

2010

LS 600h L

OWNER'S MANUAL



2010

LS 600h L

OWNER'S MANUAL

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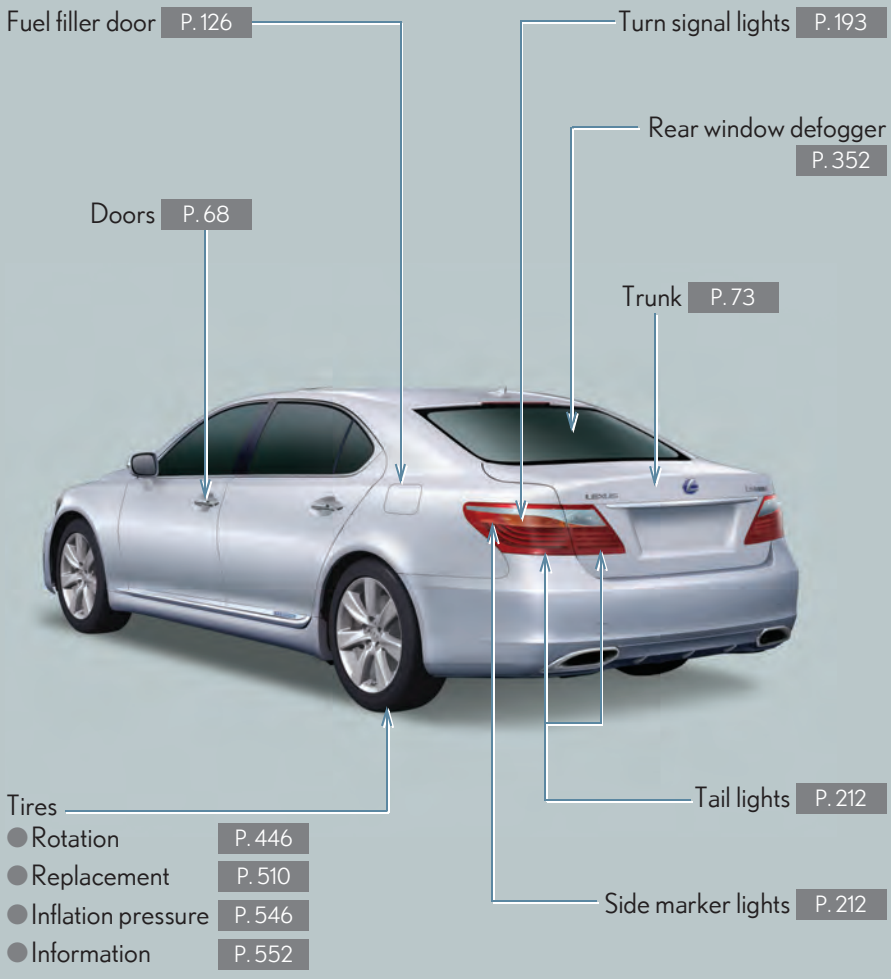
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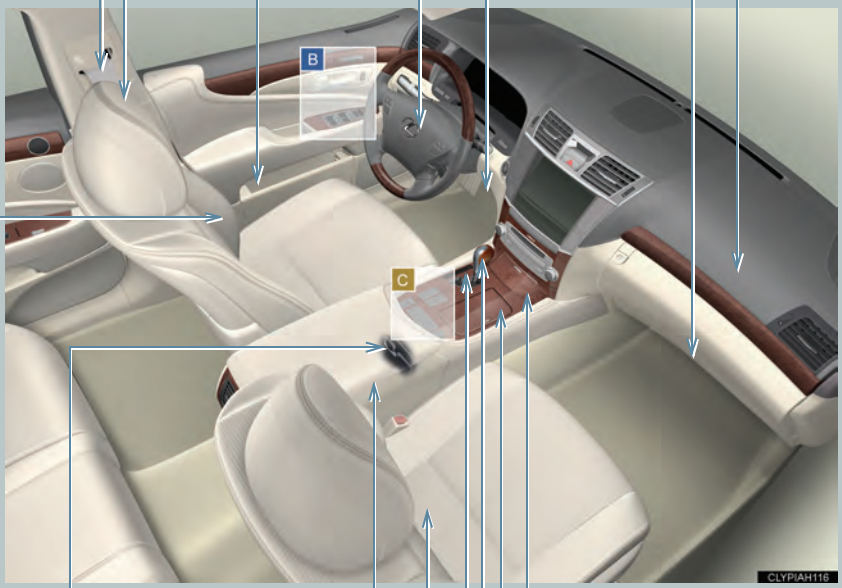
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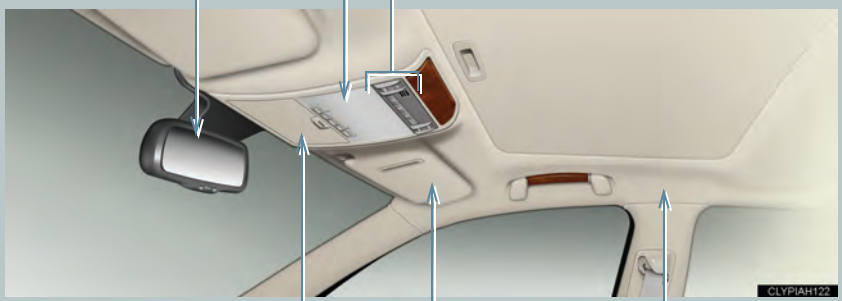
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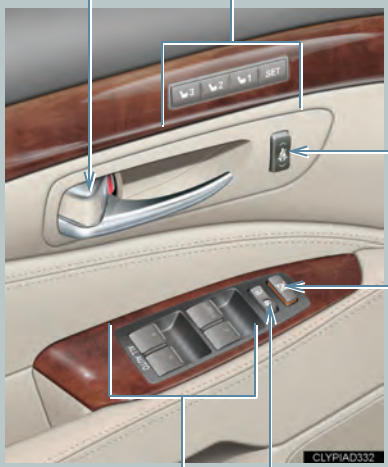
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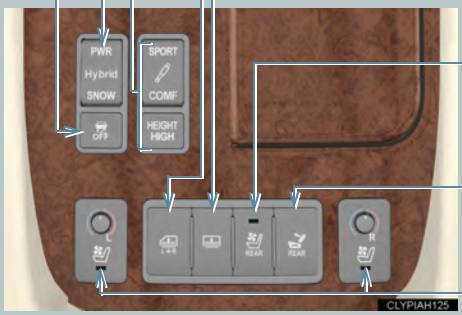
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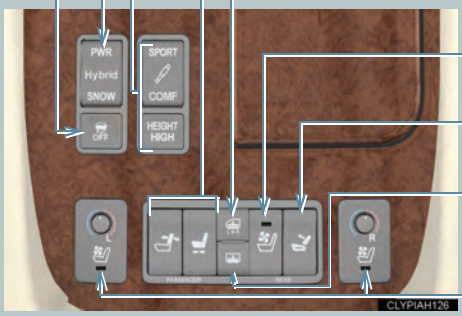
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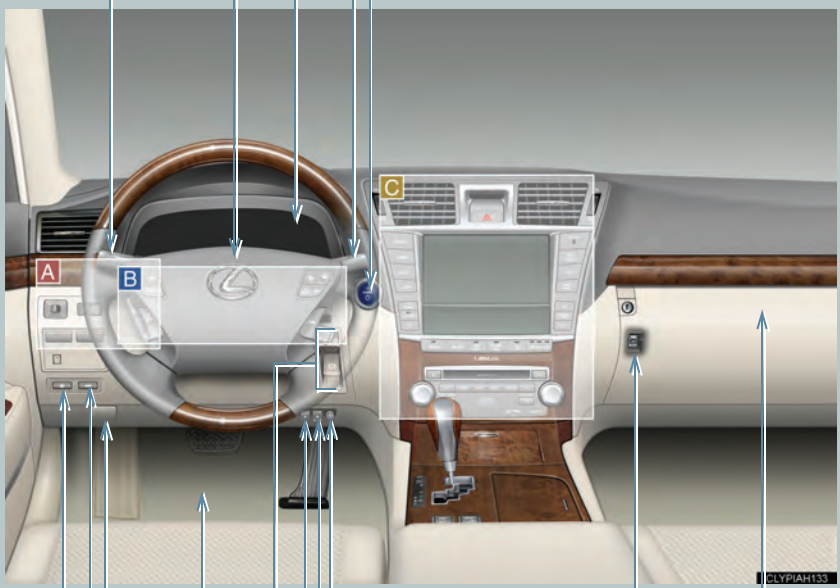
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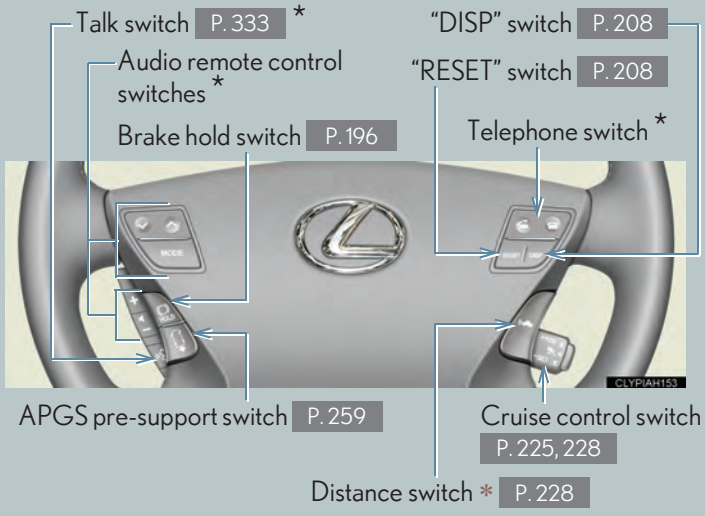
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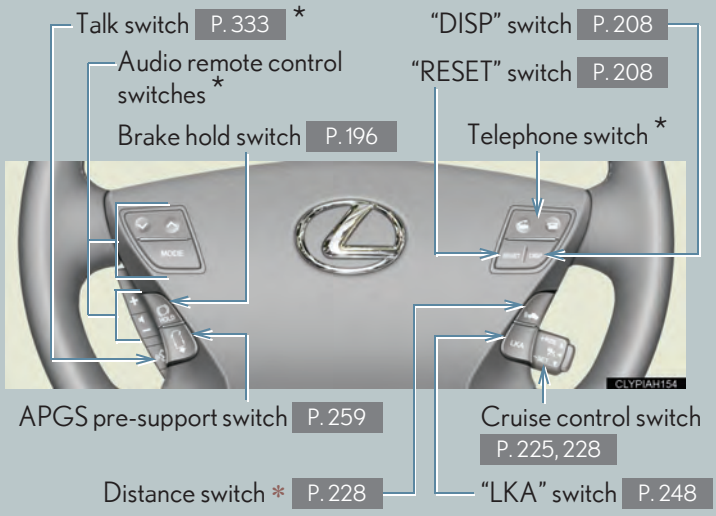
*: If equipped

B

▶ Without LKA (Lane-Keeping Assist)



▶ With LKA (Lane-Keeping Assist)



C



*: If equipped

*: Refer to "Navigation System Owner's Manual".

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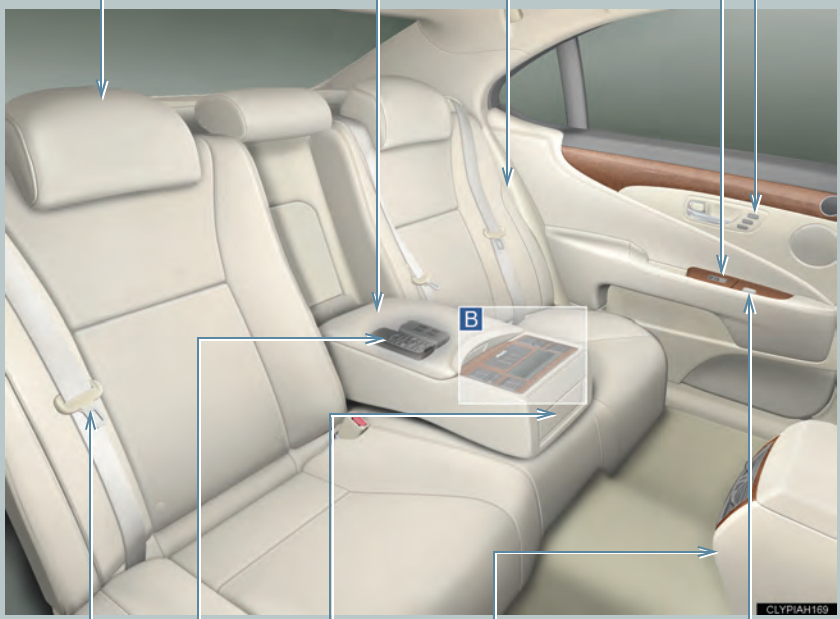
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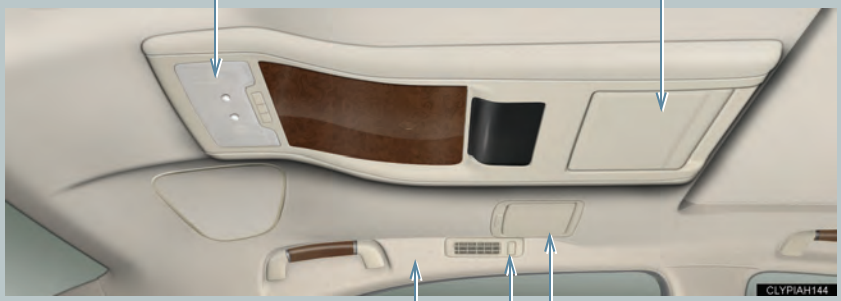
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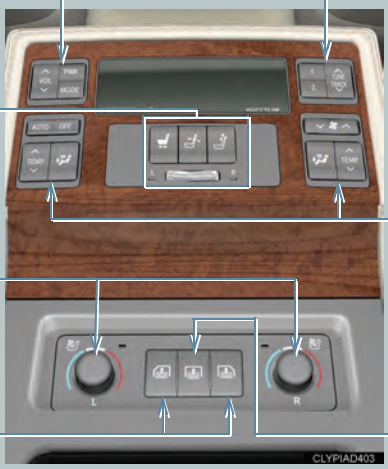
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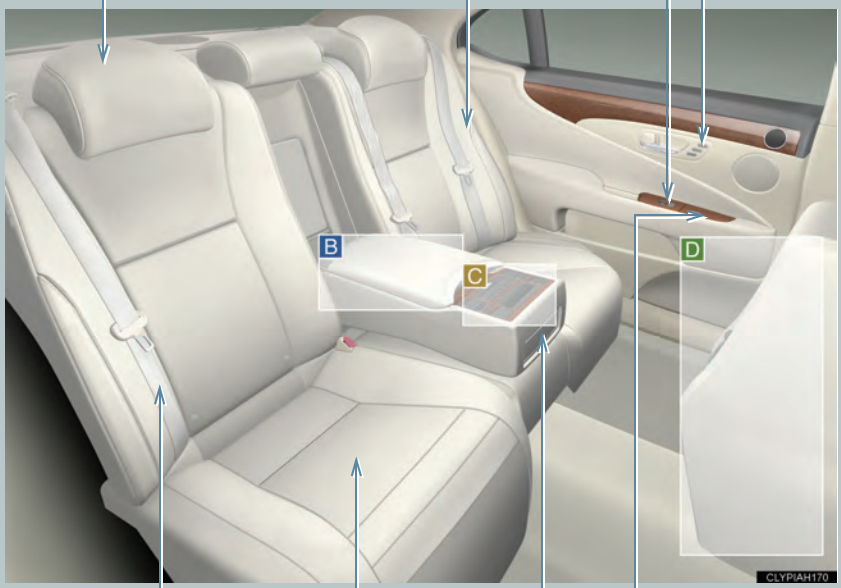
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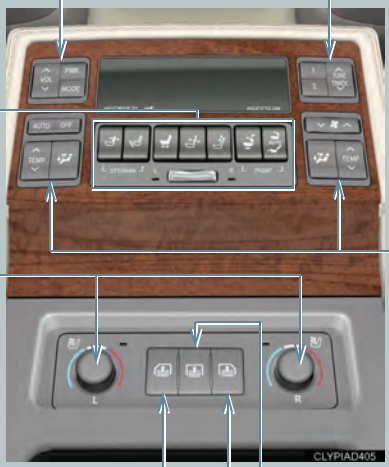


*: If equipped

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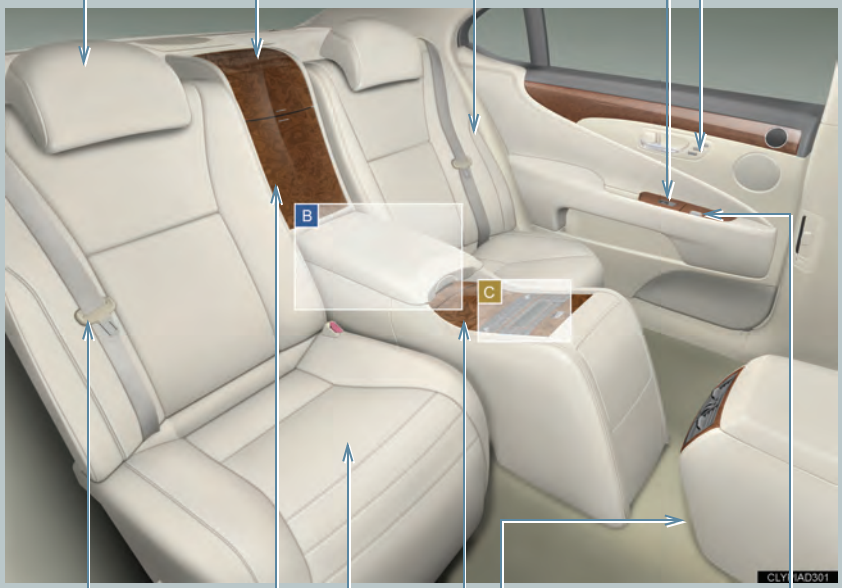
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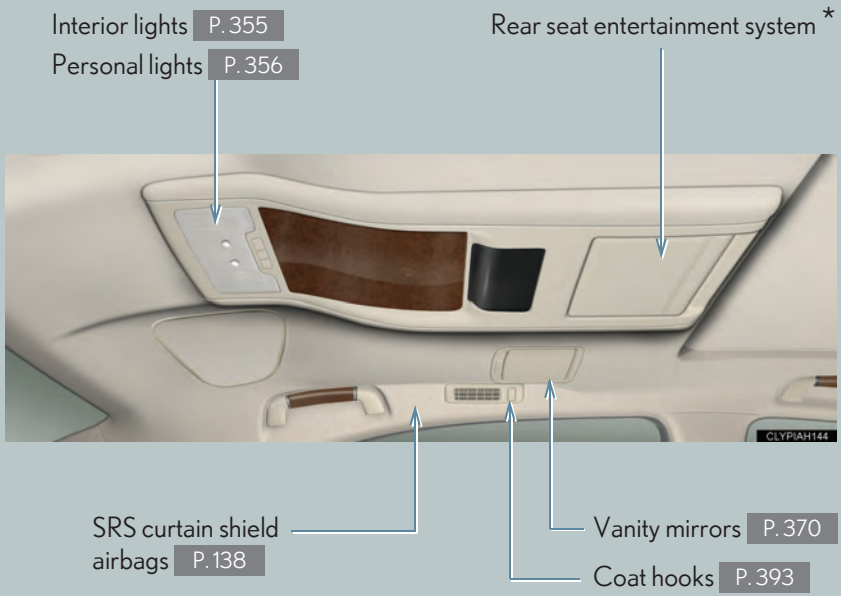
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For your information

Main Owner's Manual

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

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

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

Noise from under vehicle after turning off the hybrid system

Approximately five hours after the hybrid system 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.

High voltage parts and cables on the hybrid vehicles emit approximately the same amount of electromagnetic waves as the conventional gasoline powered vehicles or home electronic appliances despite of their electromagnetic shielding.

Unwanted noise may occur in the reception of the mobile two-way radio.

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.

⚠ 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 cellular phone or reading can result in a collision with resulting death or serious injury to you, your occupants or others.

General precaution regarding children's safety

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

Children may be able to start the vehicle or shift the vehicle into neutral. There is also a danger that children may injure themselves by playing with the 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.

Dispose of the hybrid battery (traction battery)

If your vehicle is disposed of without the hybrid battery having been removed, there is a danger of serious electric shock if high voltage parts, cables and their connectors are touched. In the event of that your vehicle must be disposed of, the hybrid battery must be disposed of your Lexus dealer or a qualified service shop. If the hybrid battery is not disposed of properly, they may cause electric shock that can result in death or serious injury.

Symbols used throughout this manual

Cautions & Notices

⚠ CAUTION

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

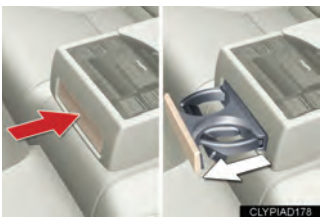
⚠ NOTICE

This is a warning against something which, if ignored, may cause damage to the vehicle or its equipment. 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).

