multiport fuel injection system/ sequential multiport fuel injection sys- tem, SRS airbag system, steering lock system
24	GAUGE NO. 2	7.5 A	Meters
25	ECU-ACC	7.5 A	Clock, main body ECU
26	CIG	20 A	Cigarette lighter
27	PWR OUTLET	20 A	Power outlet
28	RADIO NO. 2	7.5 A	Audio system
29	MIR HTR	15 A	Outside rear view mirror defoggers

	Fuse	Ampere	Circuit
30	POWER	30 A	Power window
31	P/SEAT	30 A	Power seat

#### ■ After a fuse is replaced

- If the lights do not turn on even after the fuse has been replaced, a bulb may need replacement.  $(\rightarrow P. 417)$
- If the replaced fuse blows again, have the vehicle inspected by your Lexus dealer.

#### If there is an overload in the circuits

The fuses are designed to blow before the entire wiring harness is damaged.

### **A** CAUTION

#### ■ To prevent system breakdowns and vehicle fire

Observe the following precautions.

Failing to do so may cause damage, and possibly a fire or injury.

- Never use a fuse of a higher amperage rating than 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.
   This can cause extensive damage or even fire.
- Do not modify fuses or the fuse box.

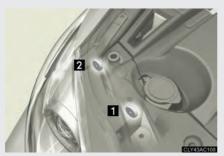
### **⚠** NOTICE

#### ■ Before replacing fuses

Have the cause of electrical overload determined and repaired by your Lexus dealer.

# Headlight aim (vehicles with discharge headlights)

### ■ Vertical movement adjusting bolts



- Adjustment bolt A
- Adjustment bolt B

### Before checking the headlight aim

STEP 1 Make sure the vehicle has a full tank of gas and the area around the headlight is not deformed.

STEP 2 Park the vehicle on level ground.

STEP 3 Sit in the driver's seat.

STEP 4 Bounce the vehicle several times.

#### Adjusting the headlight aim

STEP 1 Remove the engine compartment cover.  $(\rightarrow P. 374)$ 



Turn bolt A in either direction using a Phillips-head screwdriver.

Remember the turning direction and the number of turns in mind.

#### 4-3. Do-it-yourself maintenance



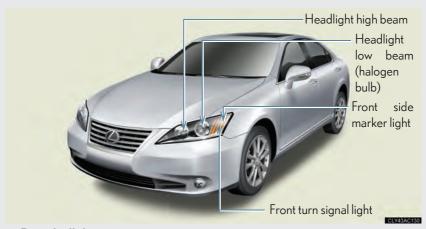
Turn bolt B the same number of turns and in the same direction as step 1 using a Phillips-head screwdriver.

If the error is over the value specified above, take the vehicle to your Lexus dealer to adjust the headlight aim.

### 4-3. Do-it-yourself maintenance **Light bulbs**

You may replace the following bulbs yourself. For more information about replacing other light bulbs, contact your Lexus dealer.

- Prepare a replacement light bulb.
  Check the wattage of the light bulb being replaced. (→P. 495)
- Front bulb locations



Rear bulb locations



### Replacing light bulbs

Headlight low beams (for vehicles without discharge bulbs) and headlight high beams

STEP 1 Remove the engine compartment cover.  $(\rightarrow P. 374)$ 

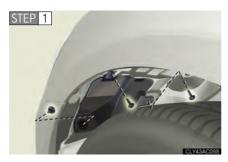


Turn the bulb base counterclockwise.

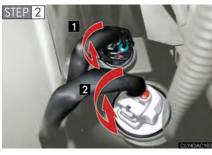


Unplug the connector while depressing the lock release.

### Front side marker lights and front turn signal lights



Remove the access hole cover.



- 1 Front side marker light
- 2 Front turn signal light
  Turn the bulb base counterclockwise.

► Front side marker light



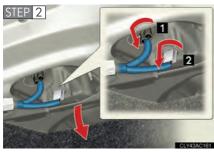
### ► Front turn signal light



### ■ Back-up lights and tail lights

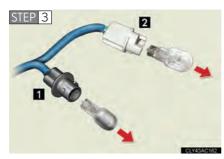


Open the trunk lid and remove the trunk panel cover clips.



Partly remove the trunk panel cover and turn the bulb bases counterclockwise.

- 1 Tail light
- 2 Back-up light

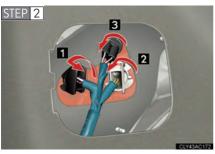


- 1 Tail light
- Back-up light

### ■ Stop/tail, rear turn signal and rear side marker lights



Open the trunk lid and remove the access hole cover.



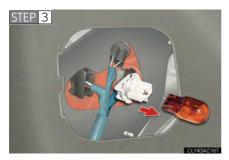
- 1 Stop/tail light
- 2 Rear turn signal light
- Rear side marker light

  Turn the bulb base counterclockwise.

► Stop/tail light



### ► Rear turn signal light



Remove the light bulb.

► Rear side marker light



#### Bulbs other than the above

If any of the bulbs listed below has burnt out, have your Lexus dealer replace it.

- Headlight low beams (discharge bulbs)
- Parking lights
- Front fog lights
- Side turn signal lights
- High mounted stoplight
- License plate lights

#### Condensation build-up on the inside of the lens

Contact your Lexus dealer for more information in the following situations. Temporary condensation build-up on the inside of the headlight lens does not indicate a malfunction.

- Large drops of water are built up on the inside of the lens.
- Water has built up inside the headlight.

### ■ Discharge headlights

If voltage to the discharge bulbs is insufficient, the bulbs may not come on, or may go out temporarily. The discharge bulbs will come on when normal power is restored.

#### ■ LED light bulbs

The parking lights, side turn signal lights, high mounted stoplight and license plate lights consist of a number of LEDs. If any of the LEDs burn out, take your vehicle to your Lexus dealer to have the light replaced.

### **A** CAUTION

#### ■ Replacing light bulbs

- Turn off the headlights. Do not attempt to replace the bulb immediately after turning off the headlights.
  - The bulbs become very hot and may cause burns.
- Do not touch the glass portion of the light bulb with bare hands. Hold the bulb by the plastic or metal portion.
  - If the bulb is scratched or dropped it may blow out or crack.
- Fully install light bulbs and any parts used to secure them. Failing 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 take apart or repair the low beam headlight bulbs, connectors, power supply circuits, or related components.
   Doing so could result in electric shock and serious injury or death.

#### ■ Discharge headlights

- Contact your Lexus dealer before replacing discharge headlights (including light bulbs).
- Do not touch the high-intensity discharge headlight's high voltage socket when the headlights are turned on.
  - An extremely high voltage of  $20000\ V$  will be discharged and could result in serious injury or death by electric shock.

#### ■ To prevent damage or fire

Make sure bulbs are fully seated and locked.

### 4-3. Do-it-yourself maintenance

When trouble arises

5

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#### 5-1. Essential information

### **Emergency flashers**

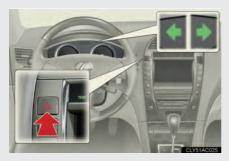
Use the emergency flashers if the vehicle malfunctions or is involved in an accident.

► Without navigation system



Press the switch to flash all the turn signal lights. To turn them off, press the switch once again.

### ► With navigation system



Press the switch to flash all the turn signal lights. To turn them off, press the switch once again.

### **⚠** NOTICE

#### ■ To prevent battery discharge

Do not leave the emergency flashers on longer than necessary when the engine is not running.

### If your vehicle needs to be towed

If towing is necessary, we recommend having your vehicle towed by your Lexus dealer or a commercial towing service, using a lift-type truck or a flat bed truck.

Use a safety chain system for all towing, and abide by all state/provincial and local laws.

If towing from the front, the vehicle's rear wheels and axles must be in good condition.  $(\rightarrow P.433)$ 

If they are damaged, use a towing dolly or flat bed truck.

#### Before towing

The following may indicate a problem with your transmission. Contact your Lexus dealer before towing.

- The engine is running, but the vehicle will not move.
- The vehicle makes an abnormal sound.

#### **Emergency towing**

If a tow truck is not available, in an emergency your vehicle may be temporarily towed using a cable or chain secured to the emergency towing eyelet. This should only attempted on hard, surfaced roads for short distances at low speeds.

A driver must be in the vehicle to steer and operate the brakes. The vehicle's wheels, drive train, axles, steering and brakes must be in good condition.



Towing eyelet

#### ■ Emergency towing procedure

- STEP 1 Release the parking brake.
- STEP 2 Shift the shift lever to N.
- Turn the "ENGINE START STOP" switch to ACCESSORY (engine off) or IGNITION ON mode (engine running).

### **A** CAUTION

#### ■ Caution while towing

- Use extreme caution when towing the vehicle.
   Avoid sudden starts or erratic driving maneuvers which place excessive stress on the emergency towing eyelets and the cables or chains. Always use caution for the surroundings and other vehicles 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.

### **↑** NOTICE

#### ■ To prevent causing serious damage to the transmission

Never tow this vehicle from the rear with front wheels on the ground. This may cause serious damage to the transmission.

### Installing towing eyelet



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.



Insert the towing eyelet into the hole and tighten partially by hand.



Tighten down the towing eyelet securely using a wheel nut wrench.

#### ■ Location of the emergency towing eyelet

 $\rightarrow$  P. 461

# **A** CAUTION

# ■ Installing towing eyelet to the vehicle

Make sure that towing eyelet are installed securely.

If not securely installed, towing eyelet may come loose during towing. This may lead to accidents that cause serious injury or even death.

# Towing with a sling-type truck



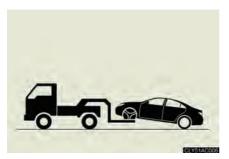
# **MOTICE**

# ■ To prevent body damage

Do not tow with a sling type truck, either from the front or rear.

#### Towing with a wheel lift-type truck

#### ► From the front



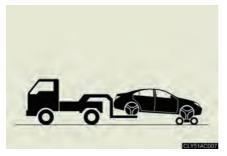
Release the parking brake.

# ♠ NOTICE

#### ■ To prevent damaging the vehicle

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.

#### ► From the rear



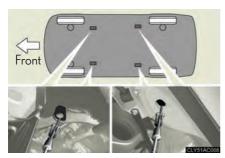
Use a towing dolly under the front wheel.

### ♠ NOTICE

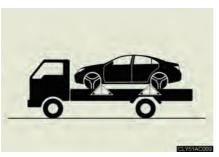
#### ■ To prevent causing serious damage to the transmission

Never tow this vehicle from the rear with the front wheels on the ground.

#### Using a flat bed truck



If your Lexus is transported by a flat bed truck, it should be tied down at the locations shown in the illustration.



If you use chains or cables to tie down your vehicle, the angles shaded in black must be 45°.

Do not overly tighten the tie downs or the vehicle may be damaged.

### **↑** NOTICE

#### ■ To avoid serious damage to your vehicle



Do not use the rear transport eyelets. They are used for shipping purposes only.

# 5-1. Essential information If you think something is wrong

If you notice any of the following symptoms, your vehicle probably needs adjustment or repair. Contact your Lexus dealer as soon as possible.

#### ■ Visible symptoms

- Fluid leaks under the vehicle
   (Water dripping from the air conditioning after use is normal.)
- Flat-looking tires or uneven tire wear
- Engine coolant temperature gauge needle continually points higher than normal

#### Audible symptoms

- Changes in exhaust sound
- Excessive tire squeal when cornering
- Strange noises related to the suspension system
- Pinging or other noises related to the engine

#### Operational symptoms

- Engine missing, stumbling or running rough
- 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

#### 5-1. Essential information

# Fuel pump shut off system

To minimize the risk of fuel leakage when the engine stalls or an airbag inflates upon collision, the fuel pump shut off system stops supplying fuel to the engine.

Follow the procedure below to restart the engine after the system is activated.

Turn the "ENGINE START STOP" switch to ACCESSORY mode or OFF.

STEP 2 Restart the engine.

# **№** NOTICE

#### ■ Before starting the engine

Inspect the ground under the vehicle.

If you find that fuel has leaked on to the ground, the fuel system has been damaged and is in need of repair. Do not restart the engine.

# Event data recorder

Your vehicle has computers that monitor and control certain aspects of your vehicle. These computers assist in driving and maintaining optimal vehicle performance.

Besides storing data useful for troubleshooting, there is a system to that record data in a crash or a near car crash event.

#### In a crash or a near car crash event

The SRS airbag sensor assembly contains the EDR. In a crash or a near car crash event, this device may record some or all of the following information:

- Engine speed
- Whether the brake pedal was applied or not
- Vehicle speed
- To what extent the accelerator pedal was depressed
- Position of the transmission shift lever.
- Whether the driver and front passenger wore seat belts or not
- Driver's seat position
- SRS airbag deployment data
- SRS airbag system diagnostic data
- Front passenger's occupant classification

The information above is intended to be used for the purpose of improving vehicle safety performance. Unlike general data recorders, the EDR does not record sound data such as conversation between passengers.

#### Disclosure of the 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 leasing company for a leased vehicle) is obtained
- Officially requested by the police or other authorities
- Used as a defense for Lexus in a law suit.
- Ordered by a court law

However, if necessary Lexus will:

- Use the data for research on Lexus vehicle safety performance
- Disclose the data to a third party for research purposes without disclosing details of the vehicle owner, and only when it is deemed necessary
- Disclose summarized data cleared of vehicle identification information to a non-Lexus organization for research purposes

# 5-2. Steps to take in an emergency If a warning light turns on or a warning buzzer sounds...

Calmly perform the following actions if any of the warning lights turn on or flash. If a light turns on or flashes, but then turns off, this does not necessarily indicate a malfunction in the system.

#### Stop the vehicle immediately. Continuing to drive the vehicle may be dangerous.

The following warning indicates a possible problem in the brake system. Immediately stop the vehicle in a safe place and contact your Lexus dealer.

Warning light	Warning light/Details	
BRAKE (USA)	Brake system warning light (warning buzzer)* Indicates the following; • Low brake fluid	
(Canada)	<ul> <li>Malfunction in the brake booster system         This light also 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.     </li> </ul>	

# \*: Parking brake engaged warning buzzer:

 $\rightarrow$ P. 452

#### Stop the vehicle immediately.

The following warnings indicate the possibility of damage to the vehicle that may lead to an accident. Immediately stop the vehicle in a safe place and contact your Lexus dealer.

Warning light	Warning light/Details	
==	Charging system warning light Indicates a malfunction in the vehicle's charging system.	
(USA)  (Canada)	Malfunction indicator lamp Indicates the following:  Empty fuel tank  Loose fuel tank cap  Malfunction in the electronic engine control system;  Malfunction in the electronic throttle control system; or  Malfunction in the electronic automatic transmission control system.	

## Have the vehicle inspected by your Lexus dealer immediately.

Failing to investigate the cause of the following warnings may lead to the system operating abnormally and possibly cause an accident. Have the vehicle inspected by your Lexus dealer immediately.

Warning light	Warning light/Details	
*	SRS warning light Indicates a malfunction in: • The SRS airbag system; or • Front passenger occupant classification system • The seat belt pretensioner system.	

Warning light	Warning light/Details
(USA)  (Canada)	ABS warning light Indicates a malfunction in: • The ABS; or • The brake assist system.
PCS	Pre-collision system warning light Indicates a malfunction in the pre-collision system.

# Follow the correction procedure.

After taking the specified steps to correct the suspected problem, check that the warning light turns off.

Warning light	Warning light/Details	Correction procedure
4	Open door warning light (warning buzzer*1) Indicates that a door or trunk is not fully closed.	Check that all doors and the trunk are closed.
	Low fuel level warning light Indicates remaining fuel level is low. (Approximately 2.8 gal. [10.5 L, 2.3 Imp.gal.] or less)	Refuel the vehicle.
<b>*</b>	Driver's seat belt reminder light (warning buzzer*2) Warns the driver to fasten his or her seat belt.	Fasten the seat belt.

Warning light	Warning light/Details	Correction procedure
(without navigation system)  (with navigation system)	Front passenger's seat belt reminder light (warning buzzer*2) Warns the front passenger to fasten his or her seat belt.	Fasten the seat belt.
	Tire pressure warning light	
(!)	When the light comes on: Low tire inflation pressure.	Adjust the tire inflation pressure.
	When the light comes on after blinking for 1 minute: Malfunction in the tire pressure warning system	Have the system checked by your Lexus dealer.
A	Master warning light A buzzer sounds and the warning light comes on and flashes to indicate that the master warning system has detected a malfunction.	→P. 449

# \*1: Open door warning buzzer:

 $\rightarrow$  P. 452

# \*2: Driver's and front passenger's seat belt reminders:

The driver's and front passenger's seat belt reminder sounds to alert the driver and front passenger that his or her sear belt is not fastened. The buzzer sounds intermittently for 10 seconds after the vehicle has reached a speed of at least 12 mph (20 km/h). Then, if the seat belt is still unfastened, the buzzer will sound in a different tone for 20 more seconds.

#### ■ First check when the malfunction indicator lamp comes on while driving

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 lamp will go off after taking several driving trips.

If the lamp does not go off even after several trips, contact your Lexus dealer as soon as possible.