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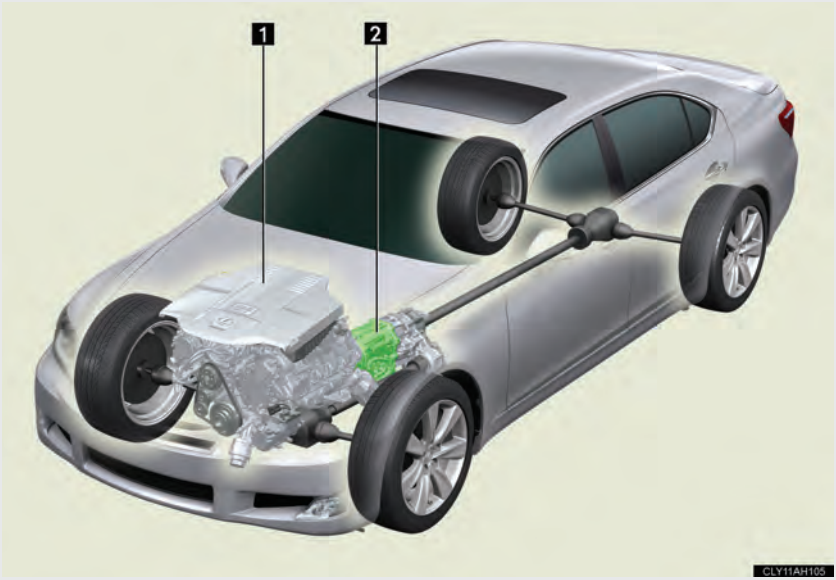
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Hybrid system

Your vehicle is a hybrid vehicle. It has characteristics different from conventional vehicles. Be sure you are closely familiar with the characteristics of your vehicle, and operate with care.

The hybrid system combines a gasoline engine and an electric motor (traction motor) according to driving conditions, improving fuel efficiency and reducing exhaust emissions.



1 Gasoline engine

2 Electric motor (Traction motor)

When stopped/during take-off

The gasoline engine stops when the vehicle is stopped. During take-off, the electric motor (traction motor) drives the vehicle. At slow speeds or when traveling down a gentle slope, the engine is stopped and the motor is used.

During normal driving

The gasoline engine is predominantly used. The electric motor (traction motor) charges the hybrid battery as necessary.

When accelerating sharply

The power of the hybrid battery (traction battery) is added via electric motor (traction motor) to that of the gasoline engine.

When braking (Regenerative braking)

The electric motor (traction motor) charges the hybrid battery (traction battery).

Regenerative braking

The motor generator converts kinetic energy to electric energy when:

- The accelerator pedal is released.
- The brake pedal is depressed with the shift lever in "D", "S" or "R".

Conditions in which the gasoline engine may not stop

The gasoline engine starts and stops automatically. However, it may not stop automatically in the following conditions:

- The gasoline engine is warming up.
- The hybrid battery (traction battery) is being charged.
- The hybrid battery (traction battery) temperature is low or high.

Charging the battery

- As the gasoline engine charges the hybrid battery (traction battery), the battery does not need to be charged from an outside source. However, if the vehicle is left parked for a long time the hybrid battery will slowly discharge. For this reason, be sure to drive the vehicle at least once every few months for at least 30 minutes or 10 miles (16 km). If the hybrid battery becomes fully discharged and you are unable to jump-start the vehicle with the 12-volt battery, contact your Lexus dealer.
- If the shift lever is in "N", the hybrid battery (traction battery) will not be charged. When driving in heavy traffic, operate the vehicle with the shift lever in "D" or "S" to avoid discharging the battery.
- To help prevent the 12-volt battery from becoming discharged, drive the vehicle at least once a month, and operate the accessories only when the "READY" indicator is on. When parking the vehicle, make sure the doors and trunk are closed and all lights are turned off.

After the 12-volt battery has discharged or has been changed or removed

The gasoline engine may idle at times when it usually would not. The vehicle idles continuously in order to re-learn the engine operating conditions and this does not indicate a malfunction. If this continues for more than a few days, contact your Lexus dealer.

■ **Sounds and vibrations specific to a hybrid vehicle**

There may be no engine sounds or vibrations even though the vehicle is able to move. Always put the shift lever in "P" when parked.

The following sounds or vibrations may occur when the hybrid system is operating, and are not a malfunction:

- Motor sounds may be heard from under the vehicle.
- Sounds may be heard from the hybrid battery (traction battery) behind the rear seat when the hybrid system starts or stops.
- Sounds may be heard from the transmission when the hybrid system starts or stops.
- Engine sounds may be heard when accelerating sharply.
- Sounds may be heard due to energy regeneration when you depress the brake pedal.
- Vibration may be felt when the gasoline engine starts or stops.
- You may hear cooling fan sounds coming from the air intake vents behind the rear seat.

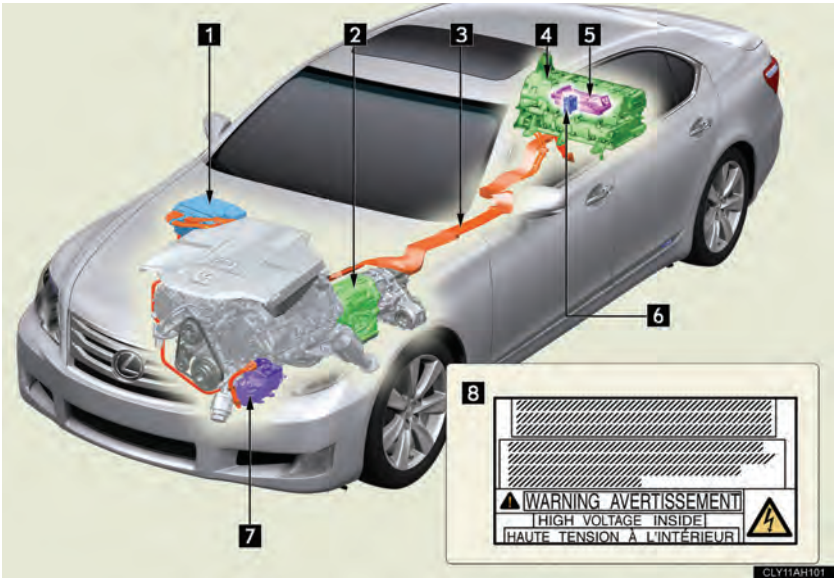
■ **Hybrid battery (traction battery) cooling**

The air conditioning system may operate automatically to cool the hybrid battery (traction battery).

■ **Maintenance, repair, recycling, and disposal**

Contact your Lexus dealer regarding maintenance, repair, recycling and disposal. Do not dispose of the vehicle yourself.

High voltage components



1 Power control unit
2 Electric motor (Traction motor)
3 High voltage cables (orange color)
4 Hybrid battery (Traction battery)
5 DC/DC converter
6 Service plug
7 Air conditioning compressor
8 Caution label

Take care when handling the hybrid system, as it contains a high voltage system (about 650V at maximum) as well as parts that become extremely hot when the hybrid system is operating. Obey the caution labels attached to the vehicle.

Hybrid battery air vents



There are air intake vents on the package tray for the purpose of cooling the hybrid battery (traction battery). If the vents become blocked, the hybrid battery may overheat, leading to a reduction in hybrid battery output.

Emergency shut off system

The emergency shut off system blocks off the high voltage current and stops the fuel pump to minimize the risk of electrocution and fuel leakage when a certain level of impact is detected by the impact sensor. If the emergency shut off system activates, your vehicle will not restart. To restart the hybrid system, contact your Lexus dealer.

Energy monitor/consumption screen



You can view the status of your hybrid system on the multi-information display (→P. 208) and the touch screen (→P. 328). The following images are examples only, and may vary slightly from actual conditions.

Energy monitor

● How to display on the touch screen:

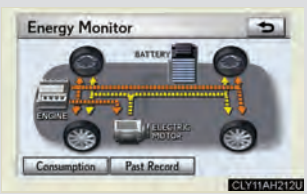
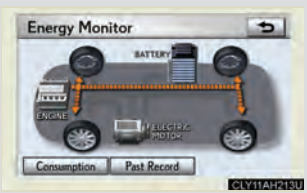
STEP 1 Press “INFO/PHONE” beside the touch screen.

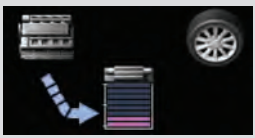
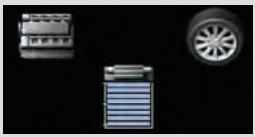
STEP 2 Touch “Fuel Consumption” on the “Information” screen.

If the “Energy Monitor” screen does not appear, touch “Energy”.

● How to display on the multi-information display:

Press the “DISP” switch on the steering wheel several times to select the energy monitor display.

	Touch screen	Multi-information display
When the vehicle is powered by the electric motor (traction motor)		
When the vehicle is powered by both the gasoline engine and the electric motor (traction motor)	 	
When the vehicle is powered by the gasoline engine		

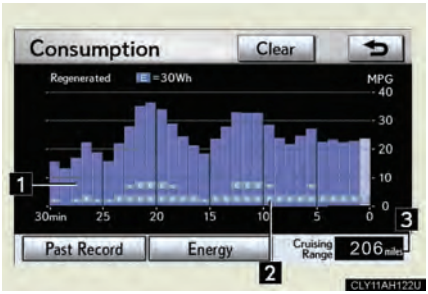
	Touch screen	Multi-information display
When the vehicle is charging the hybrid battery (traction battery)		
		
When there is no energy flow		
Hybrid battery (traction battery) status	Low Full 	Low Full 

Consumption

STEP 1 Press "INFO/PHONE" beside the touch screen.

STEP 2 Touch "Fuel Consumption" on the "Information" screen.

If the "Consumption" screen does not appear, touch "Consumption".



1 Fuel consumption in the past 30 minutes

2 Regenerated energy in the past 30 minutes

One symbol indicates 30 Wh. Up to 4 symbols are shown.

3 Cruising range

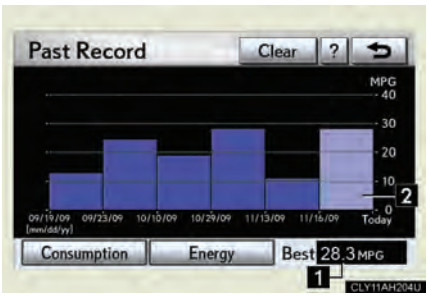
These images are examples only, and may vary slightly from actual conditions.

Past record

STEP 1 Press "INFO/PHONE" beside the touch screen.

STEP 2 Touch "Fuel Consumption" on the "Information" screen.

If the "Past Record" screen does not appear, touch "Past Record".



1 Best past fuel consumption

2 Average fuel consumption

Displays the average fuel consumption between each reset of the average fuel consumption on the multi-information display.

When resetting, if the average consumption is better than the best past fuel consumption will be updated.

These images are examples only, and may vary slightly from actual conditions.

Resetting the consumption data

Selecting "Clear" on the "Consumption" screen will reset the average fuel consumption. Selecting "Clear" on the "Past Record" screen will reset the past records. Selecting "Yes" will confirm resetting of all the data (except cruising range).

Hybrid warning message

A message is automatically displayed when a malfunction occurs in the hybrid system or an improper operation is attempted.



If a warning message is shown on the multi-information display, read the message and follow the instructions.

If a warning light comes on or a warning message is displayed, or the 12-volt battery is disconnected

The hybrid system may not start. In that case, try to start the system again. If the "READY" indicator does not come on, contact your Lexus dealer.

When refueling, the fuel filler door may take a few moments to open

As part of emission system operation, it may take up to 10 seconds for the fuel filler door to automatically release after the opener switch is pressed. Before refueling is possible, a message will be shown on the multi-information display. (→P. 126)

Running out of fuel

When the vehicle has run out of fuel and the hybrid system cannot be started, refuel the vehicle with at least enough gasoline to make the low fuel level warning light (→P. 501) go off. If there is only a small amount of fuel, the hybrid system may not be able to start. (The minimum amount of fuel to add to make the low fuel level warning light go out is about 3.4 gal. [13 L, 2.8 Imp. gal.], when the vehicle is on a level surface. This value may vary when the vehicle is on a slope.)

Hybrid battery (traction battery)

The hybrid battery (traction battery) has a limited service life. The lifespan of the hybrid battery (traction battery) can change in accordance with driving style and driving conditions.

⚠ CAUTION

■ High voltage precautions

The vehicle has high voltage DC and AC systems as well as a 12-volt system. DC and AC high voltage is very dangerous and can cause severe burns and electric shock that may result in death or serious injury.

- Never touch, disassemble, remove or replace the high voltage parts, cables and their connectors.
- The hybrid system will become hot after starting as the system uses high voltage. Be careful of both the high voltage and the high temperature, and always obey the caution labels attached to the vehicle.

5-seat models



4-seat models



- Never try to open the service plug access hole located behind the rear seat. The service plug is used only when the vehicle is serviced and is subject to high voltage.

⚠ CAUTION

Road accident cautions

Observe the following precautions to reduce the risk of injury:

- Pull your vehicle off the road, put the shift lever in "P", apply the parking brake, and turn the hybrid system off.
- Do not touch the high voltage parts, cables and connectors.
- If electric wires are exposed inside or outside your vehicle, an electric shock may occur. Never touch exposed electric wires.
- If a fluid leak occurs, do not touch it as it may be strong alkaline electrolyte from the hybrid battery (traction battery). If it comes into contact with your skin or eyes, wash it off immediately with a large amount of water or if possible, boric acid solution. Seek immediate medical attention.
- If a fire occurs in the hybrid vehicle, leave the vehicle as soon as possible. Never use a fire extinguisher that is not meant for electric fires. Using even a small amount of water may be dangerous.
- If your vehicle needs to be towed, do so with four wheels raised. If the wheels with the electric motor (traction motor) are on the ground when towing, the motor may continue to generate electricity. This may cause an electricity leakage leading to a fire. (→P. 489)

Nickel-metal hydride battery

Your vehicle contains a sealed nickel-metal hydride battery. If disposed of improperly, it is hazardous to the environment and there is a risk of severe burns and electrical shock that may result in death or serious injury.

Emergency shut off system

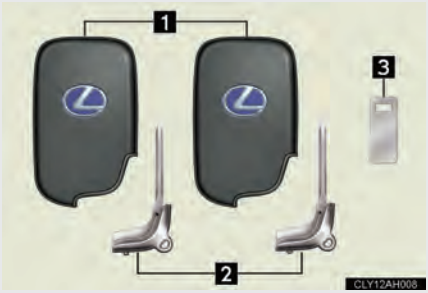
- Carefully check to see if there are exposed high voltage parts or cables. Never touch the parts or cables. (→P. 38)
- Carefully inspect the ground under the vehicle. If you find that liquid has leaked onto the ground, the fuel system may have been damaged. Leave the vehicle as soon as possible.

NOTICE

■ **Hybrid battery air vents**

- Do not put foreign objects over the air vents. The hybrid battery (traction battery) may overheat and be damaged.
- Clean the air vents regularly to prevent the hybrid battery (traction battery) from overheating.
- Do not wet the air vents. It may cause a short circuit and damage the hybrid battery (traction battery).
- Do not carry large amounts of water such as water cooler bottles in the vehicle. If water spills over the hybrid battery (traction battery), the battery may be damaged.

The following keys are provided with the vehicle.



1 Electronic keys
- Operating the smart access system with push-button start (→P. 52)
- Operating the wireless remote control function (→P. 65)

2 Mechanical keys

3 Key number plate

Card key



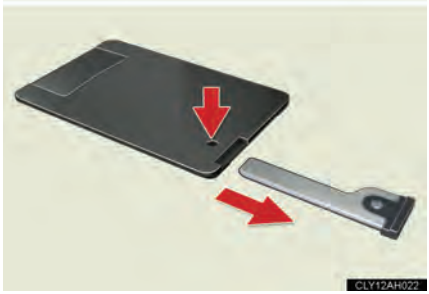
1 Electronic key

Operating the smart access system with push-button start (→P. 52)

2 Mechanical key

Using the mechanical key





Take out the mechanical key.

The mechanical key can only be inserted in one direction, as the key only has grooves on one side. If the key cannot be inserted in a lock cylinder, turn it over and re-attempt to insert it.

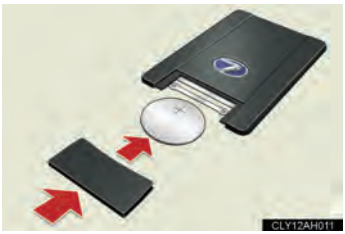
After using the mechanical key, store it in the electronic key. Carry the mechanical key together with the electronic key. If the electronic key battery is depleted or the entry function does not operate properly, you will need the mechanical key. (→P. 523)

Card key

- The mechanical key that is stored inside the card key should be used only if a problem arises, such as when the key does not operate properly.
- If it is difficult to take out the mechanical key, push down the lock release button using a pen tip etc. If it is still difficult to pull it out, use a coin etc.



- To store the mechanical key in the card key, insert it inside while pressing the lock release button.



- If the battery cover is not installed and the battery falls out or if the battery was removed because the key got wet, reinstall the battery with the positive terminal facing the Lexus emblem.
- The card key is not waterproof.

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

Turn the trunk opener main switch off and lock the glove box as circumstances demand. (→P. 74, 360)

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.

To have a new key made

New genuine Lexus keys can be made by your Lexus dealer using the keys provided with your vehicle; the electronic keys, card key and key number plate.

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

Observe the following:

- Do not drop the keys, subject them to strong shocks or bend them.
- Do not expose the keys to high temperatures for a long period of time.
- Do not get the keys wet or wash them in an ultrasonic washer etc.
- Do not attach metallic or magnetic materials to the keys or place the keys close to such materials.
- Do not disassemble the electronic keys.
- Do not place the keys near objects that produce magnetic fields, such as TVs, audio systems, glass top ranges, or medical electrical equipment, such as low-frequency therapy equipment.

When a vehicle key is lost

If the key remains lost, the risk of vehicle theft increases significantly. Visit your Lexus dealer immediately with all remaining electronic keys and the card key that was provided with your vehicle.

Precautions for handling the card keys

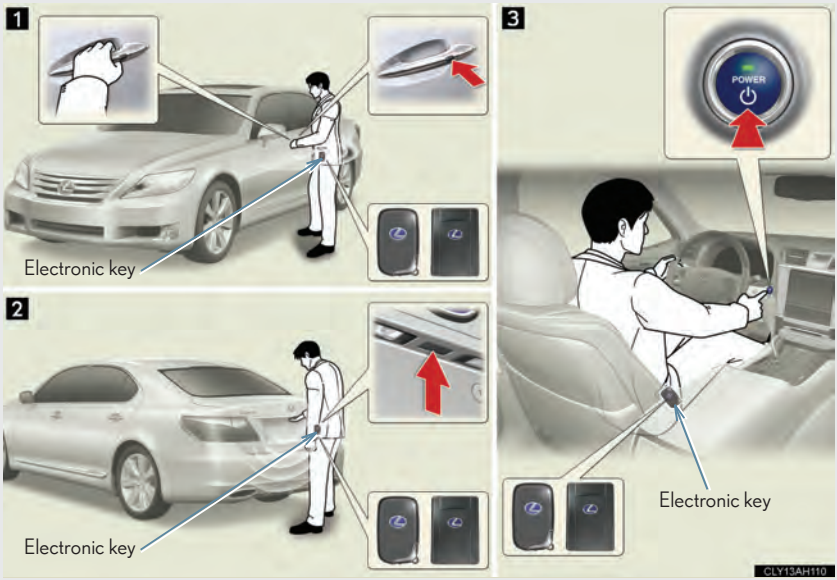
- Do not apply excess force when inserting the mechanical key to the card key. Doing so may damage the card key.
- If the battery or card key terminals get wet, the battery may corrode and the card key may stop working.
  If the key is dropped into water, or if drinking water etc. is spilled on the key, immediately remove the battery cover and wipe the battery and terminals. (To remove the battery cover, lightly grasp and pull it.) If the battery is corroded, have your Lexus dealer replace the battery.
- Do not crush the battery cover or use a screwdriver to remove the battery cover. Forcibly removing the battery cover may bend or damage the key.
- If the battery cover is frequently removed, the battery cover may become loose.
- When installing the battery, make sure to check the direction of the battery.
  Installing the battery in the wrong direction may cause the battery to deplete rapidly.

NOTICE

- The surface of the card key may be damaged, or its coating may peel off in the following situations:
  - The card key is carried together with hard objects, such as coins or keys.
  - The card key is scraped with a sharp object, such as a tip of mechanical pencil.
  - The surface of the card key is wiped with thinners or benzene.

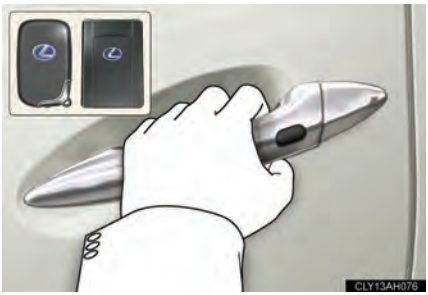
Smart access system with push-button start

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



1 Unlocks and locks the doors (→P. 53)
2 Opens the trunk (→P. 53)
3 Starts and stops the hybrid system (→P. 183)

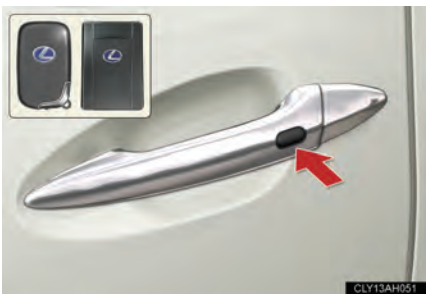
Unlocking and locking the doors



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 moon roof.

Opening the trunk

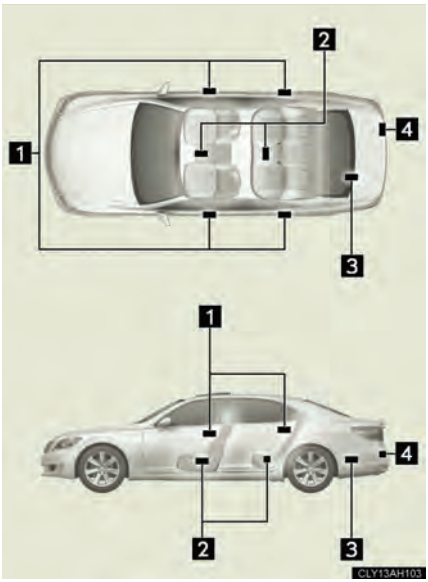


Press the button.

The trunk lid automatically opens fully.

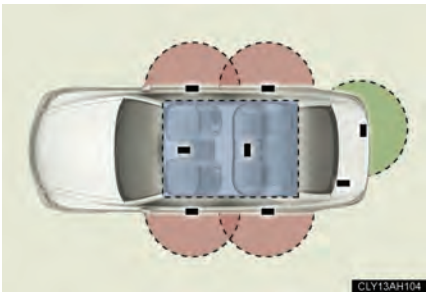
Antenna location and effective range

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 an outside door handle. (Only the doors detecting the key can be operated.)

- When opening 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 hybrid system or changing "POWER" 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 moon roof: A buzzer sounds to indicate that the windows and moon roof are operating.

Door lock buzzer

If an attempt to lock the doors is made when a door is not fully closed, a buzzer sounds continuously. Fully close the door to stop the buzzer, and lock the vehicle once more.

Adjusting the volume of the buzzer

The operation signal buzzer and door lock buzzer can be set to the desired volume.



1 Increases the volume

2 Decreases the volume

The buzzer can be turned off by turning the knob fully clockwise.

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, wireless remote control and immobilizer system from operating properly:
(Ways of coping: →P. 523)

- When the electronic key battery is depleted
- Near a TV tower, electric power plant, gas station, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
- When carrying a portable radio, cellular phone, cordless phone or other wireless communication 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 other wireless keys (that emit radio waves) are being used nearby
- When carrying the electronic key together with the following devices that emit radio waves
  - Another vehicle's electronic key or a wireless key that emits radio waves
  - Personal computers or personal digital assistants (PDAs)
  - Digital audio players
  - Portable game systems
- If window tint with a metallic content or metallic objects are attached to the rear window

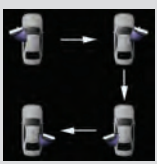
Switching the door unlock function

It is possible to set which doors the entry function unlocks using the wireless remote control.

STEP 1 Turn the "POWER" switch OFF.

STEP 2 When the indicator light on the key surface is not on, press and hold , , or for about 5 seconds while pressing and holding 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	Beep
	Hold the driver's door handle to unlock only the driver's door.	Exterior: Beeps 3 times Interior: Rings once
	Hold a passenger's door handle to unlock all the doors.	
	Hold the door handle to unlock the front and rear doors on your side.	Exterior: Beeps 4 times Interior: Rings once
	Hold the door handle to unlock the door.	Exterior: Beeps once Interior: Rings once
	Hold a door handle to unlock all doors.	Exterior: Beeps twice Interior: Rings once

STEP 3 Unlock the doors using the wireless remote control and open one of the doors.

If a door is not opened within 60 seconds after is pressed, the doors will be locked again and the alarm will automatically be set.
In case that the alarm is triggered, immediately stop the alarm. (→P. 133)

■ **Battery-saving function**

In the following circumstances, the entry function is disabled in order to prevent the 12-volt battery from discharging and the electronic key battery from depleting.

- When the entry function has not been used for 30 days 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 when carrying the electronic key on your person.
- The vehicle is locked/unlocked using the wireless remote control function. (→P. 65)
- The vehicle is locked/unlocked using the mechanical key. (→P. 523)

■ **Electronic key battery depletion**

- The standard battery life is 1 to 2 years. (The card key battery life is about a year and a half.)
- If the battery becomes low, an alarm will sound in the cabin when the hybrid system stops. (→P. 61)
- 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. 464)
- To avoid serious deterioration, do not leave the electronic key within 3 ft. (1 m) of the following electrical appliances that produce a magnetic field:
  - TVs
  - Personal computers
  - Cellular phones, cordless phones and battery chargers
  - Recharging cellular phones or cordless phones
  - 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, floor or door pockets, or in the glove box when the hybrid system is started or "POWER" 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 hybrid system if the electronic key is near the window.
- The doors may unlock if a large amount of water splashes on the door handle, such as in the rain or in a car wash when the electronic key is within the effective range. (The door will automatically be locked after approximately 60 seconds if the doors are not opened and closed.)
- 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 ft. (2 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 is used to prevent theft of the vehicle and unforeseeable accidents resulting from erroneous operation. Perform the appropriate correction procedure described in the following table:

Alarm	Situation	Correction procedure
Exterior alarm sounds once for 2 seconds.	An attempt was made to lock the doors using the entry function while the electronic key was still inside the passenger compartment.	Retrieve the electronic key from the passenger compartment and lock the doors again.
	The trunk was closed with the electronic key inside and all doors were locked.	Retrieve the electronic key from the trunk and close the trunk lid.
Exterior alarm sounds once for 60 seconds.	An attempt was made to exit the vehicle and lock the doors while carrying the electronic key without first turning the "POWER" switch OFF.	Turn the "POWER" switch OFF and lock the doors again.
Exterior alarm sounds once for 10 seconds.	An attempt was made to lock the vehicle while a door was open.	Close all of the doors and lock the doors again.

Alarm	Situation	Correction procedure
Interior alarm pings continuously.	The “POWER” switch was turned to ACCESSORY mode while the driver’s door was open (or the driver’s door was opened while the “POWER” switch was in ACCESSORY mode).	Turn the “POWER” switch OFF and close the driver’s door.
	The “POWER” switch was turned OFF while the driver’s door was open.	Close the driver’s door.
Interior alarm sounds continuously. *1	When the “POWER” switch is in ON or ACCESSORY 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” and turn the “POWER” switch OFF.
Interior and exterior alarms sound continuously. *1	When the “POWER” switch is in ON or ACCESSORY mode, the driver's door was closed after the key was carried outside the vehicle, and the shift lever was not in “P”.	Shift the shift lever to “P”, turn the “POWER” switch OFF and close the driver's door again.
Interior alarm pings once. *1	The electronic key has a low battery.	Replace the electronic key battery.
	An attempt was made to start the hybrid system without the electronic key being present, or the electronic key was not functioning normally.	Start the hybrid system with the electronic key present. *2

Alarm	Situation	Correction procedure
Interior alarm pings once and exterior alarm sounds 3 times. *1	The driver's door was closed after the key was carried outside the vehicle, and the "POWER" switch was not turned OFF.	Turn the "POWER" switch OFF and close the driver's door again.
	An occupant carried the electronic key outside the vehicle and closed the door while the "POWER" switch was not OFF.	Bring the electronic key back into the vehicle.

*1: A warning message will be shown on the multi-information display in the instrument cluster.

*2: If the hybrid system 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. 59)

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

- Locking and unlocking the doors and trunk: Use the mechanical key. (→P. 523)
- Starting the hybrid system: →P. 524

■ **When the electronic key battery is fully depleted**

→P. 464

■ **Customization**

Settings (e.g. smart access system with push-button start) can be deactivated. (Customizable features →P. 563)

Certification for the smart access system with push-button start

▶ U.S.A.

FCC ID: NI4TMLF-4

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.

▶ 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.

⚠ CAUTION

Caution regarding interference with electronic devices

- People with implanted pacemakers or cardiac defibrillators should keep away from the smart access system antennas. (→P. 55) 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.

Wireless remote control

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



1 Locks all doors

2 Unlocks all doors

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

3 Opens the windows and moon roof (press and hold)*

4 Opens the trunk (press and hold)

5 Sounds alarm (press and hold) (→P. 133)

*: 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.

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

Door lock buzzer

If an attempt to lock the doors is made when a door is not fully closed, a buzzer sounds continuously. Fully close the door to stop the buzzer, and lock the vehicle once more.

■ **Adjusting the volume of the buzzer**

The operation signal buzzer and door lock buzzer can be set to the desired volume. (→P. 56)

■ **Alarm**

Using the wireless remote control to lock the door will set the alarm system. (→P. 133)

■ **Electronic key battery depletion**

→P. 59

■ **Security feature**

→P. 61

■ **If the wireless remote control does not operate properly**

- Locking and unlocking the doors and trunk: Use the mechanical key. (→P. 523)
- Starting the hybrid system: →P. 524

■ **When the electronic key battery is fully depleted**

→P. 464

■ **Conditions affecting operation**

→P. 57

■ **Customization**

Settings (e.g. trunk unlocking function) can be changed. (Customizable features →P. 563)

Certification for wireless remote control

FCC ID: HYQ14ACX
FCC ID: NI4TMRF-002
FCC ID: HYQ14AEB
FCC ID: HYQ14ADF
FCC ID: NI4TMRF-001
FCC ID: HYQ14AEF

▶ U.S.A.

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.

▶ 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

→P. 53

Wireless remote control

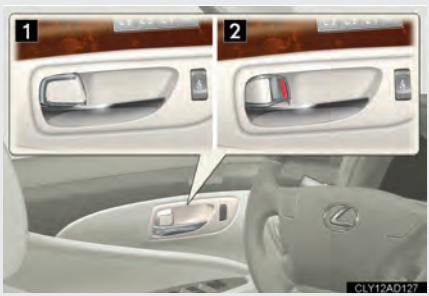
→P. 65

Door lock switch



1 Locks all doors
2 Unlocks all doors

Inside lock button



1 Locks the door
2 Unlocks the door

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

Locking the front doors from the outside without a key

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

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 canceled:

Function	Operation
Shift position linked door locking function	Shifting the shift lever out of "P" with the hybrid system on 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 "POWER" switch OFF.

Setting and canceling the functions

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

STEP 1 Close all the doors and turn the “POWER” switch to ON mode. (Perform step 2 within 20 seconds.)

STEP 2



Shift the shift lever to “P” or “N”, and press and hold the driver's door lock switch (or) for 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 switch position
Shift position linked door locking function	P	
Shift position linked door unlocking function		
Speed linked door locking function	N	
Driver's door linked door unlocking function		

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.

■ **Door closer**

In the event that a door is left slightly open, the door closer will automatically close it to the fully closed position.

- The door closer will operate regardless of "POWER" switch mode.
- The door closer will not function if the door has been closed while pulling the inside or outside door handle.
- The door can be opened by pulling the inside or outside door handle, even when the door closer is operating (except when the lock button is in the lock position or the child-protector lock is set).
- The motor sound may be heard for several seconds after the door closer closes the door. This does not indicate a malfunction.

■ **Using the mechanical key**

The doors can also be locked and unlocked with the mechanical key. (→P. 523)

■ **Customization**

Settings (e.g. unlocking function using a key) can be changed.
(Customizable features →P. 563)

⚠ CAUTION

■ To prevent an accident

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

- 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, as the doors may be opened even if the inside lock buttons are in locked position.
- Set the rear door child protector locks when children are seated in the rear seat.

■ Door closer

In the event that a door is left slightly open, the door closer will automatically close it to the fully closed position. If the child-protector lock is set, the door closer will not stop during operation even if an attempt is made to open the door from inside the vehicle. Be careful not to catch fingers or anything else in the door. Failure to do so may result in serious injury.

⚠ NOTICE

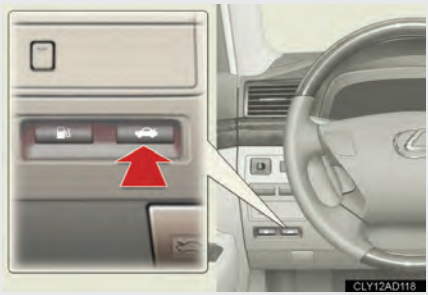
■ To prevent door closer malfunction

Do not frequently repeat opening and closing of doors, or apply excessive force to a door while the door closer is operating.

Trunk

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

Opening the trunk from inside the vehicle



Press the opener switch.

The trunk lid automatically opens fully.

Opening the trunk from outside the vehicle

▶ Entry function
→P. 53

▶ Wireless remote control
→P. 65

Trunk closer switch



Pressing the switch closes the trunk lid automatically. (A buzzer sounds.)

Pressing the switch while the trunk lid is closing opens the trunk lid again.

Canceling the trunk opener feature



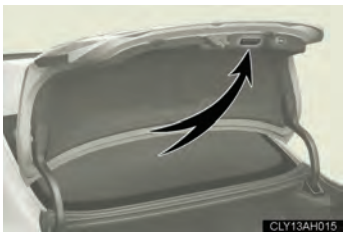
Turn the main switch in the glove box off to disable the trunk opener.

1 On

2 Off

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

Trunk handle



Use the trunk handle when closing the trunk.

Trunk easy closer

In the event that the trunk lid is left slightly open, the trunk easy closer will automatically close it to the fully closed position.

Function to prevent the trunk being locked with the electronic key inside (when all the doors are locked)

Closing the trunk lid with the electronic key left inside the trunk will sound an alarm. In this case, the trunk lid can be opened by pressing the button on the trunk lid.

Overload protection function

The trunk lid will not operate when excessive load is present on the top of the trunk lid.

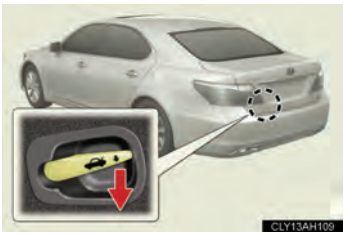
Fall-down protection function

While the trunk lid is opening automatically, applying excessive force to it will stop the opening operation to prevent the trunk lid from rapidly falling down.

Jam protection function

While the trunk lid is closing automatically, the trunk lid will stop closing and open if something gets caught.

Internal trunk release lever



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.

Using the mechanical key

The trunk can be also opened using the mechanical key. (→P. 523)

Customization

Setting of power trunk opener and closer function can be deactivated. (Customizable features →P. 563)

⚠ 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.

⚠ 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.

⚠ CAUTION

■ Trunk easy closer



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

■ Power trunk opener and closer

Observe the following precautions when operating the power trunk opener and closer.
Failure to do so may cause serious injury.

- Check the safety of the surrounding area to make sure there are no obstacles or anything that could cause any of your belongings to get caught.
- If anyone is in the vicinity, make sure they are safe and let them know that the trunk is about to open or close.
- If the trunk closer switch is pressed while the trunk lid is opening during automatic operation, the trunk lid stops opening. Take extra care when on an incline, as the trunk lid may open or close suddenly.
- On an incline, the trunk lid may fall after it opens automatically. Make sure the trunk lid is fully open and secure before using the trunk.
- In the following situations, the power trunk opener and closer may detect an abnormality and automatic operation may be stopped. In this case, the trunk lid has to be operated manually. Take extra care in this situation, as the stopped trunk lid may suddenly fall, causing an accident.
  - When the trunk lid contacts an obstacle
  - When the battery voltage suddenly drops, such as when the "POWER" switch is turned to ON mode or the hybrid system is started during automatic operation
- Do not attach any accessories other than genuine Lexus parts to the trunk lid. The power trunk opener and closer may not operate, causing itself to malfunction, or the trunk lid may fall closed again after it is opened.

⚠ CAUTION

■ Jam protection function

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

- Never use any part of your body to intentionally activate the jam protection function.
- The jam protection function may not work if something gets caught just before the trunk lid fully closes. Be careful not to catch fingers or anything else in the trunk lid.
- The jam protection function may not work depending on the shape of the object that is caught. Be careful not to catch fingers or anything else.

NOTICE

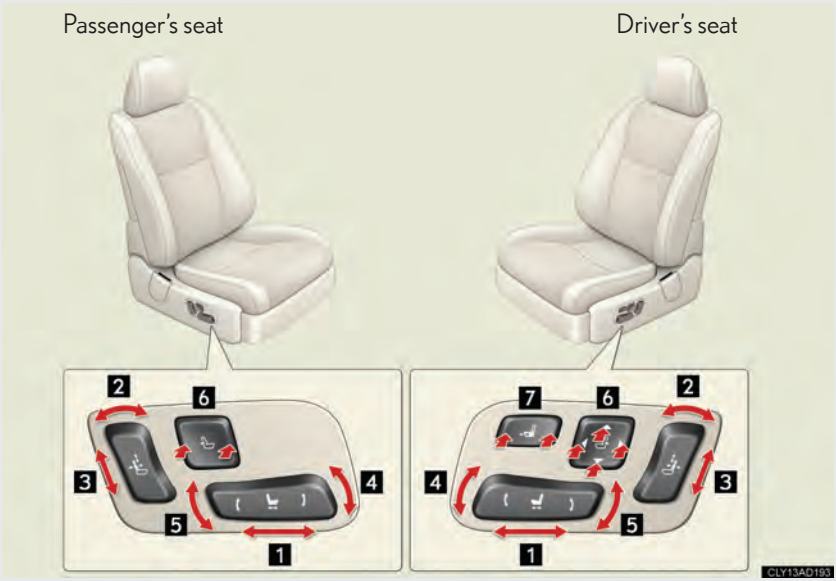
■ To prevent trunk easy closer malfunction

Do not apply force to the trunk lid while the trunk easy closer is operating.

■ To prevent damage to the power trunk opener and closer

- Make sure that there is no luggage or snow on the trunk lid before operating the power trunk opener and closer. In addition, make sure that there is no ice between the trunk lid and frame that prevents movement of the trunk lid. Operating the power trunk opener and closer when excessive load is present on the trunk lid may cause a malfunction.
- Do not apply excessive force to the trunk lid while the power trunk opener and closer is operating.

Front seats



1 Seat position switch

The height of the driver's head restraint is automatically adjusted simultaneously with the seat position adjustment operation.

2 Seatback angle switch

3 Head restraint height adjustment switch (→P. 104)

4 Seat cushion (front) angle switch

5 Vertical height adjustment switch

6 Lumbar support switch

Driver's seat: 4-way
Front passenger's seat: 2-way

7 Seat cushion length adjustment switch

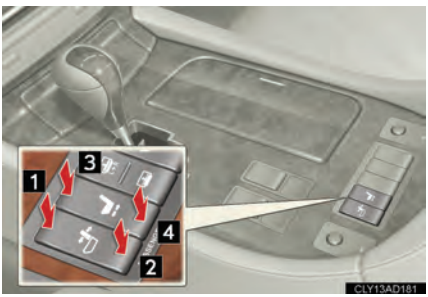
Operating the front passenger's seat from the driver's seat

▶ Without rear console display



1 Tilts the seatback forward
2 Tilts the seatback backward
3 Moves the seat forward
4 Moves the seat backward

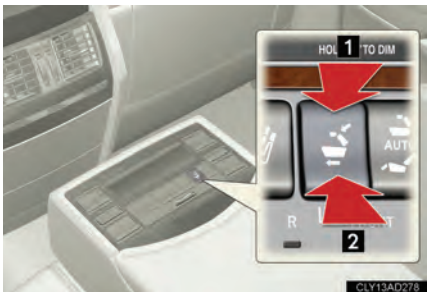
▶ With rear console display



1 Tilts the seatback forward
2 Tilts the seatback backward
3 Moves the seat forward
4 Moves the seat backward

Operating the front passenger's seat from the rear seat (with relaxation seat)

▶ 5-seat models



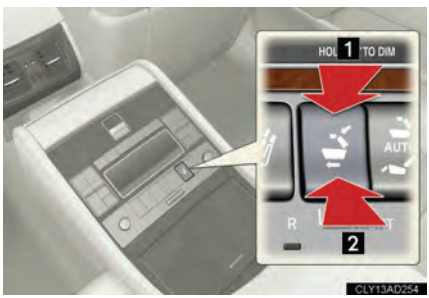
1 Moves the front passenger's seat forward

The signal beeps when the seat operation stops at the forward limit.

2 Moves the front passenger's seat backward

The seatback will return to the neutral position. If the head restraint is folded, it will rise before the seatback moves.

▶ 4-seat models



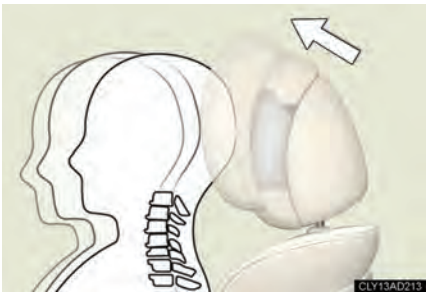
1 Moves the front passenger's seat forward

The signal beeps when the seat operation stops at the forward limit.

2 Moves the front passenger's seat backward

The seatback will return to the neutral position. If the head restraint is folded, it will rise before the seatback moves.

Active head restraints



If the vehicle detects an impact during a rear-end collision, the front part of the head restraint moves forward and upward to help reduce the risk of whiplash to the seat occupant.

When reversing, even a small amount of force applied from the rear, such as a minor rear impact, may cause the head restraints to move.

Operating the front passenger's seat from the rear seat (with relaxation seat)

The front passenger's seat can be operated when the "POWER" switch is in ON mode. However, in the following situations, the front passenger's seat does not move even when the switch is operated:

- The weight of an occupant or heavy object etc. is detected on the front passenger's seat.
- The front passenger's seat belt is fastened.
- The front passenger's door is open. (The front seat will not move forward.)

Seat cushion automatic length adjustment (driver's seat)

If the front of the cushion gets too close to the area around the instrument panel when the seat position is being adjusted, the seat cushion will automatically retract.

Seat operation automatic stop function (with relaxation seat)

If a front seat is likely to come into contact with the retractable table (4-seat models) or the ottoman during seat operation or activation of the auto away function, a buzzer will sound and seat slide operation will be stopped partway.
(A warning message will be shown on the multi-information display.)

Active head restraints

- The active head restraint on the front passenger seat will not activate if the seat is unoccupied. However, it may activate during a rear-end collision if luggage is in the seat or the seat belt is fastened.
- Once the active head restraint has activated, the head restraint remains protruded forward and upward. After it has operated, have it repaired at your Lexus dealer.