#### ■SRS warning light

This warning light system monitors the following:

- The airbag sensor assembly
- The front airbag sensors
- · The side and curtain shield airbag sensor assemblies
- The curtain shield airbag sensor assemblies
- The driver's seat position sensor
- The driver's seat belt buckle switch
- Occupant detection system (ECU and sensors)
- "AIR BAG ON" and "AIR BAG OFF" indicator lights
- Front passenger's seat belt buckle switch
- The seat belt pretensioner assemblies
- The inflators
- The interconnecting wiring and power sources

#### Front passenger detection sensor and passenger seat belt reminder

If luggage or other load is placed on the front passenger seat, depending on its weight, the reminder light may flash and buzzer may sound.

#### ■ When the tire pressure warning light comes on

Check the tire inflation pressure and adjust to the appropriate level. Pushing the tire pressure warning reset switch does not turn off the tire pressure warning light.

#### ■ The tire pressure warning light may turn on due to natural causes

The tire pressure warning light may turn on due to natural causes such as natural air leaks or 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

#### ► Full-size spare tire

The spare tire is also equipped with the tire pressure warning valve and transmitter. The tire pressure warning light will turn on if the tire inflation pressure of the spare tire is low. If a tire goes flat, even though the flat tire is replaced with the spare tire, the tire pressure warning light does not turn off. Replace the spare tire with the repaired tire and adjust the proper tire inflation pressure. The tire pressure warning light will turn off after a few minutes.

#### ➤ Compact spare tire

The compact spare tire is not equipped with the 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 is replaced with the spare tire. Replace the spare tire with the repaired tire and adjust the proper tire inflation pressure. The tire pressure warning light will turn off after a few minutes.

#### ■ If the tire pressure warning system is inoperative

The tire pressure warning system will be disabled in the following conditions: (When the condition becomes normal, the system will work properly.)

- If tires not equipped with tire pressure warning valves and transmitters are used.
- If the ID code on the tire pressure warning valves and transmitters is not registered in the tire pressure warning computer.
- If the tire pressure warning select switch is set to a different tire setting.
- If the tire inflation pressure is 73 psi (500 kPa, 5.1 kgf/cm<sup>2</sup> or bar) or higher.

The tire pressure warning system may be disabled in the following conditions: (When the condition becomes normal, the system will work properly.)

- If electronic devices or facilities using similar radio wave frequencies are nearby.
- If a radio set at similar frequencies is in use in the vehicle.
- If a window tint that affects the radio wave signals is installed (vehicles with fullsize spare tire).
- If there is a lot of snow or ice on the vehicle, in particular around the wheels or wheel housings.
- If non-genuine Lexus wheels are used. (Even if you use Lexus wheels, the tire pressure warning system may not work properly with some types of tires.)
- If tire chains are used.
- If the full-size spare tire is in a location subject to poor radio wave signal reception.
- If a large metallic object which can interfere with signal reception is put in the trunk (vehicles with full-size spare tire).

#### ■ If the tire pressure warning light comes on after blinking for 1 minute frequently

If the tire pressure warning light comes on after blinking for 1 minute frequently when the "ENGINE START STOP" switch is turned to IGNITION ON mode, have it checked by your Lexus dealer.

#### ■ Customization that can be configured at Lexus dealer

The vehicle speed linked seat belt reminder buzzer can be disabled. (Customizable features  $\rightarrow$ P. 511)

### **A** CAUTION

#### ■ If the tire pressure warning light comes on

Be sure to observe the following precautions. Failure to do so could cause 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.
- 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 the tire is flat, change to 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.

# **A** CAUTION

#### ■ 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 tell-tale 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.



#### ■ Precaution when installing a different tire

When a tire of a different specification or maker is installed, the tire pressure warning system may not operate properly.

## 5-2. Steps to take in an emergency

# If a warning message is displayed

If a warning is shown on the multi-information display, stay calm and perform the following actions:



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.

Multi-information display

If any of the warning message turns on again after performing the following actions, contact your Lexus dealer.

#### Stop the vehicle immediately.

The following warnings indicate the possibility of damage to the vehicle that may lead to an accident. Immediately stop the vehicle in a safe place and contact your Lexus dealer.

Warning message	Details
LOW OIL PRESSURE  (Flashing)	Indicates an abnormal engine oil pressure. A buzzer also sounds.

## Have the vehicle inspected by your Lexus dealer immediately.

Failing to investigate the cause of the following warnings may lead to the system operating abnormally and possibly cause an accident. Have the vehicle inspected by your Lexus dealer immediately.

Warning message	Details		
CHECK S/T LOCK	Indicates a malfunction in the steering lock system.		
(Flashing)			
CHECK PCS SYSTEM  PCS (Flashing)	Indicates a malfunction in the pre-collision system.		
(If equipped)	A buzzer also sounds.		

Warning message	Details
CHECK SONAR (If equipped)	Indicates intuitive parking assist malfunction. A buzzer also sounds. The malfunctioning assist-sensor is shown flashing on the display.
CHECK CRUISE SYSTEM  (Flashing and then continuously on)  (Flashing)  or  (Flashing)  (If equipped)	Indicates a malfunction in the radar cruise control system.  A buzzer also sounds.  Stop the vehicle in a safe place. Switch the "ENGINE START STOP" switch to OFF and then to IGNITION ON mode again to reset the cruise control system.

# Follow the correction procedure.

After taking the specified steps to correct the suspected problem, check that the warning message turns off.

Warning message	Details	Correction procedure
RIGHT FRONT C	Indicates that one or more of the doors is not fully closed.  The system also indicates which doors are not fully closed.  If a shes and a buzzer sounds to indicate that one or more of the doors is not fully closed (with the vehicle having reached a speed of 3 mph [5 km/h]).	Make sure that all of the doors are closed.
HOOD	Indicates that the hood is not fully closed.  flashes and a buzzer sounds to indicate that hood is not fully closed (with the vehicle having reached a speed of 3 mph [5 km/h]).	Close the hood.

Warning message	Details	Correction procedure
TRUNK	Indicates that the trunk is not fully closed.  flashes and a buzzer sounds to indicate that trunk is not fully closed (with the vehicle having reached a speed of 3 mph [5 km/h]).	Close the trunk.
MOONROOF OPEN  (Flashing)	Indicates that the moon roof is not fully closed (with the "ENGINE START STOP" switch OFF and the driver's door opened). A buzzer also sounds.	Close the moon roof.
PARK BRAKE  (Flashing)	Indicates that the parking brake is still engaged (with the vehicle having reached a speed of more than 3 mph [5 km/h]).  A buzzer also sounds.	Release the parking brake.
LOW WASHER FLUID	Indicates that the washer fluid level is low. A buzzer also sounds.	Add washer fluid.

Warning message	Details	Correction procedure
LOW ENGINE OIL LEVEL	Indicates that engine oil level is low. A buzzer also sounds.	Check the level of engine oil, and add if necessary.
OIL MAINT	Indicates that the engine oil is scheduled to be changed.  A buzzer also sounds.	
(USA only)	Comes on approximately 4500 miles (7200 km) after the engine oil is changed. (The indicator will not work properly unless the oil maintenance data has been reset.)	Check and the engine oil, and change if necessary.
OIL MAINT REQD  (USA only)	Indicates that the engine oil should be changed. A buzzer also sounds.	
	Comes on approximately 5000 miles (8000 km) after the engine oil is changed (and the oil maintenance data has been reset).	Check and change the engine oil.

Warning message	Details	Correction procedure
PCS NOT AVAILABLE NOW	Indicates that the pre- collision system is not currently functional.	Clean the grille and the sensor.  This message appears when the pre-collision system is hot. In this case, wait until the system
(If equipped)		cools down.
CLEAN SONAR (If equipped)	Indicates that the sensor of intuitive parking assist is dirty or covered with ice.  A buzzer also sounds.	Clean the sensor.
CLEAN RADAR SENSOR  (Flashing and then continuously on)  (Flashing)  (If equipped)	Indicates that the radar cruise control sensor is dirty or covered with ice. A buzzer also sounds.	Clean the sensor.

Warning message	Details	Correction procedure
CRUISE NOT AVAILABLE  (Flashing and then continuously on)  CRUISE (Flashing)  (If equipped)	Indicates that the radar cruise control system is unable to judge vehicle-to-vehicle distance because the windshield wipers are set at high speed operation mode.  A buzzer also sounds.	Turn them off or set them to either the intermittent or the slow mode.
(Flashing) (If equipped)	Indicates that your vehicle is nearing the vehicle ahead (in radar cruise mode).  A buzzer also sounds.	Slow the vehicle by applying the brakes.
TAILLIGHT FAILURE	Indicates one or more stop lights are burned out.	Have the defective bulbs replaced by your Lexus dealer.

#### ■ Changing the engine oil (USA only)

Make sure to reset the oil change system.  $(\rightarrow P. 375)$ 

#### ■ Warning light display in radar cruise mode

In the following cases, the warning light may not be displayed even if vehicle-to-vehicle distance closes.

- When your vehicle and the vehicle ahead are traveling at the same speed or the vehicle ahead is traveling more quickly than your vehicle
- When the vehicle ahead is traveling at a very low speed
- Immediately after cruise control speed is set
- At the instant the accelerator pedal is depressed

Follow the correction procedure for problem in smart access system with push-button start.

After taking the specified steps to correct the suspected problem, check that the warning message turns off.

Interior buzzer	Exterior buzzer	Warning message	Details	Correction procedure
Once	_	KEY IS NOT DETECTED  (Comes on for 8 seconds.)  (Flashing)	Indicates that an attempt was made to start the engine without the electronic key being present, or the electronic key was not functioning normally.	Start the engine with the electronic key present.*
Once	3 times	KEY IS NOT DETECTED  (Flashing)	Indicates that a door other than the driver's door has been opened and closed with the "ENGINE START STOP" switch in any mode other than OFF and the electronic key outside of the detection area.	Confirm the location of the electronic key.

Interior buzzer	Exterior buzzer	Warning message	Details	Correction procedure
Once	3 times	KEY IS NOT DETECTED  (Flashing)	Indicates that the driver's door has been opened or closed with the shift lever in P, the "ENGINE START STOP" switch in any mode other than OFF and the electronic key outside of the detection area.	Turn the "ENGINE START STOP" switch OFF or confirm the location of the electronic key.
Con- tinuous	Con- tinuous	SHIFT TO RANGE  KEY IS NOT DETECTED  (Displayed alternately)  (Flashing)	Indicates that the driver's door has been opened or closed with the shift lever out of P, the "ENGINE START STOP" switch in any mode other than OFF and the electronic key outside of the detection area.	<ul> <li>Shift the shift lever to P.</li> <li>Confirm the location of the electronic key.</li> </ul>
Once	_	LOW KEY BATTERY  (Flashing)	Indicates that the key battery is low.	Replace the battery. $(\rightarrow P. 404)$

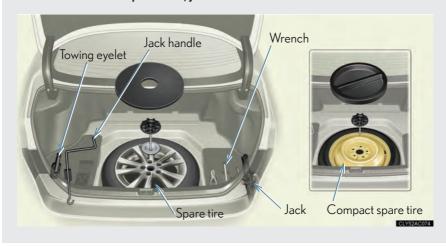
Interior buzzer	Exterior buzzer	Warning message	Details	Correction procedure
Once	_	WHEN STARTING THE ENGINE, DEPRESS THE BRAKE PEDAL	Indicates that a door has been opened or closed and the "ENGINE START STOP" switch has been switched twice to ACCESSORY mode from OFF.	Press the "ENGINE START STOP" switch while applying the brakes.
_	_	S/T IS NOT UNLOCKED  (Comes on for 15 seconds.)  (Flashing)	Indicates that the steering lock has not released.	Press the "ENGINE START STOP" switch again while turn- ing the steering wheel with the brake pedal depressed.
Once	_	DEPRESS THE BRAKE PEDAL, AND TOUCH THE ENGINE SWITCH WITH THE KEY	Indicates that the electronic key does not operate properly.	→P. 476
_	_	TO START, DEPRESSTHE BRAKE PEDAL, AND PUSH THE ENGINE SWITCH		

<sup>\*:</sup> If the engine does not start when the electronic key is inside the vehicle, the electronic key battery may be depleted or there may be difficulties receiving the signal from the key. (—)P. 30)

# 5-2. Steps to take in an emergency If you have a flat tire

# Remove the flat tire and replace it with the spare provided.

- Before jacking up the vehicle
  - Stop the vehicle on a hard, flat surface.
  - Set the parking brake.
  - Shift the shift lever to P.
  - Stop the engine.
  - Turn on the emergency flashers.
- Location of the spare tire, jack and tools



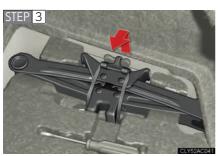
# Taking out the jack



Lift up the hook of the panel on the trunk floor.



Secure the panel using the hook provided.



Remove the hook.

# Taking out the spare tire



Lift up the hook of the panel on the trunk floor.



Secure the panel using the hook provided.



Loosen the center fastener that secures the spare tire.

# Replacing a flat tire

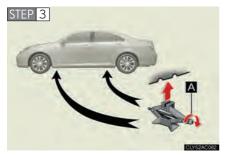


Chock the tires.

Flat tire		Wheelchock positions
Front	Left-hand side	Behind the rear right-hand side tire
	Right- hand side	Behind the rear left- hand side tire
Rear	Left-hand side	In front of the front right-hand side tire
Real	Right- hand side	In front of the front left- hand side tire



Slightly loosen the wheel nuts (one turn).



Turn the jack portion "A" by hand until the notch of the jack is in contact with the jack point.



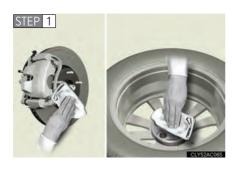
Raise the vehicle until the tire is slightly raised off the ground.



Remove all the wheel nuts and the tire.

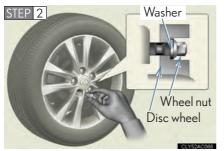
When resting the tire on the ground, place the tire so that the wheel design faces up to avoid scratching the wheel surface.

### Installing the spare tire



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, and the tire may come off the vehicle.

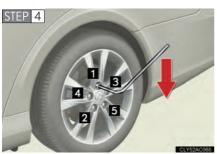


Install the spare tire and loosely tighten each nut by hand to approximately the same amount.

Turn the lug nuts until the washers come into contact with the wheel.



Lower the vehicle.



Firmly tighten each nut two or three times in the order shown in the illustration.

Tightening torque: 10.5 kgf·m (103 N·m, 76 ft·lbf)

STEP 5 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 only in an emergency.
- $\bullet$  Make sure to check the tire pressure of the compact spare tire. ( $\rightarrow$ P. 493)

### ■ When using the compact spare tire

As the compact spare tire is not equipped with the tire pressure warning valve and transmitter, low inflation pressure of the spare tire will not be warned. Also, if you replace the compact spare tire after the tire pressure warning light comes on, the light remains on.

■ If you have a flat front tire on a road covered with snow or ice (vehicles with compact spare tire)

Install the compact spare tire on the rear of the vehicle. Perform the following steps and fit tire chains to the front tires.

- STEP 1 Replace a rear tire with the compact spare tire.
- Replace the flat front tire with the tire removed from the rear of the vehicle.
- STEP 3 Fit tire chains to the front tires.

### ■ After completing the tire change

The tire pressure warning system must be reset.  $(\rightarrow P. 389)$ 

### **A** CAUTION

### ■Using the tire jack

Improper use of the tire jack may lead to death or serious injuries due to the vehicle suddenly falling off the jack.

- 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.
- Always check that the tire jack is securely set to the jack point.
- Do not put any part of your body under the vehicle supported by a jack.
- Do not start or run the engine while your vehicle is supported by the jack.
- Do not raise the vehicle while someone is in it.
- When raising the vehicle, do not put an object on or under the jack.
- Do not raise the vehicle to a height greater than that required to replace the tire.
- Use a jack stand if it is necessary to get under the vehicle.

Take particular care when lowering the vehicle to ensure that no one working on or near the vehicle may be injured.

### ■ Replacing a flat tire

Observe the following precautions to reduce the risk of 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 10.5 kgf·m (103 N·m, 76 ft·lbf) as soon as possible after changing wheels.
   Failure to follow these precautions could cause the nuts to loosen and the wheels may fall off, which could lead to an accident causing death or serious injury.

### **A** CAUTION

#### ■ When using the compact spare tire

- Remember that your compact spare tire is specifically designed for use with your vehicle. Do not use your compact spare tire on another vehicle.
- Do not use two compact spare tires simultaneously.
- Replace the compact spare tire with a standard tire as soon as possible.
- Avoid sudden acceleration, deceleration and braking, as well as sharp cornering.

#### ■ 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. Failing to observe this precaution may lead to an accident causing death or serious injury.

#### ■ When the compact spare tire attached

The vehicle speed may not be correctly detected, and the following systems may not operate correctly:

- ABS & Brake assist
- VSC
- TRAC
- Navigation system (if equipped)

### **⚠** NOTICE

#### Do not drive the vehicle with 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.

#### ■ 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.

#### ■ To avoid damaging the tire pressure warning valves and transmitters

Do not use liquid sealants on flat tires.