⚠ CAUTION

Seat adjustment

To reduce the risk of sliding under the lap belt during a collision, do not recline the seat more than necessary.
If the seat is too reclined, the lap belt may slide past the hips and apply restraint forces directly to the abdomen, or your neck may contact the shoulder belt, increasing the risk of death or serious injury in the event of an accident.
Adjustments should not be made while driving as the seat may unexpectedly move and cause the driver to lose control of the vehicle.

Operating the front passenger's seat from the driver's seat or rear seat

Do not operate the front passenger's seat when a passenger is seated in it. In addition, do not let anyone sit down in the front passenger's seat while the seat is being operated or when the head restraint is being folded. The front passenger may catch their legs between the instrument panel and seat, or the head restraint may interfere with their head, resulting in injury.

The active head restraint on the front passenger seat

Do not place anything, such as a cushion, on the front passenger's seat.
Doing so will disperse the passenger's weight, which may prevents the sensor from detecting the passenger's weight properly. As a result, the active head restraint may not activate in the event of an accident.

Active head restraint precautions

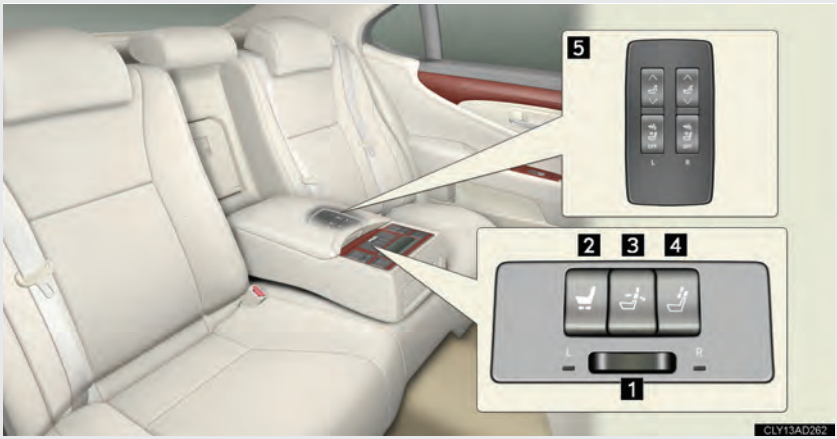
- Do not put head restraint covers.
- For removal, installation, modification, disassembly or disposal of the active head restraints, contact your Lexus dealer.
  Inappropriate handling of the active head restraints may prevent them from operating properly during an accident.

NOTICE

■ **Operating the front passenger's seat from the driver's seat or rear seat**

Before operating the front passenger's seat, make sure that there is no luggage or any other objects on the seat or in the footwell that could prevent its operation. Failure to do so may result in excess force being applied, causing damage to the seat and/or the luggage.

▶ 5-seat models without relaxation seat



1 Seat selection switch
The indicator light for the seat that can be operated comes on.

2 Seat position adjustment switch

3 Seatback upper angle adjustment switch

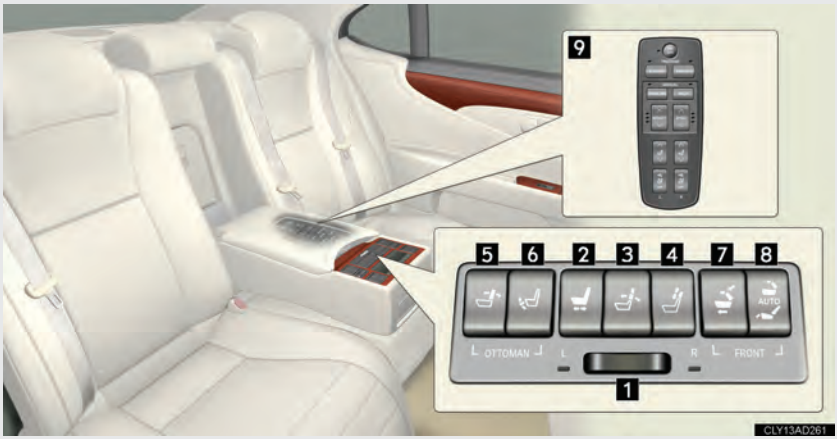
4 Head restraint height adjustment switch (→P. 104)

5 Pelvic support seat controller

The seat return function linked to the door opening operation allows the seat to automatically return to the neutral position for easier access to and from the vehicle.

*: If equipped

▶ 5-seat models with relaxation seat



The right-hand rear seat is a relaxation seat, which is equipped with a seatback angle adjustment function and an ottoman.

1 Seat selection switch
The indicator light for the seat that can be operated comes on.

2 Seat position adjustment switch

3 Seatback upper angle adjustment switch

4 Head restraint height adjustment switch (→P. 104)

5 Seatback angle adjustment switch

6 Ottoman angle adjustment switch

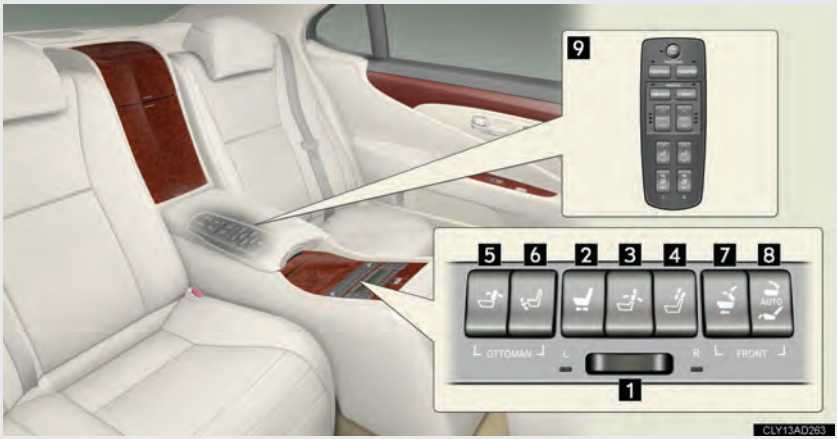
7 Front passenger's seat control switch (→P. 82)

8 Relaxation mode switch

9 Rear seat relaxation system/pelvic support seat controller

The seat return function linked to the door opening operation allows the seat to automatically return to the neutral position for easier access to and from the vehicle.

▶ 4-seat models



The right-hand rear seat is a relaxation seat, which is equipped with a seatback angle adjustment function and an ottoman.

1 Seat selection switch
The indicator light for the seat that can be operated comes on.

2 Seat position adjustment switch

3 Seatback upper angle adjustment switch

4 Head restraint height adjustment switch (→P. 104)

5 Seatback angle adjustment switch

6 Ottoman angle adjustment switch

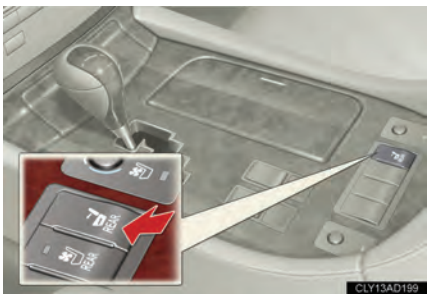
7 Front passenger's seat control switch (→P. 82)

8 Relaxation mode switch

9 Rear seat relaxation system/pelvic support seat controller

The seat return function linked to the door opening operation allows the seat to automatically return to the neutral position for easier access to and from the vehicle.

Returning the rear seat from the front seats

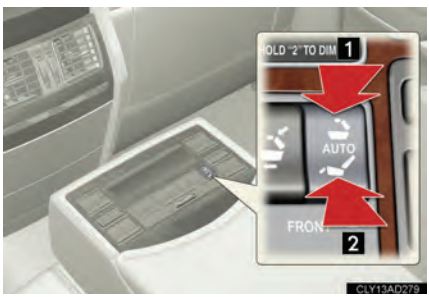


The seat will return to the neutral position while the button is pressed and held.

Relaxation mode operation (relaxation seat)

Relaxation mode can be entered by operating a switch. The front passenger seat will move forward, and then the seatback of the relaxation seat will recline and the ottoman will simultaneously rise.

▶ 5-seat models



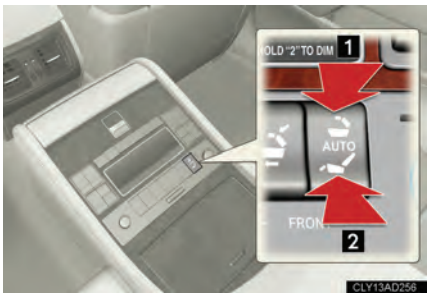
Pressing the switch will cause a beep to sound and operation will start.

1 Enters relaxation mode

2 Returns to the neutral position.

To stop the operation part-way through, press either side of the switch again, or press any other seat adjustment button.

▶ 4-seat models



Pressing the switch will cause a beep to sound and operation will start.

1 Enters relaxation mode

2 Returns to the neutral position.

To stop the operation part-way through, press either side of the switch again, or press any other seat adjustment button.

Pelvic support seat with seat vibrator

Pelvic support seat with seat vibrator, which feature a support plate mounted in the seatback and a vibration function, are equipped on each outside rear seat. The support plate position and vibration speed can be adjusted according to the occupant's preferences.

▶ Without relaxation seat

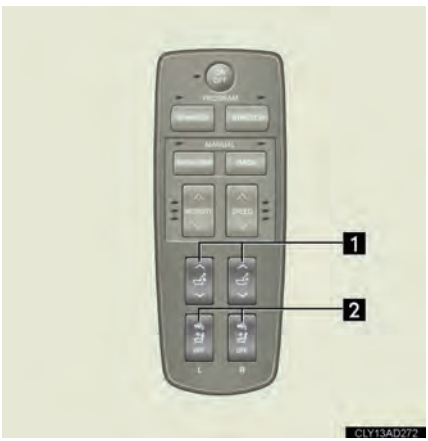


1 Support plate position adjustment switch

2 Vibration switch

Press to operate the vibration function. Vibration will start in the same speed level as when previously operated. Each time is pressed, the speed changes between 3 levels. Pressing "OFF" stops the vibration function.

▶ With relaxation seat



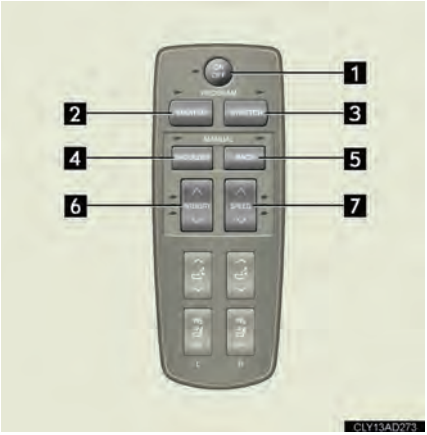
1 Support plate position adjustment switch

2 Vibration switch

Press to operate the vibration function. Vibration will start in the same speed level as when previously operated. Each time is pressed, the speed changes between 3 levels. Pressing "OFF" stops the vibration function.

Rear seat relaxation system (with relaxation seat)

Pneumatic chambers built into the right-hand rear seat provide the occupant with pressure of different speeds and intensities.



1 Turns the system on and off

If no buttons are selected within approximately 3 minutes of operating this switch, the system will automatically turn off.

2 Starts the "SHIATSU" program

Partial pressure for the whole back

3 Starts the "STRETCH" program

Stretches and relaxes the lower back

4 Starts operation for the upper back

5 Starts operation for the lower back

6 Adjusts the intensity of the air pressure

3 intensity levels are available.

7 Adjusts the speed of the air unit

3 speed levels are available.

Seat return function linked to the door opening operation

- Operating conditions
  The "POWER" switch is in ON mode.
- Canceling operation partway through
  During the seat return operation, performing either of the following actions cancels the operation:
  - Pressing the "SET", "M" or "C" button
  - Pressing any of the seat adjustment switches
- Disabling the seat return function



Pressing the "C" button will disable the seat return function.
The indicator light comes on when the seat return function is disabled.
Pressing the button again will enable the seat return function.

- Seat return operation after turning the "POWER" switch OFF
  The seat will automatically return to the neutral position if the door is opened within approximately 45 seconds of the "POWER" switch being turned OFF.

Relaxation mode (relaxation seat)

- Operating conditions
  Relaxation mode can be entered when the "POWER" switch is in ON mode. However, in the following situations, relaxation mode cannot be entered even when the switch is operated:
  - The weight of an occupant or heavy object etc. is detected on the front passenger's seat.
  - The front passenger's seat belt is fastened.
  - The front passenger's door is open. (The front seat will not move forward.)
- Operation after turning the "POWER" switch OFF
  The rear seat can be returned to the neutral position as long as the relaxation mode switch is operated within approximately 45 seconds of the "POWER" switch being turned OFF.

■ **Pelvic support seat with seat vibrator**

● Operating conditions
The "POWER" switch is in ON mode.

● Automatic stop function

- Vibration will automatically stop approximately 15 minutes after starting.
- Vibration will automatically stop if the adjacent rear door is opened.

● Pelvic support seat return function

- The position of the support plate will automatically return to the neutral position within approximately 5 seconds of the "POWER" switch being turned OFF.
- The position of the support plate will automatically return to the neutral position if the adjacent rear door is opened.

■ **Rear seat relaxation system (with relaxation seat)**

● Operating conditions
The "POWER" switch is in ON mode.

● Automatic stop function
Each operation will automatically stop approximately 15 minutes after starting.

⚠ CAUTION

■ **Power rear seats**

● Seat adjustment
To reduce the risk of sliding under the lap belt during a collision, do not recline the seat more than necessary.
If the seat is too reclined, the lap belt may slide past the hips and apply restraint forces directly to the abdomen, or your neck may come into contact with the shoulder belt, increasing the risk of death or serious injury in the event of an accident.
Adjustments should not be made while driving as the seat may unexpectedly move and cause the driver to lose control of the vehicle.

● When returning the rear seats from the front seats
To avoid injuring the rear passengers, wait until they have gotten out of the vehicle before returning the rear seats to the neutral position.

⚠ CAUTION

- When adjusting the seat position and ottoman angle (with relaxation seat)
  Keep sufficient footwell space to prevent your feet from being caught by the front seat.
- Using the ottoman (with relaxation seat)
  - Do not sit on the ottoman.
    If someone sits on the ottoman, the seat belt cannot be fitted properly, and they may be thrown from the seat in the event of an accident or sudden braking, resulting in death or serious injury.
  - When getting in or out of the vehicle, retract the ottoman. If the ottoman is not retracted, it may cause a fall, resulting in an injury.

■ Using the pelvic support seat with seat vibrator and rear seat relaxation system

- Those who are pregnant, have recently given birth, or suffer from ailments requiring rest (heart disease etc.) should consult a doctor before use.
- Do not allow children to use the pelvic support seat vibration function or the rear seat relaxation function.
- Do not use immediately after consuming a meal or alcohol, or for an extended period of time.
- If you feel sick while using the pelvic support seat vibration function or the rear seat relaxation function, immediately discontinue use.

⚠ NOTICE

■ To prevent an ottoman malfunction (with relaxation seat)

- Do not place any objects in the rear seat footwell that could prevent the operation of the ottoman.
- Do not place heavy luggage on the ottoman.
- Do not place any objects under the ottoman while it is raised for use. These objects may interfere with the ottoman being folded, causing damage to the ottoman or the objects themselves.

Driving position memory

Your preferred driving position (the position of the driver's seat and steering wheel, angle of the outside rear view mirrors, and height of seat belt shoulder anchor) 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.
Three different driving positions can be entered into memory.

The same buttons are found on the front passenger's side, allowing the front passenger's seat position and seat belt shoulder anchor height to be memorized.

Entering a position to memory

STEP 1 Check that the shift lever is in "P".

STEP 2 Turn the "POWER" switch to ON mode.

STEP 3 Adjust the driver's seat, steering wheel, outside rear view mirrors and seat belt shoulder anchor height to the desired positions. (When memorizing the front passenger's seat, adjust the front passenger's seat to the desired positions.)

STEP 4



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

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

Recalling the memorized position

STEP 1 Check that the shift lever is in "P".

STEP 2 Turn the "POWER" switch to ON mode.

STEP 3



Press button "1", "2" or "3" to recall the memorized position.

Front passenger's seat (with relaxation seat): When retractable table (4-seat models) or ottoman is used, rearward memories cannot be recalled.

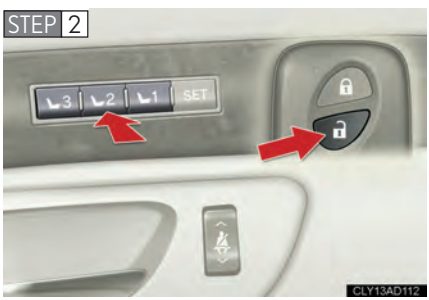
Linking driving position memory with door unlock operation (driver's seat)

One memorized driving position can be registered to each electronic key. This driving position will then be recalled when the driver's door is unlocked using the electronic key's entry function or wireless remote control and the driver's door is opened.

▶ Using the wireless remote control

STEP 1 Turn the "POWER" switch OFF and close the driver's door.

STEP 2



While pressing the desired button ("1", "2" or "3"), press on the wireless remote control until the signal beeps.

STEP 3 Open one of the doors.

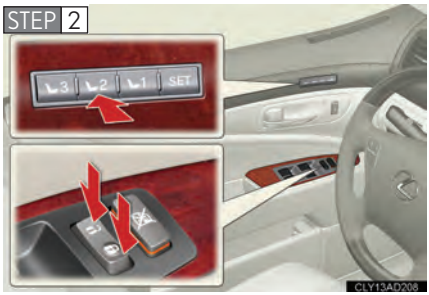
If a door is not opened within 30 seconds after is pressed, the doors will be locked again and the alarm will automatically be set.
In case that the alarm is triggered, immediately stop the alarm. (→P. 133)

▶ Using the door lock switch

Carry only one of the keys (including the card 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.

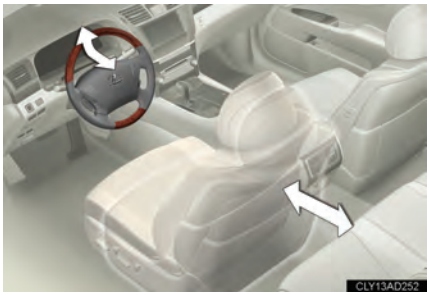
STEP 1 Turn the "POWER" switch OFF and close the driver's door.

STEP 2



While pressing the desired button ("1", "2" or "3"), press the lock or unlock side on the door lock switch (either the driver or passenger side) until the signal beeps.

Power easy access system (driver's seat)



The auto away/return function enables easy access by activating when the driver attempts to enter or exit the vehicle.

▶ Auto away function (exiting the vehicle)

When all of the following actions have been performed, the steering wheel will move up and back to the point farthest away from the driver and the seat will move backward:

- The shift lever has been shifted to "P".
- The "POWER" switch has been turned OFF.
- The driver seat belt has been unfastened.

▶ Auto return function (entering the vehicle)

When either of the following actions has been performed, the steering wheel will move toward the driver and seat will move forward:

- The "POWER" switch has been turned to ACCESSORY mode.
- The driver seat belt has been fastened.

■ **When driving position memory is linked with door unlock operation**

If the driver's door is opened, the driver's seat will move toward the memorized position but stop slightly beforehand to allow easy access to the vehicle.
Turning the "POWER" switch to ACCESSORY mode or fastening the driver's seat belt moves the seat fully into the memorized position.

■ **Canceling the linked door unlock operation**

STEP 1 Turn the "POWER" switch OFF and close the driver's door.

STEP 2 Using the wireless remote control: While pressing the "SET" button, press  on the wireless remote control until the signal beeps.

Using the door lock switch: While pressing the "SET" button, press the lock or unlock side on the door lock switch until the signal beeps.

■ **Operating the driving position memory after turning the "POWER" switch OFF**

Driver's seat: Memorized positions (except the steering wheel position) can be activated up to 180 seconds after the driver's door is opened and 60 seconds after it is closed again, even after the "POWER" switch is turned OFF.

Front passenger's seat: Memorized position can be activated up to 180 seconds after the front passenger's door is opened, even after the "POWER" switch is turned OFF.

■ **Stopping memorized position recall operations part-way through**

To stop all memorized position recall operations part-way through, perform one of the following actions:

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

To individually stop a memorized position recall operation for a seat, the steering wheel, outside rear view mirrors, or a seat belt shoulder anchor, operate the corresponding position adjustment switch while the memorized position is being recalled. All items can still be adjusted manually even if their recall operation is stopped part-way through.

■ **Seat operation automatic stop function (with relaxation seat)**

If a front seat is likely to come into contact with the retractable table (4-seat models) or the ottoman during seat operation or activation of the auto away function, a buzzer will sound and seat slide operation will be stopped partway.
(A warning message will be shown on the multi-information display.)

■ **The auto away function for exiting the driver seat**

If the seat is already close to the rearmost position, the auto away function may not operate when the driver exits the vehicle.

■ **Customization**

The distance that the driver's seat moves backward during the auto away function can be changed. (Customizable features →P. 563)

⚠ CAUTION

■ **Seat adjustment caution**

Take care during seat adjustment so that the seat does not strike the rear passenger or squeeze your body against the steering wheel. Always check that there is no rear passenger or luggage behind your seat during the auto away function is activated when you stop and exit from the vehicle.

Rear seat position memory*

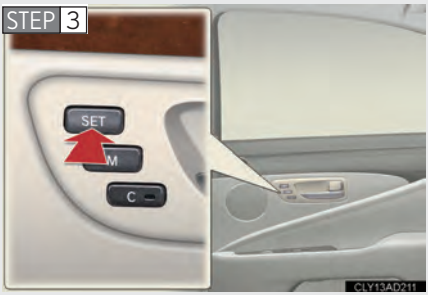
The rear seat position can be memorized and recalled with the touch of a button.

Entering a position to memory

STEP 1 Turn the "POWER" switch to ON mode.

STEP 2 Adjust the rear seat to the desired position.