### 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.

If the engine will not start, even though correct starting procedures are being followed ( $\rightarrow$ P. 124), consider each of the following points.

■ The engine will not start even when 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.
   Add fuel to the vehicle.
- The engine may be flooded.
  Try to restart the engine once more following correct starting procedures. (→P. 124)
- There may be a malfunction in the engine immobilizer system.  $(\rightarrow P.78)$
- 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.

- lacktriangle The battery may be discharged. ( $\rightarrow$ P. 477)
- The battery terminal connections may be loose or corroded.
- The starter motor does not turn over

One of the following may be the cause of the problem.

• The engine starting system may be malfunctioning due to an electrical problem such as an open circuit or a blown fuse. However, an interim measure is available to start the engine. (→P. 472)

■ 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.
- $\bullet$  The battery may be discharged. ( $\rightarrow$ P. 477)
- 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.

### **Emergency start function**

When the engine does not start, the following steps can be used as an interim measure to start the engine if the "ENGINE START STOP" switch is functioning normally.

- STEP 1 Set the parking brake.
- STEP 2 Shift the shift lever to P.
- STEP 3 Set the "ENGINE START STOP" switch to the ACCESSORY mode.
- STEP 4 Push and hold the "ENGINE START STOP" switch 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 checked by your Lexus dealer.

## If the shift lever cannot be shifted from P

If the shift lever cannot be shifted with your foot on the brake, there may be a problem with the shift lock system (a system to prevent accidental operation of the shift lever). 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.

STEP 1 Set the parking brake.

STEP 2 Turn the "ENGINE START STOP" switch to the ACCESSORY mode.

STEP 3 Depress the brake pedal.



Pry the cover up with a flathead screwdriver or equivalent.



Press the shift lock override button.

The shift lever can be shifted while the button is pressed.

# 5-2. Steps to take in an emergency If you lose your keys

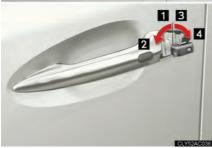
New genuine Lexus keys can be made by your Lexus dealer using the other key and the key number stamped on your key number plate.

## If the electronic key does not operate properly

If communication between the electronic key and vehicle is interrupted  $(\rightarrow P.~30)$  or the electronic key cannot be used because the battery is depleted, smart access system with push-button start and wireless remote control cannot be used. In such cases, the doors can be opened or the engine can be started by following the procedure below.

### Locking and unlocking the doors and key linked functions





Remove the cover on the driver's door handle using the mechanical key ( $\rightarrow$ P. 24) in order to perform the following operations.

- 1 Locks all doors
- Closes the windows/standard moon roof (turn and hold)
- 3 Unlocks the door

Turning the key rearward unlocks the driver's door. Turning the key once again unlocks the other doors.

4 Opens the windows/standard moon roof (turn and hold)

Return the cover to the original position after use.

### Changing "ENGINE START STOP" switch modes and starting the engine

STEP 1 Shift the shift lever to P and apply the brakes.



Touch the Lexus emblem side of the electronic key to the "ENGINE START STOP" switch.

An alarm will sound to indicate that the start function cannot detect the electronic key that is touched to the "ENGINE START STOP" switch if any of the doors is opened and closed while the key is touched to the switch.

seconds of the buzzer sounding, release the brake pedal and press the "ENGINE START STOP" switch. Modes can be changed each time the switch is pressed. (->P. 124)

To start the engine: Press the "ENGINE START STOP" switch within 10 seconds after the buzzer sounds, keeping the brake pedal depressed.

In the event that the "ENGINE START STOP" switch still cannot be operated, contact your Lexus dealer.

### ■ Stopping the engine

Shift the shift lever to P and press the "ENGINE START STOP" switch as you normally do when stopping the engine.

### ■ Replacing the key battery

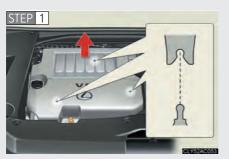
As the above procedure is the temporary measure, it is recommend that the electronic key battery be replaced immediately when the battery depletes.  $(\rightarrow P. 404)$ 

# If the vehicle battery is discharged

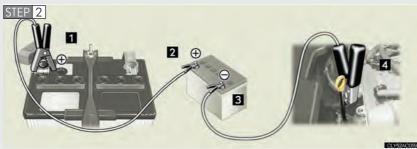
The following procedures may be used to start the engine if the vehicle's battery is discharged.

You can call your Lexus dealer or qualified repair shop.

If you have a set of jumper (or booster) cables and a second vehicle with a 12-volt battery, you can jump start your Lexus following the steps below.



Remove the cover.



Connecting the jumper cables.

- 11 Positive (+) battery terminal on your vehicle
- 2 Positive (+) battery terminal on the second vehicle
- 3 Negative (-) battery terminal on the second vehicle
- 4 Connect the jumper cable to ground on your vehicle as shown in the illustration.

- 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.
- STEP 4 Open and close any of the doors with the "ENGINE START STOP" switch OFF.
- "ENGINE START STOP" switch to the IGNITION ON mode, then start the vehicle's engine.
- STEP 6 Once the vehicle's engine has started, remove the jumper cables in the exact reverse order in which they were connected.

Once the engine starts, have the vehicle checked at your Lexus dealer as soon as possible.

### ■ Starting the engine when the battery is discharged

The engine cannot be started by push-starting.

### Avoiding a discharged battery

- Turn off the headlights and the audio system while the engine is turned 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, etc.

### **A** CAUTION

#### 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 the jumper cable is connected to the correct terminal and that it is not unintentionally in contact with any part other than the intended terminal.
- Do not allow the jumper cables to come into contact with the "+" and "-" terminals.
- Do not allow open flame or use matches, cigarette lighters or smoke near the battery.

#### ■ Battery precautions

The battery contains poisonous and corrosive acidic electrolyte, while related parts contain lead and lead compounds. Observe the following precautions when handling the battery.

- When working with the battery, always wear safety glasses and take care not to allow any battery fluids (acid) to come into contact with skin, clothing or the vehicle body.
- Do not lean over the battery.
- In the event that battery fluid comes into contact with the skin or eyes, immediately wash the affected area with water and seek medical attention.
   Place a wet sponge or cloth over the affected area until medical attention can be received.
- Always wash your hands after handling the battery support, terminals, and other battery-related parts.
- Do not allow children near the battery.

### ♠ NOTICE

### ■ When handling jumper cables

Be careful that the jumper cables do not become tangled in the cooling fan or any of the belts when connecting or disconnecting them.

# 5-2. Steps to take in an emergency If your vehicle overheats

### If your engine overheats:

STEP 1 Stop the vehicle in a safe place and turn off the automatic air conditioning system.

STEP 2 Check to see if steam is coming out from under the hood.

If you see steam:

Stop the engine. Carefully lift the hood after the steam subsides and then restart the engine.

If you do not see steam:

Leave the engine running and carefully lift the hood.

STEP 3 Remove the engine compartment cover.  $(\rightarrow P. 374)$ 

STEP 4 Check to see if the cooling fan is operating.

If the fan is operating:

Wait until the temperature of the engine (shown on the instrument cluster) begins to fall and then stop the engine.

If the fan is not operating:

Stop the engine immediately and call your local Lexus dealer.



After the engine has cooled down sufficiently, check the engine coolant level and inspect the radiator core (radiator) for any leaks.



Add engine coolant if required.

Water can be used in an emergency measure if engine coolant is unavailable.  $(\rightarrow P. 490)$ 



Install the reservoir cap.

Make sure that the engine coolant reservoir hose is positioned as shown in the illustration.

Have the vehicle checked at your nearest Lexus dealer as soon as possible.

### ■Overheating

If you observe the following, your vehicle may be overheating.

- The engine coolant temperature gauge enters the red zone or a loss of power is experienced.
- Steam is coming from under the hood.

### **A** CAUTION

### ■ To prevent an accident or injury when inspecting under the hood of your vehicle

- 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, causing serious injury such as burns.
- Keep hands and clothing away from the fan and other belts while the engine is running.
- Do not loosen the radiator cap while the engine and radiator are hot.
   Serious injury, such as burns, may result from hot coolant and steam released under pressure.

### **↑** NOTICE

#### ■ When adding engine coolant

Wait until the engine has cooled down before adding engine coolant. When adding coolant, do so slowly. Adding cool coolant to a hot engine too quickly can cause damage to the engine.

# 5-2. Steps to take in an emergency If the vehicle becomes stuck

Carry out the following procedures if the tires spin or the vehicle becomes stuck in mud, dirt, or snow.