STEP 3



Press the "SET" button until the signal beeps.

If the preset is being used, the previously recorded seat position will be overwritten.

Recalling the memorized position



Press the "M" button until the signal beeps.

Relaxation seat: The memorized position will only be recalled if the ottoman is in a position higher than the memorized position. It will not move in an upward direction.

*: If equipped

■ **Seat return function linked to the door opening operation**

When the door is opened, the rear seat will automatically return to the neutral position. This function is available for 45 seconds after the "POWER" switch is turned OFF.

■ **Canceling the seat position recall or return function**



Pressing the "C" button will disable the seat position recall or seat return function.
The indicator light comes on when the function is disabled.
Pressing the button again will enable the seat position recall or seat return function.

Performing either of the following cancels the seat returning operation:

- Press the "SET", "M" or "C" button.
- Press any of the seat adjustment switches.

⚠ CAUTION

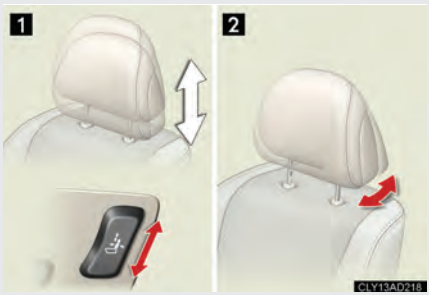
■ **Seat adjustment caution**

Take care during seat adjustment so that the rear passengers do not strike the front seats.

Head restraints

Head restraints are provided for all seats.

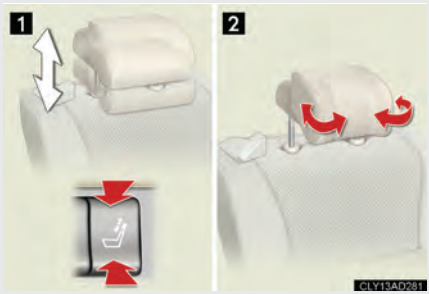
Front seats



1 Vertical adjustment
→P. 80
2 Horizontal adjustment

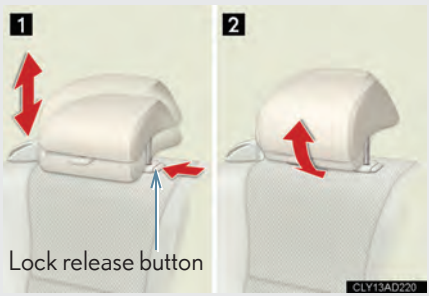
Outside rear seats

▶ Power type



1 Vertical adjustment
→P. 86
2 Side support adjustment

▶ Manual type



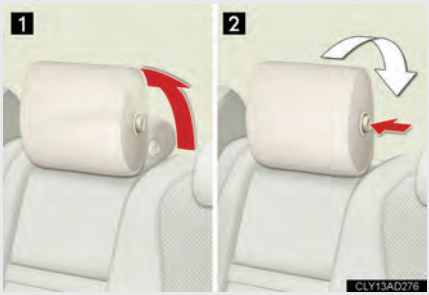
1 Vertical adjustment

Pull the head restraints up when raising.

Push and hold the lock release button when lowering.

2 Horizontal adjustment

Rear center seat (5-seat models)



1 To use
2 To fold

Removing the head restraints

For removal and installation of the head restraint, contact your Lexus dealer.

Adjusting the height of the head restraints (except rear center seat)



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

Rear center seat

Make sure to pull the head restraint forward when using the rear center seat.

⚠ 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.
- Manual type: After adjusting the head restraints, push down on them and make sure they are locked in position.
- Do not drive with the head restraints removed.

Seat belts

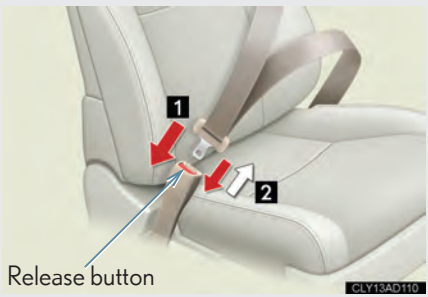
Make sure that all occupants are wearing their seat belts before driving the vehicle.

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



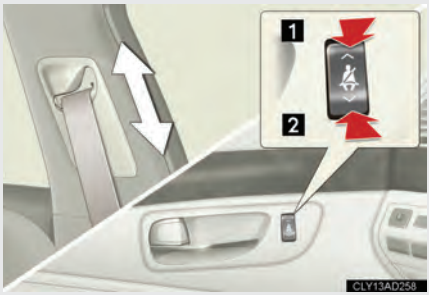
1 Fastening the belt

Push the plate into the buckle until a clicking sound is heard.

2 Releasing the belt

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

Adjusting the seat belt shoulder anchor height (front seats)



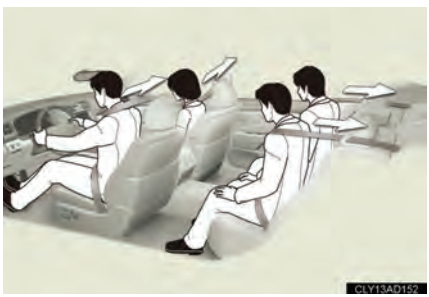
1 Up
2 Down

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 pre-collision 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. (→P. 305)

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. (→P. 162)

Pregnant women



Obtain medical advice and wear the seat belt in the proper way. (→P. 107)

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 round part of the abdominal area.

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

■ **People suffering illness**

Obtain medical advice and wear the seat belt in the proper way.

■ **Child seat belt usage**

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

- Use a child restraint system appropriate for the child, until the child becomes large enough to properly wear the vehicle's seat belt. (→P. 157)
- When the child becomes large enough to properly wear the vehicle's seat belt, follow the instructions on P. 107 regarding seat belt usage.

■ **Automatic adjustment of the seat belt shoulder anchor height (front seats)**

A desired seat belt shoulder anchor height can be entered to memory and recalled automatically by the driving position memory and seat position memory. (→P. 96)

■ **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.

⚠ 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.
- To achieve a proper seating position, do not recline the seat more than necessary. The seat belt is most effective when the occupants are sitting up straight and well back in the seats.
- Do not wear the shoulder belt under your arm.
- Always wear your seat belt low and snug across your hips.

■ **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. (→P. 108)

■ **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.

⚠ CAUTION

■ 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.

■ Seat belt damage and wear

- Do not damage the seat belts by allowing the belt, plate, or buckle to be jammed in the door.
- Inspect the seat belt system periodically. Check for cuts, fraying, and loose parts. Do not use a damaged seat belt until it is replaced. Damaged seat belts cannot protect an occupant from death or serious injury.
- Ensure that the belt and plate are locked and the belt is not twisted.
  If the seat belt does not function correctly, immediately contact your Lexus dealer.
- Replace the seat assembly, including the belts, if your vehicle has been involved in a serious accident, even if there is no obvious damage.
- Do not attempt to install, remove, modify, disassemble or dispose of the seat belts. Have any necessary repairs carried out by your Lexus dealer. Inappropriate handling of the pretensioner may prevent it from operating properly, resulting in death or serious injury.

■ Precaution for pre-collision seat belts

Do not rely on the pre-collision system to avoid accidents. Always pay attention to the surrounding conditions, and drive safely and responsibly.

■ 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.

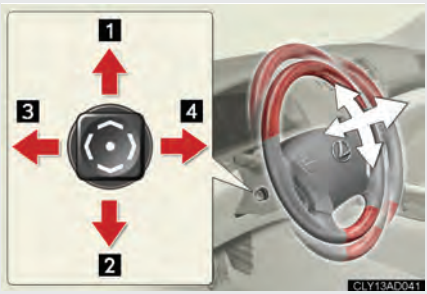
NOTICE

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 "POWER" switch is in ACCESSORY or ON mode, or when the driver's seat belt is fastened.



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

■ **Automatic adjustment of the steering position**

A desired steering position can be entered to memory and recalled automatically by the driving position memory. (→P. 96)

■ **Power easy access system**

The steering wheel and driver's seat move in accordance with "POWER" switch mode and the driver's seat belt condition. (→P. 99)

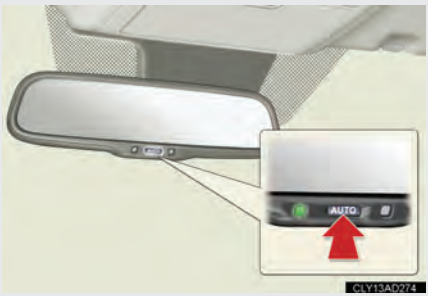
⚠ CAUTION

■ **Caution while driving**

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

Anti-glare inside rear view mirror

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



Turns automatic mode on/off

The indicator comes on when automatic mode is turned on.

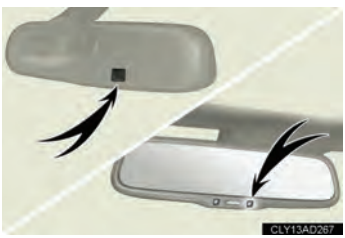
The mirror will revert to automatic mode each time the "POWER" switch is turned to ON mode.

Adjusting the height of rear view mirror



Adjust the height of the rear view mirror by moving it up and down.

To prevent sensor error



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

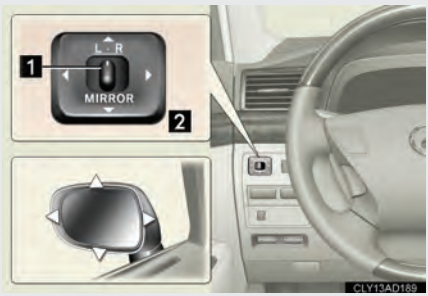
⚠ CAUTION

Caution while driving

Do not adjust the position of the mirror while driving.
Doing so may lead to mishandling of the vehicle and cause an accident, resulting in death or serious injury.

Outside rear view mirrors

Mirror angle can be adjusted using the switch when the "POWER" switch is in ACCESSORY or ON mode.



1 Selects a mirror to adjust ("L": left or "R": right)

2 Adjusts the mirror up, down, in, or out using the switch

Folding and extending the mirrors



1 Folds the mirrors

2 Extends the mirrors

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

When the mirrors are fogged up

Turn on the mirror defoggers to defog the mirrors. (→P. 352)

Automatic adjustment of the mirror angle

A desired mirror face angle can be entered to memory and recalled automatically by the driving position memory. (→P. 96)

Linked mirror function when reversing

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 automatic mode, the outside rear view mirrors will activate in conjunction with the anti-glare inside rear view mirror to reduce reflected light. (→P. 115)

⚠ CAUTION

When driving the vehicle

Observe the following precautions while driving.
Failure to do so may result in loss of control of the vehicle and cause an accident, resulting in death or serious injury.

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

When a mirror is moving

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

When the mirror defoggers are operating

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

Power windows

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



1 Closing
2 One-touch closing*
3 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 the 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 "POWER" switch is in ON mode.

■ **Door lock linked window operation**

- The power windows can be closed using the entry function. (→P. 53)
- The power windows can be opened and closed using the mechanical key. (→P. 523)

■ **Operating the power windows after turning the hybrid system off**

The power windows can be operated for approximately 45 seconds even after the "POWER" switch is switched to ACCESSORY mode or 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**

Settings (e.g. linked door key operation) can be changed.
(Customizable features →P. 563)

⚠ CAUTION

■ Closing the windows

Observe the following precautions.
Failure 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 use any part of your body to intentionally activate the jam protection function.
- The jam protection function may not work if something gets caught just before the window fully closes.

Moon roof

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

Opening and closing



1 Open

The moon roof stops slightly before the fully open position to reduce wind noise. Press the switch again to fully open.

2 Close

Lightly press either of the moon roof switches to stop the moon roof partway.

Tilting up and down



1 Tilt up

2 Tilt down

Lightly press either of the moon roof switches to stop the moon roof partway.

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

The "POWER" switch is in ON mode.

■ **Moon roof open warning buzzer**

The buzzer sounds and a message is shown on the multi-information display in the instrument cluster when the "POWER" switch is turned OFF and the driver's door is opened with the moon roof open.

■ **Door lock linked moon roof operation**

- The moon roof can be closed using the entry function. (→P. 53)
- The moon roof can be opened and closed using the mechanical key. (→P. 523)

■ **Operating the moon roof after turning the hybrid system off**

The moon roof can be operated for approximately 45 seconds even after the "POWER" switch is switched to ACCESSORY mode or 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.

■ **Sunshade**

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

When the moon roof does not close normally

Perform the following procedure:

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

STEP 1 Stop the vehicle.

STEP 2 Press and hold the "CLOSE" switch.*1
The moon roof will close, reopen and pause for approximately 10 seconds.*2 Then it will close again, tilt up and pause for approximately 1 second. Finally, it will tilt down, open and close.

STEP 3 Check to make sure that the moon roof is completely closed and then release the switch.

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

STEP 1 Stop the vehicle.

STEP 2 Press and hold the "UP" switch*1 until the moon roof moves into the tilt up position and stops.

STEP 3 Release the "UP" switch once and then press and hold the "UP" switch again.*1
The moon roof will pause for approximately 10 seconds in the tilt up position.*2 Then it will adjust slightly and pause for approximately 1 second. Finally, it will tilt down, open and close.

STEP 4 Check to make sure that the moon roof is completely closed and then release the switch.

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

*2: If the switch is released after the above mentioned 10 second pause, automatic operation will be disabled. In that case, press and hold the "CLOSE" or "UP" switch, and the moon roof will tilt up and pause for approximately 1 second. Then it will tilt down, open and close. Check to make sure that the moon roof is completely closed and then release the switch.

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

Customization

Settings (e.g. linked door key operation) can be changed.
(Customizable features →P. 563)

⚠ CAUTION

■ Opening the moon roof

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

- Do not allow any passengers to put their hands or heads outside the vehicle while it is moving.
- Do not sit on top of the moon roof.

■ Closing the moon roof

Observe the following precautions.
Failure 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 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 use any part of your body to intentionally activate the jam protection function.
- The jam protection function may not work if something gets caught just before the moon roof fully closes.

Opening the fuel tank cap

The fuel tank of your vehicle has a special structure, which requires a reduction in fuel tank pressure before refueling. After the opener switch has been pressed, it will take several seconds until the vehicle is ready for refueling.

Before refueling the vehicle

Close all the doors and windows, and turn the "POWER" switch OFF.

Opening the fuel tank cap



Press the opener switch.

The fuel filler door will open within about 10 seconds of the switch being pressed. Before refueling is possible, a message will be shown on the multi-information display in the instrument cluster to indicate the progress of the fuel filler door opener.



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.

■ **Fuel types**

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

■ **Fuel tank capacity**

Approximately 22.1 gal. (84 L, 18.4 Imp. gal.)

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



- If the fuel filler door opener switch cannot be operated, contact your Lexus dealer to service the vehicle. In case where refueling is urgently necessary, the fuel filler door can be opened using the lever in the trunk.

- Using the lever to open the fuel filler door may not allow for an adequate reduction in fuel tank pressure before refueling. To prevent fuel from spilling out, turn the cap slowly when removing it.
  During refueling, fuel may spill out from the filler opening due to air being discharged from inside the fuel tank. Therefore, fill the fuel tank carefully and slowly.

⚠ CAUTION

■ Refueling the vehicle

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

- After exiting the vehicle and before opening the fuel door, touch an unpainted metal surface to discharge any static electricity. It is important to discharge static electricity before refueling because sparks resulting from static electricity can cause fuel vapors to ignite while refueling.
- Always hold the grips on the fuel tank cap and turn it slowly to remove it.
  A whooshing sound may be heard when the fuel tank cap is loosened. Wait until the sound cannot be heard before fully removing the cap. In hot weather, pressurized fuel may spray out the filler neck and cause injury.
- Do not allow anyone that has not discharged static electricity from their body to come close to an open fuel tank.
- Do not inhale vaporized fuel.
  Fuel contains substances that are harmful if inhaled.
- Do not smoke while refueling the vehicle.
  Doing so may cause the fuel to ignite and cause a fire.
- Do not return to the vehicle or touch any person or object that is statically charged.
  This may cause static electricity to build up, resulting in a possible ignition hazard.

■ When replacing the fuel tank cap

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

NOTICE

■ Refueling

- Finish refueling within 30 minutes. If more than 30 minutes passes, the internal valve closes. In this condition, fuel may overflow during the refueling process. Press the fuel filler door opener switch again.
- Do not spill fuel during refueling.
  Doing so may damage the vehicle, such as causing the emission control system to operate abnormally or damaging fuel system components or the vehicle's painted surface.

Immobilizer system

The vehicle's keys have built-in transponder chips that prevent the hybrid system from starting if a key has not been previously registered in the vehicle's on-board computer.
Never leave the keys inside the vehicle when you leave the vehicle.



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

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

System maintenance

The vehicle has a maintenance-free type immobilizer system.

Conditions affecting operation

Depending on surrounding environment and conditions, the immobilizer system may not operate properly. This may prevent the hybrid system from starting.
(→P. 57)

Certifications for the immobilizer system

▶ U.S.A.

FCC ID: NI4TMIMB-1

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.

▶ 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.

⚠ NOTICE

■ **To ensure the system operates correctly**

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

Alarm

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

Triggering of the alarm

The alarm is triggered in the following situations:

- A locked door or trunk is unlocked or opened in any way other than using the entry function, wireless remote control or key. (The doors will lock again automatically.)
- The hood is opened while the vehicle is locked.

Setting the alarm system



Close the doors, trunk and hood, and lock all doors.
The system will be set automatically after 30 seconds.

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

Deactivating or stopping the alarm

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

- Unlock the doors or trunk.
- Start the hybrid system. (The alarm will be deactivated or stopped after a few seconds.)

■ **System maintenance**

The vehicle has a maintenance-free type alarm system.

■ **Items to check before locking the vehicle**

To prevent unexpected triggering of the alarm and vehicle theft, make sure of the following:

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

■ **Triggering of the alarm**

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



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



- The 12-volt battery is recharged or replaced when the vehicle is locked.

■ **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 12-volt battery.

Panic mode



When  is pressed for longer than about one second, an alarm will sound for about 60 seconds and the vehicle lights flash to deter any person from trying to break into or damage your vehicle.

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

NOTICE

To ensure the system operates correctly

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

Correct driving posture

Drive in a good posture as follows:



1. Sit upright and well back in the seat. (→P. 80)
2. Adjust the position of the seat forward or backward to ensure the pedals can be reached and easily depressed to the extent required. (→P. 80)
3. Adjust the seatback so that the controls are easily operable.
4. Adjust the tilt and telescopic positions of the steering wheel downward so the SRS driver airbag is facing your chest. (→P. 114)
5. Adjust the head restraint in place with the center of the head restraint closest to the top of your ears. (→P. 104)
6. Wear the seat belt correctly. (→P. 107)

⚠ CAUTION

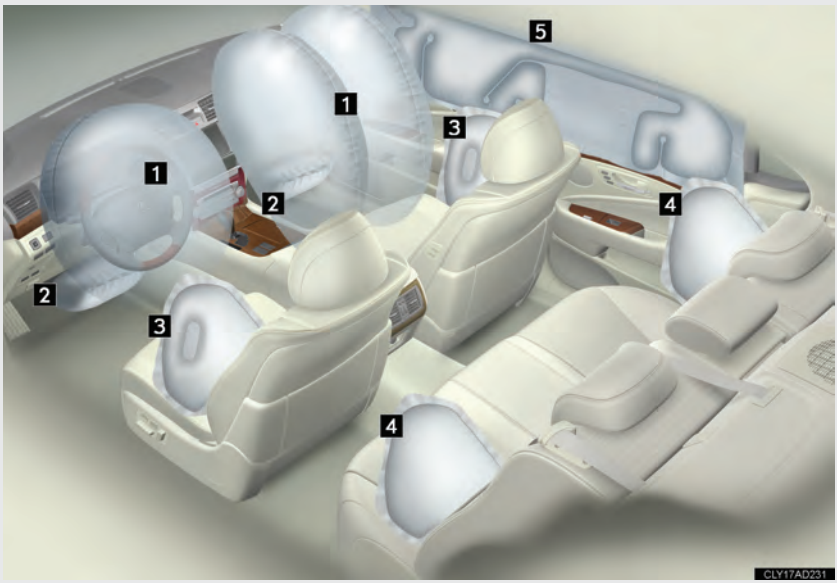
■ While driving

- 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.



▶ SRS front airbags

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

2 SRS Knee airbags
Can help provide driver and front passenger protection

▶ SRS side and curtain shield airbags

3 Front SRS side airbags
Can help protect the torso of the front seat occupants

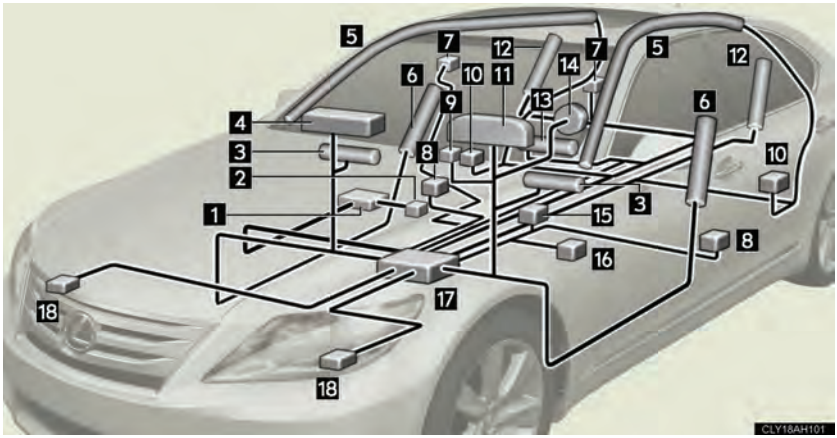
4 Rear SRS side airbags (power rear seat)
Can help protect the torso of the outside rear seat occupants

5 SRS curtain shield airbags
Can help protect primarily the head of outside occupants



6 SRS seat cushion airbag (relaxation seat)
Can help restrain the relaxation seat occupant

SRS airbag system components



1 Front passenger occupant classification system (ECU and sensors)
2 Front passenger's seat belt buckle switch
3 Knee airbags
4 Front passenger airbag
5 Curtain shield airbags
6 Front side airbags
7 Active head restraints
8 Side and curtain shield airbag sensors
9 "AIR BAG ON" and "AIR BAG OFF" indicator light
10 Curtain shield airbag sensors
11 SRS warning light
12 Rear side airbags
13 Seat cushion airbag
14 Driver airbag
15 Driver's seat belt buckle switch
16 Driver's seat position sensor
17 Airbag sensor assembly
18 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.

■ **SRS warning light**

This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensor assemblies, curtain shield airbag sensor assemblies, driver's seat position sensor, driver's seat belt buckle switch, front passenger occupant classification system, "AIR BAG ON" indicator light, "AIR BAG OFF" indicator light, front passenger's seat belt buckle switch, seat belt pretensioner assemblies, inflators, interconnecting wiring and power sources. (→P. 499)

■ **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 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. 403)

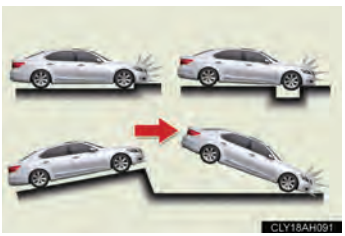
■ **SRS airbag deployment conditions (front SRS airbags and SRS seat cushion airbag)**

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

  However, this threshold velocity will be considerably higher 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 front SRS airbags, SRS seat cushion airbag and the seat belt pretensioners may not activate together.
- The SRS front passenger airbag will not activate if there is no passenger sitting in the front passenger seat. However, the front SRS passenger airbag may deploy if luggage is put in the seat, or the seat belt is fastened, even if the seat is unoccupied.(→P. 107)

■ **Conditions under which the SRS airbags may deploy (inflate), other than a collision (SRS front airbags and SRS seat cushion airbag)**

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



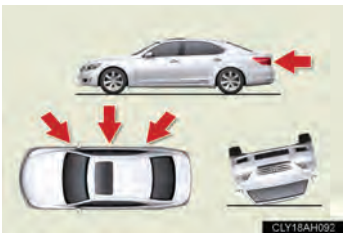
- Hitting a curb, edge of pavement or hard surface
- Falling into or jumping over a deep hole
- Landing hard or vehicle falling

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

- The SRS side airbags and SRS curtain shield airbags will deploy in the event of an impact that exceeds the set threshold level (the level of force corresponding to the impact force produced by an approximately 3300 lb. [1500 kg] vehicle colliding with the vehicle cabin from a direction perpendicular to the vehicle orientation at an approximately speed of 12 - 18 mph [20 - 30 km/h]).
- The front SRS side airbag on the passenger seat will not activate if there is no passenger sitting in the front passenger seat. However, the front SRS side airbag on the passenger seat may deploy if luggage is put in the seat, even if the seat is unoccupied. (→P. 107)

■ **Types of collisions that may not deploy the SRS airbags (front SRS airbags and SRS seat cushion airbag)**

The front SRS airbags and SRS seat cushion airbag 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 front SRS airbags and SRS seat cushion airbag may occur.



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

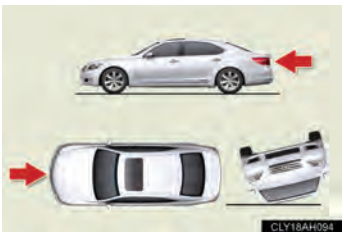
Types of collisions that may not deploy the SRS airbags (SRS side and curtain shield airbags)

The SRS side 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.

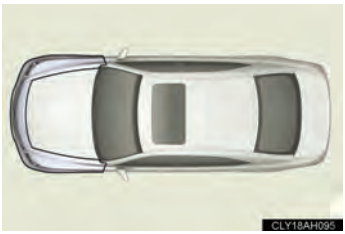


- Collision from the front
- Collision from the rear
- Vehicle rollover

When to contact your Lexus dealer

In the following cases, contact your Lexus dealer as soon as possible. Do not disconnect the 12-volt battery cables before contacting them.

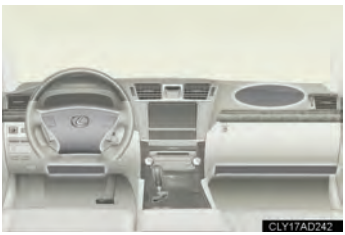
- Any of the SRS airbags has been inflated.



- 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.



- Relaxation seat: The seat cushion surface is scratched, cracked, or otherwise damaged.



- The surface of the seats with the side airbag is scratched, cracked, or otherwise damaged.
- The portion of the front pillars, rear pillars or roof side rail garnishes (padding) containing the curtain shield airbags inside is scratched, cracked, or otherwise damaged.

⚠ CAUTION

■ SRS airbag precautions

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

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

  Since the risk zone for 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.

⚠ CAUTION

■ 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 SRS driver's airbag may not activate correctly in a collision, resulting in death or serious injury in the event of a collision. Be sure to wear the seat belt with the seat belt extender.
- The SRS front passenger airbag also deploys with considerable force, and can cause death or serious injury especially if the front passenger is very close to the airbag. The front passenger seat should be as far from the airbag as possible with the seatback adjusted, so the front passenger sits upright.
- Improperly seated and/or restrained infants and children can be killed or seriously injured by a deploying airbag. An infant or child who is too small to use a seat belt should be properly secured using a child restraint system. Lexus strongly recommends that all infants and children be placed in the rear seats of the vehicle and properly restrained. The rear seats are the safest for infants and children. (→P. 157)

⚠ CAUTION

■ 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.



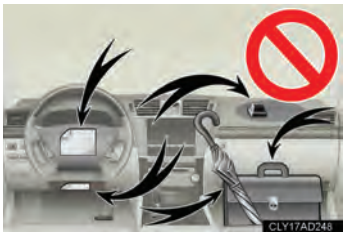
- Do not lean against the door, the roof side rail or the front, side and rear pillars.



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

⚠ CAUTION

■ 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 grip.
- 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 a vinyl cover is put on the area where the SRS knee airbag will deploy, be sure to remove it.
- Do not use seat accessories which cover the parts where the SRS side airbags and SRS seat cushion airbag inflate as they may interfere with inflation of the SRS airbags.
- Do not strike or apply significant levels of force to the area of the SRS airbag components shown on P. 140.
  Doing so can cause the SRS airbags to malfunction.
- Do not touch any of the component parts immediately after the SRS airbags have deployed (inflated) as they may be hot.
- If breathing becomes difficult after the SRS airbags have deployed, open a door or window to allow fresh air in, or leave the vehicle if it is safe to do so. Wash off any residue as soon as possible to prevent skin irritation.
- If the areas where the SRS airbags are stored, such as the steering wheel pad and front pillar garnish, are damaged or cracked, have them replaced by your Lexus dealer.

⚠ CAUTION

■ SRS airbag precautions

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

■ Modification and disposal of SRS airbag system components

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

- Installation, removal, disassembly and repair of the SRS airbags
- Repairs, modifications, removal or replacement of the steering wheel, instrument panel, dashboard, seats or seat upholstery, front, side and rear pillars 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 the front passenger.



1 SRS warning light
2 Front passenger's seat belt reminder light
3 "AIR BAG OFF" indicator light
4 "AIR BAG ON" indicator light

Conditions and operation of the front passenger occupant classification system

Adult*1

Indicator/ warning light	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG ON"
	SRS warning light	Off
	Front passenger's seat belt reminder light	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	
	Active head restraint	

Child*3 or child restraint system*4

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

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	
Devices	Front passenger airbag	Deactivated
	Side airbag on the right side passenger seats	
	Curtain shield airbag in the front passenger side	Activated
	Front passenger knee airbag	Deactivated
	Front passenger's seat belt pretensioner	
	Active head restraint	

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	Deactivated
	Side airbag on the right side passenger seats	
	Curtain shield airbag in the front passenger side	Activated
	Front passenger knee airbag	Deactivated
	Front passenger's seat belt pretensioner	Activated
	Active head restraint	

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

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

*3: 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. 157)

*5: In case the indicator light is not illuminated, consult this manual on how to install the child restraint system properly. (→P. 162)

⚠ CAUTION

■ 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 plate has not been left inserted into the buckle before someone sits in the front passenger seat.
- Make sure the "AIR BAG OFF" indicator light is not illuminated when using the seat belt extender for the front passenger seat. If the "AIR BAG OFF" indicator light is illuminated, disconnect the extender tongue from the seat belt buckle, and reconnect the seat belt. Reconnect the seat belt extender after making sure the "AIR BAG ON" indicator light is illuminated. If you use the seat belt extender while the "AIR BAG OFF" indicator light is illuminated, the 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 a 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.

⚠ CAUTION

■ Front passenger occupant classification system precautions

- 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.
- If an adult sits in the front passenger seat, the "AIR BAG ON" indicator light is illuminated. If the "AIR BAG OFF" indicator is illuminated, ask the passenger to sit up straight, well back in the seat, feet on the floor, and with the seat belt worn correctly. If the "AIR BAG OFF" indicator still remains illuminated, either ask the passenger to move to the rear seat, or if that is not possible, move the front passenger seat fully rearward.
- When it is unavoidable to install a forward-facing child restraint system on the front passenger seat, install the child restraint system on the front passenger seat in the proper order. (→P. 162)
- 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 all 50 states of the U.S.A. and Canada 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.
  (→P. 162)

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



■ **When installing a child restraint system on a rear outboard seat (power rear seat only)**



When using a child restraint system in a rear outboard seat, adjust the following:

- The upper seatback to the rearmost position
- Relaxation seat: The seatback to the most upright position
- The seat cushion to the fully rearward position
- The head restraint to the lowest and rearmost position

■ **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. (→P. 107)

⚠ CAUTION

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 the "AIR BAG OFF" indicator light is illuminated. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear-facing child restraint system is installed on the front passenger seat.
- A forward-facing child restraint system may be 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 seatback as upright as possible and always move the seat as far back as possible even if the "AIR BAG OFF" indicator light is illuminated, because the front passenger airbag 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.

⚠ CAUTION

■ Child restraint precautions

- 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 SRS side airbags or SRS curtain shield airbags deploy even if the child is seated in the child restraint system. It is dangerous if the side airbags and curtain shield airbags inflate, and the impact could cause death or serious injury to the child.
- 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 an 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 an 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 rear outside 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. 107)



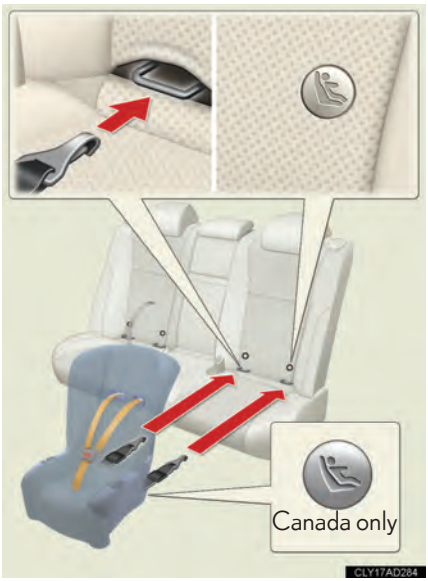
Anchor brackets (for top tether strap)

Anchor brackets are provided for each rear seat.

Installation with LATCH system

STEP 1 With power rear seat: Adjust the seatback as upright as possible.

▶ Type A



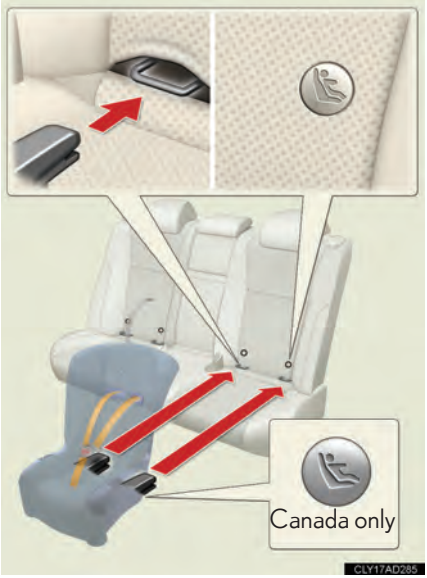
STEP 2 Widen the gap between the seat cushion and seatback slightly.

STEP 3 Latch the hooks of the lower straps onto the LATCH anchors.

STEP 4 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:
The symbol on a child restraint system indicates the presence of a lower connector system.

▶ Type B



STEP 2 Widen the gap between the seat cushion and seatback slightly.

STEP 3 Latch the buckles onto the LATCH anchors.

STEP 4 If the child restraint has a top tether strap, the top tether strap should be latched onto the top tether strap anchors.

For owners in Canada:
The 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)

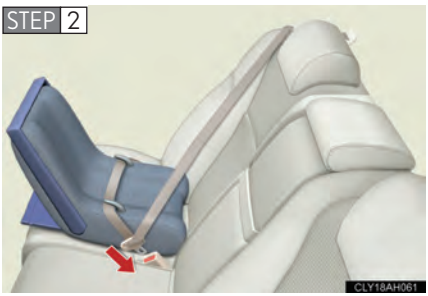
Rear-facing — Infant seat/convertible seat

STEP 1



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

STEP 2



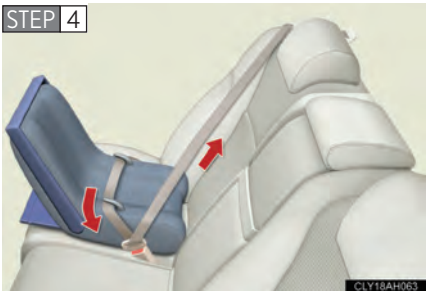
Run the seat belt through the child seat and insert the plate into the buckle. Make sure that the belt is not twisted.

STEP 3



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

STEP 4



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

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

Forward-facing — Convertible seat

STEP 1



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

STEP 2



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

STEP 3



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

STEP 4



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

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

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

STEP 1



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

STEP 2



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.

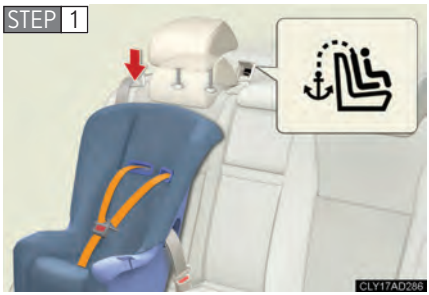
Check that the shoulder belt is correctly positioned over the child's shoulder, and that the lap belt is as low as possible. (→P. 107)

Removing a child restraint installed with a seat belt

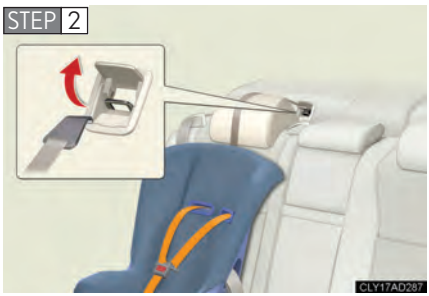


Push the buckle release button and fully retract the seat belt.

Child restraint systems with a top tether strap



Secure the child restraint using a seat belt or lower anchors, and move the head restraint in place at the lowest position. (→P. 104)



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.

⚠ CAUTION

■ **When installing a booster seat**

To prevent the belt from going into ALR lock mode, do not fully extend the shoulder belt. (→P. 109)

In ALR lock mode, the belt is locked in the position and cannot be extended, which could cause injury or discomfort to the child seated in the booster seat.

⚠ CAUTION

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 seriously injured or even killed in the event of sudden braking, sudden swerving 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.
- Adjust the front passenger seat or rear seats so that it does not interfere with the child restraint system.
- Only put a forward-facing child restraint system on the front seat when unavoidable. When installing a forward-facing child restraint on the front passenger seat, move the seat as far back as possible even if the "AIR BAG OFF" indicator light is illuminated. Failure to do so may result in death or serious injury if the airbags deploy (inflate).

- 5-seat models: When installing a child restraint system in the rear center seat, adjust both seat seatbacks as upright as possible. The seatbacks must be adjusted to the same angle. Securely restrained and this may cause death or serious injuries in the event of sudden braking, sudden swerving or an accident.
- 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. Failure 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.

⚠ CAUTION

■ When installing a child restraint system

- Push and pull the child restraint system 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.

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The following procedures should be observed to ensure safe driving:

Starting the hybrid system (→P. 183)

Driving

STEP 1 With the brake pedal depressed, shift the shift lever to "D". (→P. 189)

STEP 2 Release the parking brake. (→P. 194)

STEP 3 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". (→P.189)

Parking the vehicle

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

STEP 2 Set the parking brake. (→P.194)

STEP 3 Shift the shift lever to "P". (→P.189)

STEP 4 Press the "POWER" switch to stop the hybrid system.

STEP 5 Lock the door, making sure that you have the electronic key on your person.

Starting on a steep uphill

STEP 1 Set the parking brake and shift the shift lever to "D".

STEP 2 Gently depress the accelerator pedal.

STEP 3 Release the parking brake.

■ **Starting off on a hill**

Hill-start assist control will operate. (→P. 298)

■ **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 186 miles (300 km):
  Avoid sudden stops.
- For the first 621 miles (1000 km):
  - Do not drive at extremely high speeds.
  - Avoid sudden acceleration.
  - Do not drive continuously in the low range in the "S" position.
  - 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. (→P. 538)

For efficient use

- Put the shift lever into "D" when driving.
  In the "N" position, the gasoline engine operates but electricity cannot be generated. The hybrid battery (traction battery) will be discharged, requiring unnecessary engine power to recharge.
- Drive your vehicle smoothly.
  Avoid abrupt acceleration and deceleration. Gradual acceleration and deceleration will make more effective use of the electric motor (traction motor) without having to use gasoline engine power.
- Avoid repeated acceleration.
  Repeated acceleration consumes hybrid battery (traction battery) power, resulting in poor acceleration. Battery power can be restored by driving with the accelerator pedal slightly released.
- Put the shift lever into "P" when parking.
  In the "N" position, the hybrid battery (traction battery) does not recharge.
  Leaving the shift lever in the "N" position for an extended period of time may discharge the hybrid battery. The vehicle cannot run if the hybrid battery is discharged.

⚠ CAUTION

When starting the vehicle

Always keep your foot on the brake pedal while stopped with the hybrid system operating. 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 properly.
  - Depress the brake pedal using your right foot. Depressing the brake pedal using your left foot may delay response in an emergency, resulting in an accident.
- The driver should pay attention to pedestrians when the vehicle is powered only by the electric motor (traction motor). Because there is no engine noise, the pedestrians may misjudge the vehicle's movement.
- Do not drive the vehicle over or stop the vehicle near flammable materials.
- Do not let the vehicle roll backward while the shift lever is in a driving position, or roll forward while the shift lever is in "R".
  Doing so may result 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" or "R" 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 insufficient engine braking and lead to an accident.

⚠ CAUTION

- Do not turn the hybrid system off while driving.
  The power steering system will not operate properly if the hybrid system is off.
- 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. 189)
- 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 body are not outside the vehicle, as this may result in death or serious injury.
- Do not drive the vehicle off-road.
  This is not a AWD vehicle designed for real off-road driving. Proceed with all due caution if it becomes unavoidable to drive off-road.
- Do not drive across river crossings or through other bodies of water.
  This may cause electric/electronic components to short circuit, damage the hybrid system or cause other serious damage to the vehicle.
- Do not drive in excess of the speed limit. Even if the legal speed limit permits it, do not drive over 85 mph (140 km/h) unless your vehicle has high-speed capability tires. Driving over 85 mph (140 km/h) may result in tire failure, loss of control and possible injury. Be sure to consult a tire dealer to determine whether the tires on your vehicle are high-speed capability tires or not before driving at such speeds.

■ When driving on slippery road surfaces

- Sudden braking, acceleration and steering may cause tire slippage and reduce your ability to control the vehicle, 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.

⚠ 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.

■ When the vehicle is stopped

- Do not race the hybrid system.
  If the vehicle is in any positions other than "P" or "N", the vehicle may accelerate suddenly and unexpectedly, and may cause an accident.
- Do not leave the vehicle with the hybrid system on 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 "READY" indicator is on. Apply the parking brake as necessary.
- If the vehicle is stopped on an incline, in order to prevent accidents caused by the vehicle rolling forward or backward, always depress the brake pedal and securely apply the parking brake as needed.
- Avoid revving or racing the engine.
  Running the engine at high speed while the vehicle is stopped may cause the exhaust system to overheat, which could result in a fire if combustible material is nearby.

■ When the vehicle is parked

- Do not leave glasses, cigarette lighters, spray cans, or soft drink cans in the vehicle when it is in the sun.
  Doing so may result in the following:
  - Gas may leak from a cigarette lighter or spray can, and may lead to a fire.
  - The temperature inside the vehicle may cause the plastic lenses and plastic material of 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.

⚠ CAUTION

- Always apply the parking brake, shift the shift lever to "P", stop the hybrid system and lock the vehicle.
  Do not leave the vehicle unattended while the hybrid system is operating.
- Do not touch the exhaust pipes and the rear bumper diffusers while the hybrid system is operating or immediately after turning the hybrid system off.
  Doing so may cause burns.
- Do not leave the hybrid system operating in an area with snow build-up, or where it is snowing. If snowbanks build up around the vehicle while the hybrid system is operating, 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 hybrid system. 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 hybrid system off. Otherwise, you may accidentally move the shift lever or depress the accelerator pedal, which could cause an accident or fire due to hybrid system 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.