- Stop the engine. Set the parking brake and put the shift lever in P.
- Remove the mud, snow, or sand from around the stuck tire.
- Place wood, stones or some other material to help provide traction under the tires.
- Restart the engine.
- Carefully apply the accelerator to free the vehicle.

### **A** CAUTION

### ■When attempting to free a stuck vehicle

If you choose to rock the vehicle back and forth to free it, make sure the surrounding area is clear, to avoid striking other vehicles, objects or persons. 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 and result in death or serious injury.

### **№** NOTICE

- To avoid damaging the transmission and other components
  - Avoid spinning the wheels and do not rev the engine.
  - If the vehicle remains stuck after trying these procedures, the vehicle may require towing to be freed.



Vehicle specifications

6

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### 6-1. Specifications

# Maintenance data (fuel, oil level, etc.)

### Dimensions and weight

Overall length		191.7 in. (4870 mm)
Overall width		71.7 in. (1820 mm)
Overall height *		57.1 in. (1450 mm)
Wheelbase		109.3 in. (2775 mm)
Tread	Front	62.0 in. (1575 mm)
	Rear	61.6 in. (1565 mm)
Vehicle capacity weight (Occupants + luggage)		900 lb. (410 kg)
Towing capacity (trailer weight + cargo weight)		1000 lb. (450 kg)

<sup>\*:</sup> Unladen vehicle

### Vehicle identification

### ■ Vehicle identification

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.

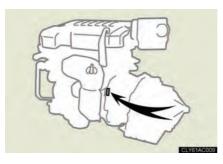


This number is stamped on the top left of the instrument panel.



This number is also on the Certification Label.

### ■ Engine number



The engine number is stamped on the engine block as shown.

### Engine

Model	2GR-FE
Туре	6-cylinder V type, 4-cycle, gasoline
Bore and stroke	$3.70\times3.27$ in. $(94.0\times83.0~\text{mm})$
Displacement	210.9 cu.in. (3456 cm <sup>3</sup> )
Drive belt tension	Automatic adjustment

### Fuel

Fuel type	Unleaded gasoline only
Octane rating	91 (Research octane number 96) or higher
Fuel tank capacity	18.5 gal. (70 L, 15.4 lmp. gal.)

### Lubrication system

Oil capacity (drain and refill)

without filter

6.0 qt. (5.7 L, 5.0 lmp. qt.)

with filter

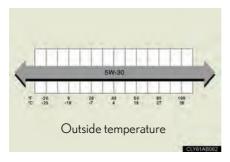
6.4 qt. (6.1 L, 5.3 lmp. qt.)

### ■ 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 multigrade engine oil

Recommended viscosity: SAE 5W-30



SAE 5W-30 is the best choice for good fuel economy and good starting in cold weather.

If SAE 5W-30 is not available, SAE 10W-30 oil may be used. However, it should be replaced with SAE 5W-30 at the next oil change.

The 5W portion of the oil viscosity rating indicates a 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 30 in 5W-30 indicates the oil viscosity when the oil is at its operating temperature. An oil with a higher viscosity may be better suited if the vehicle is operated at high speeds, or under extreme load conditions.

How to read oil container label:

The ILSAC (International Lubricant Standardization and Approval Committee) Certification Mark is added to some oil containers to help you select the oil you should use.



### Cooling system

Capacity	9.5 qt. (9.0 L, 7.9 lmp. 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 non-borate coolant with long-life organic acid technology  Do not use plain water alone.

### Ignition system

Spark plug

Make

DENSO FK

Gap 0.043 in. (1.1 mm)

FK20HR11

**↑** NOTICE

### ■ Iridium-tipped spark plugs

Use only above spark plugs. Do not adjust gaps for your engine performance or smooth driveability.

### Electrical system

Battery	
Open voltage at 68°F (20°C):	12.6 — 12.8 V Fully charged 12.2 — 12.4 V Half charged 11.8 — 12.0 V Discharged (Voltage is checked 20 minutes after the engine and all the lights are turned off)
Charging rates	5 A max.

### Automatic Transaxle

Fluid capacity*	6.87 qt. (6.5 L, 5.72 lmp. qt.)
Fluid type	Toyota Genuine ATF WS

<sup>\*:</sup> The fluid capacity is a reference quantity. If replacement is necessary, contact your Lexus dealer.

### **↑** NOTICE

Using automatic transmission fluid other than "Toyota Genuine ATF WS" may cause deterioration in shift quality, locking up of your transaxle accompanied by vibration, and ultimately damage the automatic transaxle of your vehicle.

#### **Brakes**

Pedal clearance *1	2.4 in. (61 mm) Min.
Pedal free play	0.04 — 0.24 in. (1.0 — 6.0 mm)
Brake pad wear limit	0.04 in. (1.0 mm)
Parking brake lining wear limit	0.04 in. (1.0 mm)
Parking brake pedal travel *2	7—10 clicks
Fluid type	SAE J1703 or FMVSS No. 116 DOT 3

<sup>\*1:</sup> Minimum pedal clearance when depressed with a force of 112 lbf (500 N, 51 kgf) while the engine is running.

 $<sup>^{*2}</sup>$ : Parking brake pedal travel when depressed with a force of 67.4 lbf (300 N, 30.6 kgf).

### Steering

Free play	Less than 1.2 in. (30 mm)
Power steering fluid	Automatic transmission fluid DEXRON® II or III

### Tires and wheels

## ► Type A

Tire size	P215/55R17 93V		
Tire inflation pressure (Recommended cold tire inflation pressure)	Priving under normal conditions Front: 30 psi (210 kPa, 2.1 kgf/cm² or bar) Rear: 30 psi (210 kPa, 2.1 kgf/cm² or bar) Spare: 30 psi (210 kPa, 2.1 kgf/cm² or bar) When driving at high speeds above 100 mph (160 km/h), in countries where such speeds are permitted by law, add 4.3 psi (30 kPa, 0.3 kgf/cm² or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.  Towing a trailer Front:		
	32 psi (220 kPa, 2.2 kgf/cm <sup>2</sup> or bar) Rear: 32 psi (220 kPa, 2.2 kgf/cm <sup>2</sup> or bar) Spare: 32 psi (220 kPa, 2.2 kgf/cm <sup>2</sup> or bar)		
Wheel size	17 × 7J		
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)		

### ► Type B

Tire size	P215/55R17 93V, T155/70D17 110M (spare)		
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 30 psi (210 kPa, 2.1 kgf/cm² or bar)* Rear: 30 psi (210 kPa, 2.1 kgf/cm² or bar)* Spare: 60 psi (420 kPa, 4.2 kgf/cm² or bar) *:When driving at high speeds above 100 mph (160 km/h), in countries where such speeds are permitted by law, add 4.3 psi (30 kPa, 0.3 kgf/cm² or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.		
	Towing a trailer Front:		
	32 psi (220 kPa, 2.2 kgf/cm <sup>2</sup> or bar) Rear: 32 psi (220 kPa, 2.2 kgf/cm <sup>2</sup> or bar)		
Wheel size	$17 \times 7J$ , $17 \times 4T$ (spare)		
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)		

### Light bulbs

	Light Bulbs	Bulb No.	W	Туре
	Headlights (low beam) Discharge bulbs* Halogen bulbs*	D4R H11	35 55	A B
	Headlights (high beam)	9005	60	С
	Front fog lights	9006	51	D
	Front turn signal lights	—	21	Е
	Front side marker lights	—	5	F
Exterior	Trunk light	—	5	G
	Rear side marker lights	—	5	F
	Stop/tail lights	7443	21/5	F
	Tail lights	7443	5	F
	Rear turn signal lights	—	21	Е
	Back-up lights	921	16	F
	Outer foot lights	_	5	F
Interior	Vanity lights	_	8	F
	Door courtesy lights	_	5	F
	Front interior/personal lights	—	5	F
	Rear interior light	_	5	G

<sup>:</sup> If equipped

A: D4R discharge bulbs

B: H11 halogen bulbs

C: HB3 halogen bulbs

D: HB4 halogen bulbs

E: Wedge base bulbs (amber)

F: Wedge base bulbs (clear)

G: Double end bulbs

### **Fuel information**

Your vehicle must use only unleaded gasoline.

Premium unleaded gasoline with an octane rating of 91 (Research Octane Number 96) or higher required for optimum engine performance. If 91 octane cannot be obtained, you may use unleaded gasoline with an octane rating as low as 87 (Research Octane Number 91). Use of unleaded gasoline with an octane rating lower than 91 may result in engine knocking. Persistent knocking can lead to engine damage and should be corrected by refueling with higher octane unleaded gasoline.

At minimum, the gasoline you use should meet the specifications of ASTM D4814 in the U.S.A. and CGSB3.5-M93 in Canada.