⚠ CAUTION

- If the electronically controlled brake system does not operate, do not follow other vehicles closely and avoid downhills or sharp turns that require braking.
  In this case, even though the brakes still operate, the brake pedal should be depressed more firmly than usual. Braking distance also becomes longer.
- The brake system consists of 3 individual hydraulic systems: if one of the systems fails, the others will still operate. In this case, the brake pedal should be depressed more firmly than usual and braking distance becomes longer. If this happens, do not continue to drive the vehicle. If the brake system warning light (red indicator) comes on together with buzzer sound while driving, immediately stop the vehicle in a safe place and contact your Lexus dealer.

If the vehicle becomes stuck or bogged

Do not spin the wheels recklessly when any of the tires is up in the air, or stuck in sand or mud, etc. This may damage the drive system components or propel the vehicle forward (or in another direction) and cause an accident.

⚠ NOTICE

When driving the vehicle

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

When parking the vehicle

Always 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 motor.
- When driving over bumps in the road, drive as slowly as possible to avoid damaging the wheels, underside of the vehicle, etc.

⚠ NOTICE

If a brake pad wear warning message is displayed

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.

Moderate levels of the brake pad and disc wear allow enhanced braking power. As a result, the discs may wear more quickly than conventional brake discs. Therefore, when replacing the brake pads, Lexus recommends that you also have the thickness of the discs measured.
It is dangerous to drive the vehicle when the wear limits of the brake pads and/or those of the brake discs are exceeded.

If you get a flat tire while driving

A flat or damaged tire may cause the following situations. Hold the steering wheel firmly and gradually depress the brake pedal to slow down the vehicle.

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

Information on what to do in case of a flat tire. (→P. 510)

When encountering flooded roads

Do not drive on a road that has flooded after heavy rain etc. Doing so may cause the following serious damage to the vehicle:

- Engine stalling
- Short in electrical components
- Engine damage caused by water immersion

In the event that you drive on a flooded road and the vehicle is flooded, be sure to have your Lexus dealer check the following:

- Brake function
- Changes in quantity and quality of oil and fluid used for the engine, hybrid system transmission, differential, etc.
- Lubricant condition for the propeller shaft, bearings and suspension joints (where possible) and the function of all joints, bearings, etc.

Performing the following operations when carrying the electronic key on your person starts the hybrid system or changes "POWER" switch modes.

Starting the hybrid system

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 "POWER" switch indicator turns green.

STEP 4



Press the "POWER" switch.

After a while, the "READY" indicator comes on with a beep sound.

The vehicle can move when the "READY" indicator is on even if the engine is stopped.

The hybrid system can be started from any mode.

Changing "POWER" switch modes

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



1 OFF*

The emergency flashers can be used.

2 ACCESSORY mode

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

The "POWER" switch indicator turns amber.

3 ON mode

All electrical components can be used.

The "POWER" switch indicator turns amber.

*: If the shift lever is in a position other than "P" when turning off the hybrid system, the "POWER" switch will be turned to ACCESSORY mode, not to OFF.

■ **If the hybrid system does not start**

The immobilizer system may not have been deactivated. (→P. 131)

■ **When the steering lock cannot be released**



The green indicator light on the "POWER" switch will flash and a message will be shown on the multi-information display. Press the "POWER" switch again while turning the steering wheel left and right.

■ **When the "POWER" switch indicator flashes in amber**

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

■ **If the "READY" indicator does not come on**

If the "READY" indicator does not come on when you press the "POWER" switch with the shift lever in "P" and the brake pedal depressed, contact 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 "POWER" switch will automatically turn off.

■ **When the ambient temperature is low, such as during winter driving conditions**

It may take time until the "READY" indicator comes on.

■ **Sounds and vibrations specific to a hybrid vehicle**

→P. 37

■ **When the hybrid system is malfunctioning**

→P. 499

■ **Electronic key battery depletion**

→P. 59

■ When the electronic key battery is discharged

→P. 464

■ Conditions affecting operation

→P. 57

■ Note for the entry function

→P. 60

⚠ CAUTION

■ When starting the hybrid system

Always start the hybrid system while sitting in the driver's seat. Do not depress the accelerator pedal while starting the hybrid system under any circumstances.
Doing so may cause an accident resulting in death or serious injury.

■ Stopping the hybrid system in an emergency

If you want to stop the hybrid system in an emergency while driving the vehicle, push and hold the "POWER" switch for more than 3 seconds.
However, do not touch the "POWER" switch while driving except in an emergency. If the hybrid system stops while the vehicle is being driven, this could lead to an unexpected accident.

⚠ NOTICE

■ To prevent the 12-volt battery from being discharged

Do not leave the "POWER" switch in ACCESSORY or ON mode for long periods of time without the hybrid system on.

■ When starting the hybrid system

- Do not race a cold hybrid system.
- If the hybrid system becomes difficult to start, have the hybrid system checked immediately by your Lexus dealer.

EV drive mode

In EV drive mode the electric motor (traction motor), powered by the hybrid battery (traction battery), is used to drive the vehicle.

This mode allows you to drive in residential areas early in the morning or late at night, or indoor parking lot etc. without concern for noises and gas emissions.



On/off

When EV drive mode is turned on, the EV drive mode indicator will come on. Pressing the switch when in EV drive mode will return to normal driving (using the gasoline engine and electric motor [traction motor]).

Situations in which EV drive mode cannot be turned on

It may not be possible to turn EV drive mode on in the following situations. If it cannot be turned on, a buzzer will sound and a message will be shown on the multi-information display.

- The temperature of the hybrid system is high.
  The vehicle has been left in the sun, driven on a hill, driven at high speeds, etc.
- The temperature of the hybrid system is low.
  The vehicle has been left in temperatures lower than about 32°F (0°C) for a long period of time etc.
- The gasoline engine is warming up.
- The hybrid battery (traction battery) is low.
  An "Energy Monitor" display of level 3 or lower may indicate a low battery level. (→P. 39)
- Vehicle speed is about 25 mph (40 km/h) or more.
- The accelerator pedal is depressed firmly or the vehicle is on a hill etc.
- The windshield defogger is in use.

Automatic cancelation of EV drive mode

When driving in EV drive mode, the gasoline engine may automatically restart in the following situations. When EV drive mode is canceled, a buzzer will sound and the EV drive mode indicator will flash and go off.

- The hybrid battery (traction battery) becomes low.
  The remaining battery level indicated in the "Energy Monitor" display is level 2 or lower. (→P. 39)
- Vehicle speed becomes more than about 25 mph (40 km/h).
- The accelerator pedal is depressed firmly or the vehicle is on a hill etc.

When it is possible to inform the driver of automatic cancelation in advance, a prior notice screen will appear on the multi-information display.

Possible driving distance when driving in EV drive mode

Possible driving distance when driving in EV drive mode is up to about 1/2 mile (1 km) if driven at a speed of about 25 mph (40 km/h) or less. (Possible driving distance depends on the hybrid battery [traction battery] level and driving conditions.)

Fuel economy

LS600hL is designed to achieve the best possible fuel economy during normal driving (using the gasoline engine and electric motor [traction motor]). Driving in EV drive mode more than necessary may lower fuel economy.

⚠ CAUTION

Caution while driving

When driving in EV drive mode, pay special attention to the area around the vehicle. Because there is no engine noise, pedestrians, people riding bicycles or other people and vehicles in the area may not be aware of the vehicle starting off or approaching them, so take extra care while driving.

Select a shift position appropriate for the driving conditions.

Shifting the shift lever



While the "POWER" switch is in ON mode, depress the brake pedal and move the shift lever.

Shift position uses

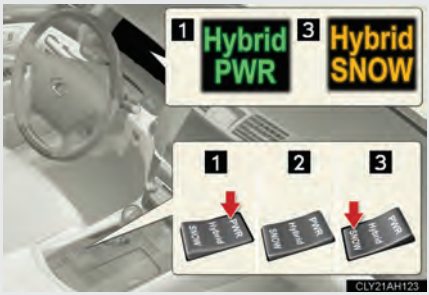
Shift position	Function
P	Parking the vehicle/starting the hybrid system
R	Reversing
N	Neutral
D	Normal driving*1
S	"S" mode driving*2 (→P. 191)

*1: To improve fuel efficiency and reduce noises, set the shift lever in the "D" position for normal driving.

*2: By selecting shift ranges using "S" mode, you can control engine braking forces.

Selecting a driving mode

The following modes can be selected in any shift position to suit driving conditions:



1 Power mode
For powerful acceleration and driving in mountainous regions

2 Normal mode

3 Snow mode
For accelerating and driving on slippery road surfaces, such as on snow

To cancel power mode or snow mode, press the same side of the switch again.



4 Eco mode

When eco mode is turned on, the "ECO MODE" indicator will come on.

Pressing the "ECO MODE" switch again turns eco mode off.

Changing shift ranges in "S" mode

Shift the shift lever to the "S" position and operate the shift lever.



1 Upshifting
2 Downshifting

The initial shift range in "S" mode is set automatically to "4", "5", "6" or "7" according to vehicle speed.

Shift ranges and their functions

- You can choose from 8 levels of engine braking force.
- A lower shift range will provide greater engine braking force than a higher shift range, and the engine revolutions will also increase.

Downshifting restrictions in "S" mode

The shift lever cannot be downshifted if the following speeds are exceeded. (A buzzer will sound twice in this situation.)

Downshifting	Maximum speed mph (km/h)
7→6	120 (193)
6→5	96 (154)
5→4	76 (122)
4→3	55 (89)
3→2	47 (76)
2→1	35 (57)

■ **When in heavy traffic**

If the shift lever is in "N", the hybrid battery (traction battery) will not be charged. To help prevent the battery from discharging, avoid putting the shift lever in "N" for an extended period of time.

■ **"S" mode**

- When the shift range is "6" or lower, holding the shift lever toward "+" sets the shift range to "8".
- When the shift range is "6" or higher, moving the shift lever toward "-" may change down by 2 shift ranges or more depending on driving conditions.
- To prevent the engine from over-revving, upshifting may automatically occur.

■ **When driving with the cruise control system**

Engine braking will not occur in "S" mode, even when downshifting to "7", "6", "5" or "4". (→P. 225, 228)

■ **Snow mode automatic deactivation**

Snow mode is automatically deactivated if the "POWER" switch is turned OFF after driving in snow mode.

■ **Eco mode**

When the vehicle is driven in eco mode, vehicle driving force and operation of the air conditioning system is controlled to improve fuel efficiency. If eco mode is turned on when the driving mode is in power mode or snow mode, power mode or snow mode will be canceled.

■ **If the shift lever cannot be shifted from "P"**

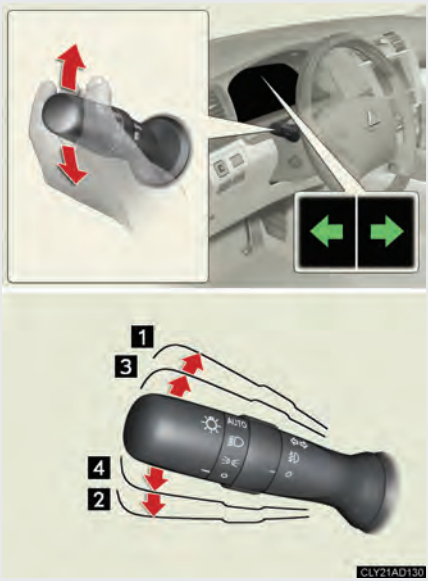
→P. 520

⚠ CAUTION

■ **When driving on slippery road surfaces**

Be careful of downshifting and sudden acceleration, as this could result in the vehicle skidding to the side or spinning.

Turn signal lever



1 Right turn

2 Left turn

3 Lane change to the right (move the lever partway and then release it)

The right hand signals will flash 3 times.

4 Lane change to the left (move the lever partway and then release it)

The left hand signals will flash 3 times.

■ **Turn signals can be operated when**

The "POWER" switch is in ON mode.

■ **If the indicators flash faster than usual**

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

■ **If the turn signals stop flashing before a lane change has been performed**

Operate the lever again.

■ **To discontinue flashing of the turn signals during a lane change**

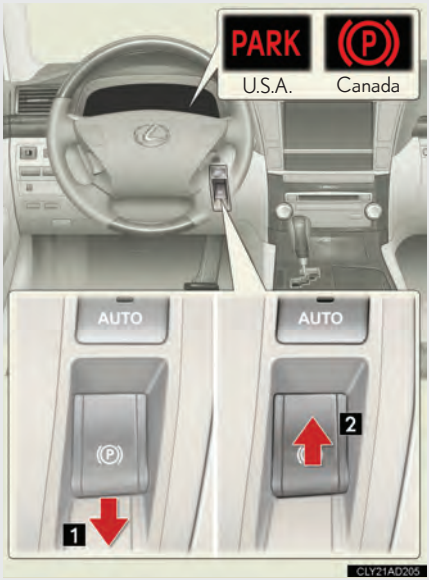
Operate the lever in the opposite direction.

■ **Customization**

The number of times the turn signals flash during a lane change can be changed. (Customizable features→P. 563)

For the parking brake, an electrical parking brake system is adopted.

Manual mode



1 Sets the parking brake

If the parking brake switch is operated when the "POWER" switch is not in ON mode, the parking brake indicator light will come on and stay on for a while.

Press and hold the parking brake switch if an emergency occurs and it is necessary to operate the parking brake while driving.

2 Releases the parking brake

Operate the parking brake switch while depressing the brake pedal. Make sure that the parking brake indicator light goes off.

Automatic mode



On/off

The parking brake is set automatically according to shift lever operation.

Operate the shift lever with the brake pedal depressed.

- When the shift lever is moved out of "P"
  The parking brake will be released.
- When the shift lever is moved into "P"
  The parking brake will be set.

■ **Parking brake operation**

- When the "POWER" switch is not in ON mode, the parking brake cannot be released using the parking brake switch.
- When the "POWER" switch is not in ON mode, automatic mode (automatic brake setting and releasing) is not available.
- If the parking brake is operated repeatedly over a short period of time, the system may restrict operation to prevent overheating. If this happens, refrain from operating the parking brake. Normal operation will return after about 1 minute.

■ **Parking brake indicator light**

When the "POWER" switch is turned OFF with the parking brake set, the parking brake indicator light will stay on for about 15 seconds. This does not indicate a malfunction.

■ **Parking brake operation sound**

When the parking brake operates, a motor sound (whirring sound) may be heard. This does not indicate a malfunction.

■ **When there is a malfunction in the system**

Warning lights and/or warning messages will turn on or flash. (→P. 498, 507) Depending on the condition, the parking brake indicator light may flash.

■ **Usage in winter time**

See "Winter driving tips" for parking brake usage in winter time. (→P. 320)

⚠ NOTICE

■ **When parking the vehicle**

Before you leave the vehicle, set the parking brake, shift the shift lever to "P" and make sure that the vehicle does not move.

■ **When the system malfunctions**

Stop the vehicle in a safe place and check the warning messages.

■ **When the parking brake cannot be released due to a malfunction**

Use the parking brake release tool to manually release the parking brake. (→P. 521)
Driving the vehicle with the parking brake set will lead to brake components overheating, which may affect braking performance and increase brake wear.

Brake Hold

The brake hold system keeps the brake applied when the shift lever is in "D", "S" or "N" with the system on and the brake pedal has been depressed to stop the vehicle. The system releases the brake when the accelerator pedal is depressed with the shift lever in "D" or "S" to allow smooth start off.



Turns the brake hold system on

The brake hold standby indicator comes on. While the system is holding the brake, the brake hold operated indicator light comes on.

Brake hold system operating conditions

The brake hold system cannot be turned on in the following conditions:

- The trunk or hood is not closed.
- The driver's door is not closed.
- The driver is not wearing the seat belt.

If any of the conditions above are detected when the brake hold system is enabled, the system will turn off and the brake hold operated indicator light will go off. In addition, if any of the conditions are detected while the system is holding the brake, a warning buzzer will sound and a message will be shown on the multi-information display. The parking brake will then be set automatically.

■ **Brake hold function**

- If the brake pedal is left released for a period of about 3 minutes after the system has started holding the brake, the parking brake will be set automatically. In this case, a warning buzzer sounds and a message is shown on the multi-information display.
- To turn the system off while the system is holding the brake, firmly depress the brake pedal and press the switch again.
- The brake hold function may not hold the vehicle when the vehicle is on a steep incline. In this situation, it may be necessary for the driver to apply the brakes. The multi-information display will inform the driver of this situation.

■ **When the parking brake is set automatically while the system is holding the brakes**

The parking brake will not be released automatically. Release the parking brake by operating the parking brake switch, making sure that the parking brake indicator light goes off. (→P. 194)

■ **When there is a malfunction in the system**

Warning lights and/or warning messages will turn on or flash. (→P. 498, 507)

⚠ CAUTION

■ **When stopped on a slippery road**

The system cannot stop the vehicle when the gripping ability of the tires has been exceeded. Do not use the system when stopped on a slippery road.

⚠ NOTICE

■ **When parking the vehicle**

The brake hold system is not designed for use when parking the vehicle for a long period of time. Turning the "POWER" switch OFF while the system is holding the brake may release the brake, which would cause the vehicle to move. When operating the "POWER" switch, depress the brake pedal, set the parking brake and shift the shift lever to "P".

Horn



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



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 "POWER" switch is in ON mode.

1 Tachometer

Displays the engine speed in revolutions per minute

2 Engine coolant temperature gauge

Displays the engine coolant temperature

3 Speedometer

Displays the vehicle speed

4 Multi-information display

→P. 208

5 Fuel gauge

Displays the quantity of fuel remaining in the tank

6 Hybrid System Indicator

Displays hybrid system output or regeneration level

7 Odometer/trip meter and trip meter reset buttons

8 Odometer

Displays the total distance the vehicle has been driven

9 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.

10 Outside temperature

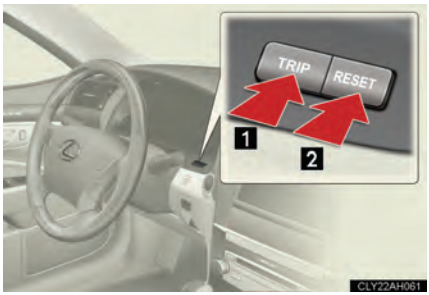
The temperature range that can be displayed is from -40°F (-40°C) to 122°F (50°C)

11 Shift position and shift range

→P. 189

12 Instrument panel light control buttons

Odometer/trip meter and trip meter reset buttons



1 Changes the display
2 Resets the trip meter currently displayed to "0"

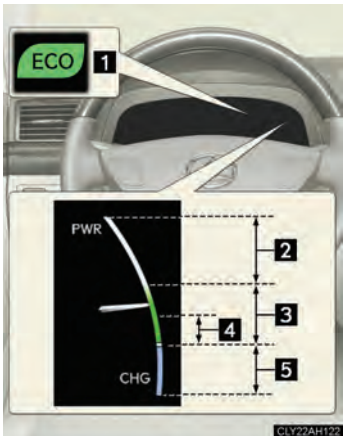
Instrument panel light control buttons

The brightness of the instrument panel lights can be adjusted.



1 Darker
2 Brighter

Hybrid System Indicator



1 Eco Driving Indicator Light
During Eco-friendly acceleration (Eco driving), Eco Driving Indicator Light will turn on.

Eco Driving Indicator Light will operate when the vehicle is being driven with the shift lever in "D". Eco Driving Indicator Light will not operate when the vehicle is in EV mode, power mode or snow mode.

2 Power area
Shows that an Eco-friendly driving range is being exceeded (during full power driving etc.)

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

4 Hybrid Eco area
Shows that gasoline engine power is not being used very often.

The gasoline engine will automatically stop and restart under various conditions.

5 Charge area
Shows that energy is being recovered via the regenerative brake.

- By keeping the indicator needle within Eco area, more Eco-friendly driving can be achieved.
- Charge area indicates regeneration* status. Regenerated energy will be used to charge the battery.
- Eco Driving Indicator Light and Hybrid System Indicator can be enabled or disabled. (→P. 210)

*: When used in this manual, "regeneration" refers to the conversion of energy created by the movement of the vehicle into electrical energy.

Engine speed

On hybrid vehicles, engine speed is precisely controlled in order to help improve fuel efficiency and reduce exhaust emissions etc.
There are times when the engine speed that is displayed may differ even when vehicle operation and driving conditions are the same.

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.)

⚠ 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) or the high coolant temperature warning light comes on or flashes. In this case, immediately stop the vehicle in a safe place, and check the engine after it has cooled completely. (→P. 529)

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



Indicators

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


Turn signal indicator (→P. 193)


Headlight high beam indicator (→P. 212)



(if equipped)
Automatic High Beam indicator (→P. 215)


(U.S.A.)
Headlight indicator (→P. 212)


(Canada)
Tail light indicator (→P. 212)


Front fog light indicator (→P. 220)



"Hybrid PWR" indicator (→P. 190)



"Hybrid SNOW" indicator (→P. 190)



*1 Brake hold standby indicator (→P. 196)



*1 Brake hold operated indicator (→P. 196)



Cruise control indicator (→P. 225, 228)



EV drive mode indicator (→P. 187)



Eco Driving Indicator Light (→P. 202)



"ECO MODE" indicator (→P. 190)



*1 "AFS OFF" indicator (→P. 213)


*1, 2 Slip indicator (→P. 299)



*1 VSC off indicator (→P. 300)



"SPORT" mode indicator (→P. 255)



"COMFORT" mode indicator (→P. 255)



*1 "HEIGHT HIGH" indicator (→P. 255)



(U.S.A.)