#### ■ Fuel tank opening for unleaded gasoline

To help prevent incorrect fueling, your Lexus has a fuel tank opening that only accommodates the special nozzle on unleaded fuel pumps.

### ■ 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.

### ■ 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.

#### ■ Gasoline quality standards

- Automotive manufacturers in the US, Europe and Japan have developed a specification for fuel quality called World-Wide Fuel Charter (WWFC) that is expected to be applied worldwide.
- The WWFC consists of four categories that are based on required emission levels. In the US, category 4 has been adopted.
- The WWFC improves air quality by lowering emissions in vehicle fleets, and customer satisfaction through better performance.

#### Lexus recommends the use of gasoline containing detergent additives

- Lexus recommends the use of gasoline that contains detergent additives to avoid build-up of engine deposits.
- All gasoline sold in the US contains detergent additives to clean and/or keep clean intake systems.

#### Lexus recommends the use of cleaner burning gasoline

Cleaner burning gasoline, including reformulated gasoline that contains oxygenates such as ethanol or MTBE (Methyl Tertiary Butyl Ether) is available in many areas.

Lexus recommends the use of cleaner burning gasoline and appropriately blended reformulated gasoline. These types of gasoline provide excellent vehicle performance, reduce vehicle emissions and improve air quality.

### ■ Lexus does not recommend blended gasoline

- Lexus allows the use of oxygenate blended gasoline where the oxygenate content is up to 10% ethanol or 15% MTBE.
- If you use gasohol in your Lexus, be sure that it has an octane rating no lower than 87.
- Lexus DOES NOT recommend the use of gasoline containing methanol.

### ■ Lexus does not recommend gasoline containing MMT

Some gasoline contains 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.

### **⚠** NOTICE

#### ■ Notice on fuel quality

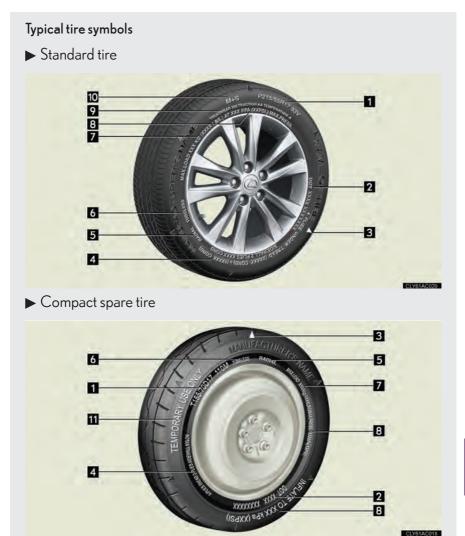
- Do not use improper fuels. If improper fuels are used the engine will be damaged.
- Do not use leaded gasoline.
   Leaded gasoline can cause damage to your vehicle's three-way catalytic converters causing the emission control system to malfunction.
- Do not use gasohol other than that stated here.
   Other gasohol may cause fuel system damage or vehicle performance problems.
- Use of unleaded gasoline with an octane rating lower than 91 may result in engine knocking. Persistent knocking can lead to engine damage and should be corrected by refueling with higher octane unleaded gasoline.

### ■ Fuel-related poor driveability

If after using a different type of fuel, poor driveability is encountered (poor hot starting, vaporization, engine knocking, etc.), 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.



1 Tire size  $(\rightarrow P. 501)$ 

**2** DOT and Tire Identification Number (TIN)  $(\rightarrow P.501)$ 

**3** Location of treadwear indicators  $(\rightarrow P. 387)$ 

4 Tire ply composition and materials

Plies are layers of rubber-coated parallel cords. Cords are the strands which form the plies in a tire.

5 Radial tires or bias-ply tires

A radial tire has "RADIAL" on the sidewall. A tire not marked "RADIAL" is a bias-ply tire.

6 "TUBELESS" or "TUBE TYPE"

A tubeless tire does not have a tube and air is directly filled in the tire. A tube type tire has a tube inside the tire and the tube maintains the air pressure.

Load limit at maximum cold tire inflation pressure  $(\rightarrow P. 391)$ 

Maximum cold tire inflation pressure  $(\rightarrow P. 493)$ This means the pressure to which a tire may be inflated.

Uniform tire quality grading

For details, see "Uniform tire quality grading" that follows.

 $\square$  Summer tire or all season tire  $(\rightarrow P. 392)$ 

An all season tire has "M+S" on the sidewall. A tire not marked "M+S" is a summer tire.

■ "TEMPORARY USE ONLY"  $(\rightarrow P.467)$ 

A compact spare tire is identified by the phrase "TEMPORARY USE ONLY" molded into its sidewall. This tire is designed for temporary emergency use only.

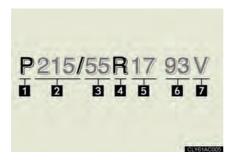
### Typical DOT and tire identification number (TIN)



- 1 DOT symbol\*
- 2 Tire Identification Number (TIN)
- Tire manufacturer's identification mark
- 4 Tire size code
- Manufacturer's optional tire type code (3 or 4 letters)
- 6 Manufacturing week
- 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.

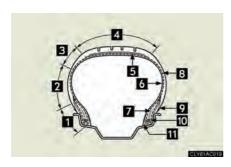
- 1 Tire use (P = Passenger car, T = Temporary use)
- 2 Section width (millimeters)
- Aspect ratio
  (tire height to section width)
- Tire construction code (R = Radial, D = Diagonal)
- 5 Wheel diameter (inches)
- 6 Load index (2 or 3 digits)
- Speed symbol (alphabet with one letter)

#### ■ Tire dimensions



- Section width
- 2 Tire height
- 3 Wheel diameter

### Tire section names



- 1 Bead
- 2 Sidewall
- **3** Shoulder
- 4 Tread
- **5** Belt
- 6 Inner liner
- Reinforcing rubber
- 8 Carcass
- 9 Rim lines
- 10 Bead wires
- 11 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.A. 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.

The 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 combination, 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 automatic 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)

Tire related term	Meaning
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
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 $1^{\star}$ 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 12-volt 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
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

Tire related term	Meaning
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
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

Tire related term	Meaning
СТ	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
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 side- wall	<ul> <li>(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</li> <li>(b) The outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle</li> </ul>
Light truck (LT) tire	A tire designated by its manufacturer as primarily intended for use on lightweight 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
Maximum permissible inflation pressure	The maximum cold inflation pressure to which a tire may be inflated

Tire related term	Meaning
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 side- walls 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
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 side- walls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands
Sidewall	That portion of a tire between the tread and bead

Tire related term	Meaning
Sidewall separation	The parting of the rubber compound from the cord material in the sidewall
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

<sup>\*:</sup> Table 1 — Occupant loading and distribution for vehicle normal load for various 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 your preferences. Programming these preferences requires specialized equipment and may be performed by an authorized Lexus dealership.

It is also possible to customize certain vehicle features yourself using the navigation screen.

Some function settings are changed simultaneously with other functions being customized. Contact your Lexus dealer for further details.

#### Settings that can be customized at a dealer

The following table includes some settings that can be customized using the navigation system display.  $(\rightarrow P. 516)$ 

ltem	Function	Default setting	Customized setting
Smart access	Smart access system with push-button start	ON	OFF
system with push-button start (→P. 26)	Operation signal (Emergency flashers)	ON	OFF
	Operation signal (Buzzer)	ON	OFF

ltem	Function	Default setting	Customized setting
	Wireless remote control	ON	OFF
Wireless remote con- trol	Unlocking operation	Driver's door unlocked in one step, all doors unlocked in two steps	All doors unlocked in one step
	Automatic door lock function to be activated if door is not opened after being unlocked	ON	OFF
	Time elapsed before automatic door lock function is activated if door is not		30 seconds
(→P. 38)	opened after being unlocked		120 seconds
	Operation signal (Emergency flashers)	ON	OFF
	Operation signal (Buzzer volume)	Level 8	Level 1 to 8
	Door lock buzzer	ON	OFF
	Trunk unlocking function	ON	OFF
	Trunk unlocking operation	Push and hold	Push twice
			One push
	Panic function	ON	OFF

ltem	Function	Default setting	Customized setting
	Unlocking using a key	Driver's door unlocked in one step, all doors unlocked in two steps	All doors unlocked in one step
Door lock	Speed-detecting automatic door lock function	OFF	ON
(→P. 41)	Opening driver's door unlocks all doors	OFF	ON
	Shifting gears to P unlocks all doors	ON	OFF
	Shifting gears to position other than P locks all doors.	ON	OFF
Power windows (→P. 68)	Linked mechanical key operation	Open and close	OFF
			Open only
			Close only
	Wireless remote control linked operation	OFF	Open only
	Linked entry function	ON	OFF

ltem	Function	Default setting	Customized setting
	1.1.1.111	Open and close	OFF
	Linked mechanical key operation		Open only
			Close only
Moon roof (standard	Linked operation of com- ponents when mechanical key is used	Slide only	Tilt only
type) (→P. 71)	Wireless remote control linked operation	OFF	Open only
	Linked operation of com- ponents when wireless remote control used	Slide only	Tilt only
	Linked entry function	ON	OFF
Multi- information display (→P. 140)	Eco Driving Indicator Light	ON	OFF
Automatic	Light sensor sensitivity	Level 3	Level 1 to 5
light control	Time elapsed before headlights automatically turn off after doors are closed	30 seconds	0 seconds
system			60 seconds
(→P. 145)			90 seconds
Lights (→P. 145)	Daytime running light system (USA only)	ON	OFF
Intuitive park-	Back sensor operation display and buzzer	ON	OFF
ing assist	Buzzer volume	Level 3	Level1to 5
(→P. 165)	Distance which a sensor detects	4.5 ft. (150 cm)	1.8 ft. (60 cm)

ltem	Function	Default setting	Customized setting
	T 1 11 6 1.1.	15 seconds	OFF
	Time elapsed before lights turn off		7.5 seconds
			30 seconds
Illumination	Operation when the doors are unlocked	ON	OFF
(→P. 308)	Operation after the "ENGINE START STOP" switch turned OFF	ON	OFF
	Front foot well lighting	ON	OFF
	Outer foot light	ON	OFF
Seat belt reminder (→P. 441)	Vehicle speed linked seat belt reminder buzzer	ON	OFF

## Multi-information display ( $\rightarrow$ P. 140)

Country	Available languages	
Canada	English and French	

## Settings that can be customized using the navigation system display

You can customize the following settings using the navigation system display.

(For further information on customizing settings using the navigation system display, refer to the Navigation System Owner's Manual.)

ltem	Function	Default setting	Customized setting
	Smart access system with push-button start	ON	OFF
Smart access	Smart door unlocking	Driver's door	All the doors
system with	Time elapsed before auto-		OFF
push-button	matic door lock function is activated if door is not	60 seconds	30 seconds
start (→P. 26)	opened after being unlocked	oo seconds	120 seconds
	Operating signal (Emergency flashers)	On	Off
Wireless remote control (→P. 38)	Unlocking operation	Driver's door unlocked in one step, all doors unlocked in two steps	All doors unlocked in one step
	Time elapsed before auto-	60 seconds	OFF
	matic door lock function is activated if door is not		30 seconds
	opened after being unlocked		120 seconds
	Operation signal (Emergency flashers)	ON	OFF

ltem	Function	Default setting	Customized setting
	Unlocking using a key	Driver's door unlocked in one step, all doors unlocked in two steps	All doors unlocked in one step
Door lock (→P. 41)	Speed-detecting auto- matic door lock function	OFF	ON
	Opening driver's door unlocks all doors	OFF	ON
	Shifting gears to P unlocks all doors	ON	OFF
	Shifting gears to position other than P locks all doors.	ON	OFF
Automatic	Light sensor sensitivity	Level 3	Level1to 5
light control system (→P. 145)	Time elapsed before headlights automatically turn off after doors are	30 seconds	0 seconds
			60 seconds
	closed		90 seconds
Lights (→P. 145)	Daytime running light system (USA only)	ON	OFF

ltem	Function	Default setting	Customized setting
Automatic air conditioning	Switching between outside air and recirculated air mode linked to "AUTO" switch operation	Auto	Manual
system (→P. 200)	A/C Auto switch operation	Auto	Manual
	Exhaust gas sensor sensitivity	Standard	-3 to 3
	Time elapsed before lights turn off	15 seconds	OFF 7.5 seconds 30 seconds
Illumination (→P. 308)	Sensitivity of the ambient light sensor used for dimming the meter lights etc.	Standard	-2 to 2
	Sensitivity of the ambient light sensor used for brightening the meter lights etc.	Standard	-2 to 2
Seat belt reminder (→P. 441)	Vehicle speed linked seat belt reminder buzzer	ON	OFF

# Items to initialize

After reconnecting or performing maintenance on the battery, the following items must be initialized for normal system operation.

ltem	When to initialize	Reference
Engine oil maintenance data (USA only)	After changing engine oil	P. 375
Tire pressure warning system	When changing the tire inflation pressure by changing traveling speed or load weight, etc.	P. 388

## For owners

7

Reporting safety defects	
for U.S. owners	522
Seat belt instructions	
for Canadian owners	
(in French)	523

## 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 <a href="http://www.safercar.gov">http://www.safercar.gov</a>; or write to: Administrator, NHTSA, 1200 New Jersey Ave, S.E., Washington, DC 20590. You can also obtain other information about motor vehicle safety from <a href="http://www.safercar.gov">http://www.safercar.gov</a>.

## 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.

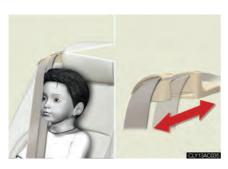
See the seat belt section for more detailed seat belt instructions in English.

#### 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 votre cou ou glisser de votre 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 vrillez pas la ceinture de sécurité.

## Guide de confort de ceinture de sécurité (sièges arrière extérieurs)



Si la sangle diagonale est proche du cou de la personne, faites coulisser le guide de confort de ceinture de sécurité vers l'avant.

#### Entretien et soin

#### ■ Ceintures de sécurité

Nettoyez avec un chiffon ou une éponge humectée d'eau savonneuse tiède. Profitez de l'occasion pour vérifier régulièrement que les ceintures ne sont pas effilochées, entaillées, ou ne paraissent pas exagérément usées.

## **A** ATTENTION

#### Détérioration 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. N'utilisez pas 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 en cas d'accident.

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For details of equipment related to the navigation system, such as the audio system and the air conditioning systems, refer to the "Navigation System Owner's Manual".

# Abbreviation/Acronym list

MEANING
Air Conditioning
Anti-lock Brake System
Adaptive Front lighting System
Artificial Intelligence Shift
Automatic Locking Retractor
Child Restraint System
Display
Electronic Control Unit
Event data recorder
Emergency Locking Retractor
Gross Axle Weight Ratings
Gross Vehicle Weight Rating
Emission inspection and maintenance
Lower Anchors and Tethers for Children
Light Emitting Diode
Methylcyclopentadienyl Manganese Tricarbonyl
Methyl Tertiary Butyl Ether
On Board Diagnostics
Pre-Collision System
Supplemental Restraint System
Tire Identification Number
Tire Pressure Warning System
Traction Control

ABBREVIATIONS	MEANING	
VIN	Vehicle Identification Number	
VSC	Vehicle Stability Control	

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	The key is lost		P. 474	If you lose your keys
	The battery runs out		P. 477	If the vehicle battery is discharged
	The doors cannot be locked		P. 41	Doors
E.	The horn begins to sound		P. 80	Alarm
	The vehicle is stuck in mud or sand		P. 483	If the vehicle becomes stuck



The warning light or indicator light comes on

P. 439

If a warning light turns on or a warning buzzer sounds...



#### ■Warning lights



Brake system warning light



P. 439



"ABS" warning light



P. 440



Low fuel level warning light P. 441



SRS warning light

P. 440



Open door warning light



Charging system warning P. 440



Malfunction indicator lamp





P. 440



Driver's seat belt reminder P. 441



Front passenger's seat belt reminder light



P. 441



Master warning light P. 441

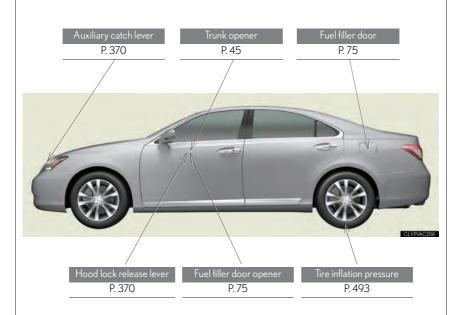


Pre-collision system warning light P. 440



Tire pressure warning light P. 441

#### **GAS STATION INFORMATION**



Fuel tank capacity	18.5 gal. (70L, 15.4 lmp. gal.)	
Fuel type	Unleaded gasoline only	P. 76, 488
Cold tire inflation pressure		P. 493
Engine oil capacity (Drain and refill)	qt. (L, Imp. qt.) Without filter 6.0 (5.7, 5.0) With filter 6.4 (6.1, 5.3)	
Engine oil type	Toyota Genuine Motor Oil or equivalent Oil grade: ILSAC multigrade engine oil Recommended oil viscosity: SAE 5W-30	P. 489



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