Parking brake indicator (→P. 194)



(Canada)

Parking brake indicator (→P. 194)

*1



"AIR BAG ON" and "AIR BAG OFF" indicator (→P. 152)



(if equipped)

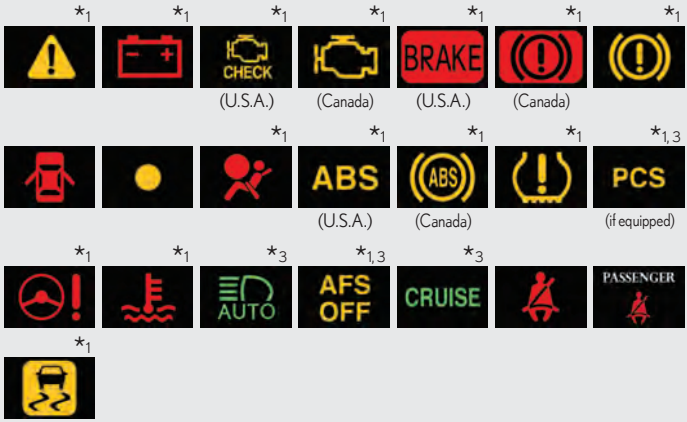
Lane keeping assist indicator (→P. 248)



"READY" indicator (→P. 183)

Warning lights

Warning lights inform the driver of malfunctions in any of the vehicle's systems. (→P. 498)



*1: These lights turn on when the "POWER" switch is turned to ON mode to indicate that a system check is being performed. They will turn off after the hybrid system is on, 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.

*2: The light flashes to indicate that the system is operating.

*3: The light flashes to indicate a malfunction.

CAUTION

If a safety system warning light does not come on

Should a safety system light such as ABS and the SRS airbag warning light not come on when you start the hybrid system, 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 driving-related data.



- Trip information (→P. 209)

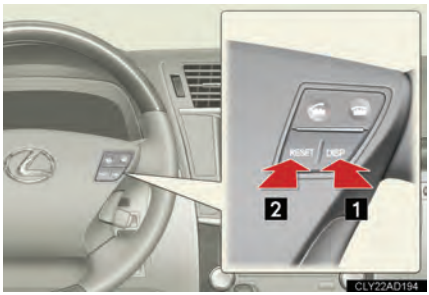
  Displays cruising range, fuel consumption and other cruising related information

- Intuitive parking assist display* (→P. 240)
- Dynamic radar cruise control display* (if equipped) (→P. 228)
- Lane-keeping assist display* (if equipped) (→P. 248)
- Turn-by-turn navigation (→P. 211)
- Warning messages (→P. 507)

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

*: Automatically displayed when the system is used

Trip information



1 "DISP" switch

Items displayed can be switched by pressing the "DISP" switch.

2 "RESET" switch

Energy monitor

Displays the status of the hybrid system (→P. 39)

Cruising range

Displays the estimated maximum distance that can be driven with the quantity of fuel remaining

- This distance is computed based on your average fuel consumption. As a result, the actual distance that can be driven may differ from that displayed.
- 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 pressing the "RESET" switch when the average fuel consumption is displayed.

The "Past record" screen on the touch screen will also be updated. (→P. 39)

Current fuel consumption

Displays the current rate of fuel consumption

Average fuel consumption after refueling

Displays the average fuel consumption since the vehicle was last refueled

Distance after refueling

Displays the distance the vehicle has been driven since the vehicle was last refueled

Elapsed time

Displays the elapsed time since it was last reset

The function can be reset by pressing the "RESET" switch when the elapsed time is displayed.

Average vehicle speed

Displays the average vehicle speed since the function was reset

The function can be reset by pressing the "RESET" switch when the average vehicle speed is displayed.

Tire inflation pressure

Displays inflation pressure of each tire. There is no correlation between the order of the displayed values and the tire positions.

It may take a few minutes to display the tire inflation pressure after the "POWER" switch is turned to ON mode. It may also take a few minutes to display the tire inflation pressure after inflation pressure has been adjusted.

Customization

Settings such as character size and which items are displayed can be changed.

Pressing the "DISP" switch for 1 second or more when the vehicle is stopped shows the customization menu screen.

This screen shows the details of customizable items and instructions for customizing. Follow these instructions to change the settings.

Settings cannot be changed while the cruise control switch is set to on.

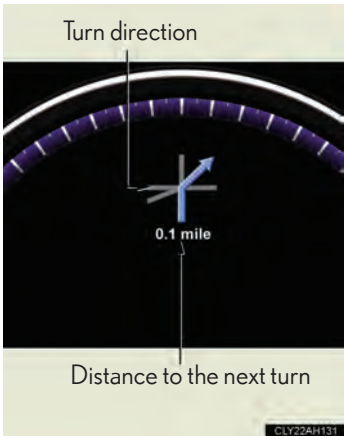
Tire inflation pressure

Tire inflation pressure changes with temperature. The displayed values may also be different from the values measured using other gauges.

Liquid crystal display

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

Turn-by-turn navigation



The turn-by-turn navigation appears only while route guidance of the navigation system is being performed. When a turn approaches, the distance to the turn and the turn direction are displayed.

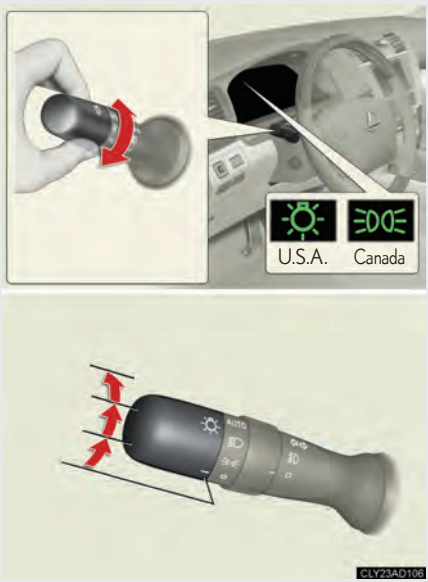
The turn-by-turn navigation can be set to on or off using the customization feature.
(→P. 210)

NOTICE

Turn-by-turn navigation image

The image shown may differ from the actual intersection.

The headlights can be operated manually or automatically.

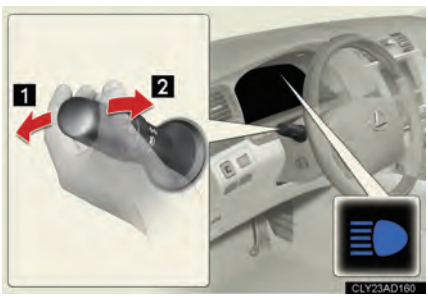


The side marker, parking, tail, license plate and instrument panel lights turn on.

The headlights and all lights listed above turn on.

AUTO The headlights, other exterior lights and instrument panel lights turn on and off automatically. (When the "POWER" switch is in ON mode)

Turning on the high beam headlights



1 With the headlights on, push the lever away from you to turn on the high beams.

Pull the lever toward you to the center position to turn the high beams off.

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

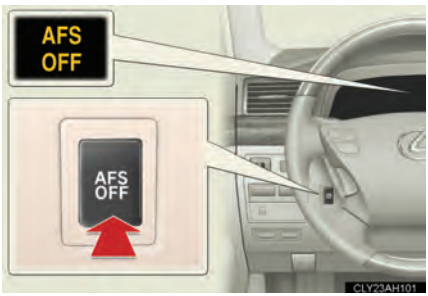
Release to turn them off. You can flash the high beams with the headlights on or off.

AFS

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

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

Deactivating AFS



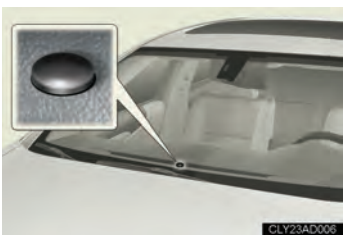
On/off

The indicator turns on when the AFS is deactivated.

Daytime running light system

To make your vehicle more visible to other drivers, the headlights turn on automatically (at a reduced intensity) whenever the hybrid system 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 system to malfunction.

■ **Automatic light off system**

- When the headlights come on: The headlights turn off 30 seconds after a door is opened and closed if the "POWER" switch has been switched to ACCESSORY mode or turned OFF. (The lights turn off immediately if 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 "POWER" switch is switched to ACCESSORY mode or turned OFF and driver's door is opened.

To turn the lights on again, turn the "POWER" switch to ON mode, or turn the light switch off once and then back to or position.

■ **Automatic headlight leveling system**

The level of the headlights is automatically adjusted according to the number of passengers and the loading condition of the vehicle to ensure that the headlights do not interfere with other road users.

■ **If the "AFS OFF" indicator flashes...**

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

■ **Customization**

Settings (e.g. light sensor sensitivity) can be changed.
(Customizable features →P. 563)

⚠ NOTICE

■ **To prevent the 12-volt battery from being discharged**

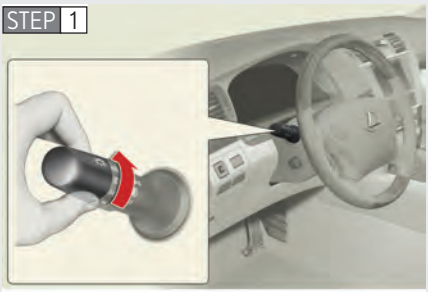
Do not leave the lights on longer than necessary when the hybrid system is off.

Automatic High Beam*

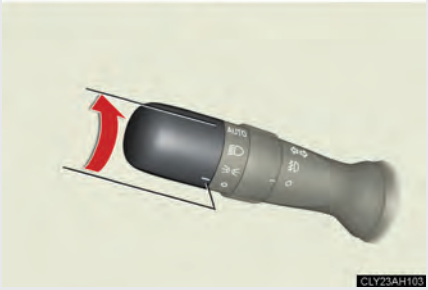
The Automatic High Beam uses an in-vehicle camera sensor to assess the brightness of streetlights, the lights of oncoming and preceding vehicles, etc., and automatically turns high beam on or off as necessary.

Activating the Automatic High Beam system

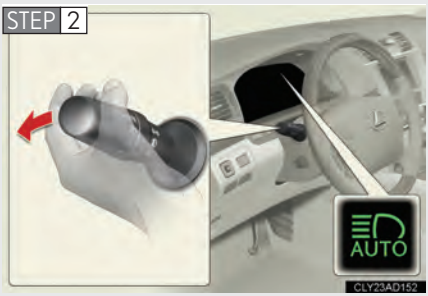
STEP 1



Head light switch in "AUTO" position.



STEP 2



Push the lever away from you.

The Automatic High Beam indicator will come on when the headlights are turned on automatically to indicate that the system is active.

*: If equipped

High beam automatic turning on or off conditions

When all of the following conditions are fulfilled, high beam will be automatically turned on (after approximately 1 second):

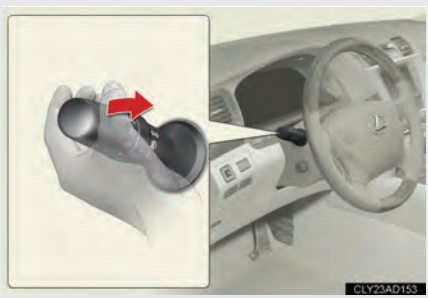
- Vehicle speed is above approximately 20 mph (32 km/h).
- The area ahead of the vehicle is dark.
- There are no oncoming or preceding vehicles with headlights or tail lights turned on.

If any of the following conditions are fulfilled, high beam will be automatically turned off:

- Vehicle speed drops below approximately 20 mph (32 km/h).
- The area ahead of the vehicle is not dark.
- Oncoming or preceding vehicles have headlights or tail lights turned on.

Turning the high beam on/off manually

▶ Switching to low beam



Pull the lever to original position.

▶ Switching to high beam



Turn the light switch to position.

■ **The Automatic High Beam can be operated when**

The "POWER" switch is in ON mode.

■ **Camera sensor detection information**

- High beam may not be automatically turned off in the following situations:
  - When oncoming vehicles suddenly appear from a curve.
  - When the vehicle is cut in front of by another.
- High beam may be turned off if an oncoming vehicle that is using fog lights without using the headlights is detected.
- House lights, street lights, red traffic signals, and illuminated billboards or signs may cause the high beam to turn off.
- The following factors may affect the amount of time taken to turn high beam on or off:
  - The brightness of headlights, fog lights, and tail lights of oncoming and preceding vehicles
  - Road conditions (wetness, ice, snow etc.)
  - The number of passengers and amount of baggage
- High beam may be turned on or off when unexpected by the driver.

- In the situations below, the system may not be able to correctly detect the surrounding brightness levels, and may flash or expose nearby pedestrians to the high beam. Therefore, you should consider turning the high beams on or off manually rather than relying on the Automatic High Beam system.
  - In bad weather (rain, snow, fog, sandstorms etc.)
  - The windshield is obscured by fog, mist, ice, dirt etc.
  - The windshield is cracked or damaged.
  - The inside rear view mirror or camera sensor is deformed or dirty.
  - Surrounding brightness levels are equal to those of headlights, tail lights or fog lights.
  - Vehicles ahead have headlights that are either switched off, dirty, are changing color, or have are not aimed properly.
  - When driving through an area of intermittently changing brightness and darkness
  - When frequently and repeatedly driving ascending/descending roads, or roads with rough, bumpy or uneven surfaces (such as stone-paved roads, gravel tracks etc.)
  - When frequently and repeatedly taking curves or driving on a winding road
  - There is a highly reflective object ahead of the vehicle, such as a sign or a mirror.
  - The vehicle's headlights are damaged or dirty.
  - The vehicle is listing or tilting, due to a flat tire, a trailer being towed etc.
  - The Automatic High Beam indicator is flashing.
  - The driver believes that the high beam may be causing problems or distress to other drivers or pedestrians nearby.

If the Automatic High Beam indicator flashes

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

Temporary lowering sensor sensitivity

The sensitivity of the sensor can be temporarily lowered.
To lower the sensitivity, push and hold the "AUTO" button on the inside rear view mirror for 15 to 20 seconds, and release. The indicator light on the inside rear view mirror will flash to indicate that the sensitivity has been lowered.

When the "POWER" switch is turned off, the sensitivity will be returned to its normal level.

Customization

The Automatic High Beam can be turned off.
(Customizable features →P. 563)

CAUTION

Limitations of the Automatic High Beam

Do not rely on the Automatic High Beam. Always drive safely, taking care to observe your surroundings and turning high beam on or off manually if necessary.

NOTICE

Notes when using the Automatic High Beam system

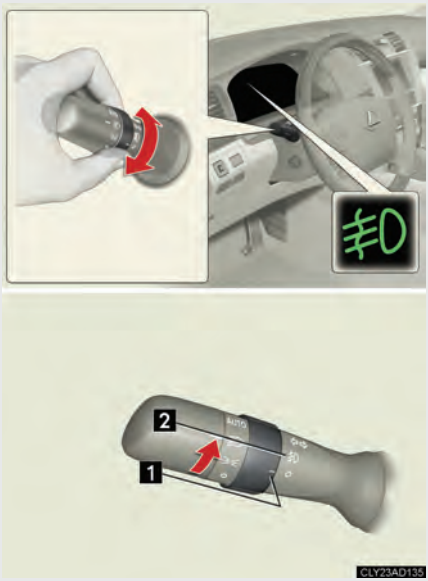


Observe the following to ensure that the Automatic High Beam functions correctly.

- Do not touch the camera sensor.
- Do not subject the inside rear view mirror or the camera sensor to a strong impact.
- Do not disassemble the camera sensor.
- Do not spill liquid onto the inside rear view mirror or the camera sensor.
- Do not apply window tinting or stickers to the camera sensor or the area of windshield near the camera sensor.
- Do not place items on the dashboard. There is a possibility that the camera sensor will mistake items reflected in the windshield for streetlights, the headlights of other vehicles, etc.
- Do not install a parking tag or any other accessories near or around the inside rear view mirror and the camera sensor.
- Do not overload the vehicle.
- Do not modify the vehicle.
- Do not replace windshield with non-genuine windshield.
  Contact your Lexus dealer.

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.

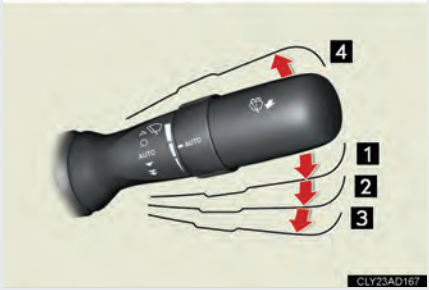


1 Turns the front fog lights off
2 Turns the front fog lights on

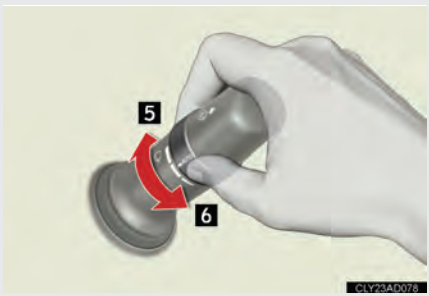
Windshield wipers and washer

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.





1 Rain-sensing wiper operation
2 Low speed wiper operation
3 High speed wiper operation
4 Temporary operation



5 Increases the sensitivity
6 Decreases the sensitivity



7 Wash/wipe operation

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

If the headlights are on, the headlight cleaner will operate once.

■ The windshield wipers and washer can be operated when

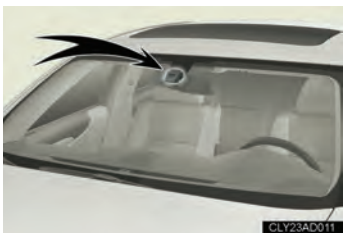
The "POWER" switch is in ON mode.

■ Effects of vehicle speed on wiper operation

With the settings other than "AUTO" also, the time until drip prevention wiper sweep occurs is changed depending on vehicle speed.

With low speed wiper operation selected, wiper operation will be switched from low speed to intermittent wiper operation only when the vehicle is stationary. (However, when the sensor sensitivity is adjusted to the highest, the mode cannot be switched.)

■ Raindrop sensor



- The raindrop sensor judges the amount of raindrops.

  An optical sensor is adopted. It may not operate properly when sunlight from the rising or setting of the sun intermittently strikes the windshield, or if bugs etc. are present on the windshield.

- If the wiper switch is turned to "AUTO" position while the "POWER" switch is in ON mode, the wiper operate once to show that auto mode is activated.
- If the temperature of the raindrop sensor is 194°F (90°C) or higher, or 5°F (-15°C) or lower, automatic operation may not occur. In this case, operate the wipers in any mode other than "AUTO".

If no windshield washer fluid sprays

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

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 subject 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 the washer fluid tank is empty

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

Headlight cleaner switch

Washer fluid can be sprayed on the headlights.



Press the switch to clean the headlights.

■ **The headlight cleaner can be operated when**

The "POWER" switch is in ON mode and the headlight switch is turned on.

■ **Windshield washer linked operation**

When the windshield washer is operated with the "POWER" switch in ON mode and the headlights on, the headlight cleaner will operate once. (→P. 221)

⚠ NOTICE

■ **When the washer fluid tank is empty**

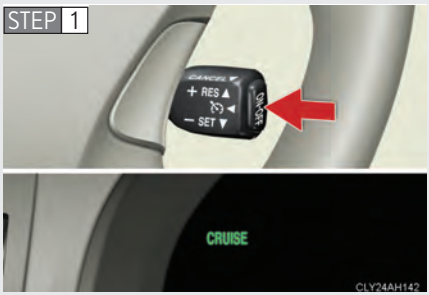
Damage to the washer fluid pump may be caused if the switch is pressed continually.

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



1 Indicator
2 Cruise control switch

Setting the vehicle speed



Press the "ON-OFF" button to activate the cruise control.

Press the button once more to deactivate the cruise control.



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

*: If equipped

Adjusting the speed setting



1 Increases speed

2 Decreases speed

Hold the lever until the desired speed setting is obtained.

Fine adjustment of the set speed can be made by lightly pushing the lever up or down and releasing it.

Canceling and resuming regular acceleration



1 Cancel

Push the lever toward 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.

Resuming is available when vehicle speed is approximately 25 mph (40 km/h) or more.

Cruise control can be set when

- The shift lever is in "D". (Recommended)
  The cruise control can also be set when the shift lever is in the "S" position and range "4", "5", "6", "7" or "8" has been selected.
- Vehicle speed is above approximately 25 mph (40 km/h).

Accelerating

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

Automatic cruise control cancelation

The cruise control will stop maintaining the vehicle speed in any of the following situations:

- Actual vehicle speed falls more than 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

Press the "ON-OFF" button once to deactivate the system, and then press the button again to reactivate the system.
If the cruise control speed cannot be set or if the cruise control cancels immediately after being activated, there may be a malfunction in the cruise control system. Have the vehicle inspected by your Lexus dealer.

⚠ CAUTION

To avoid operating the cruise control by mistake

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 winding roads
- On steep hills
  Vehicle speed may exceed the set speed when driving down a steep hill.

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.



1 Indicator
2 Display
3 Cruise control switch
4 Distance switch

Set the vehicle speed



Press the "ON-OFF" button to activate the cruise control.

Press the button once more to deactivate the cruise control.

*: If equipped



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

Selecting conventional constant speed control mode



1 Press the "ON-OFF" button to activate the cruise control.

Press the button once more to deactivate the cruise control.

2 Switch to constant speed control mode.
(Push the lever away from you and hold for approximately one second.)

Vehicle-to-vehicle distance control mode is always reset when the "POWER" switch is turned to ON mode.

Adjusting the speed setting



1 Increases speed

2 Decreases speed

Hold the lever until the desired speed setting is displayed.

Fine adjustment of the set speed can be made by lightly pushing the lever up or down and releasing it.

Canceling and resuming the speed setting



1 Cancel

Push the lever toward 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.

Resuming is available when vehicle speed is approximately 25 mph (40 km/h) or more.

Changing the vehicle-to-vehicle distance



Each press of the switch changes the vehicle-to-vehicle distance.

1 Long

2 Medium

3 Short

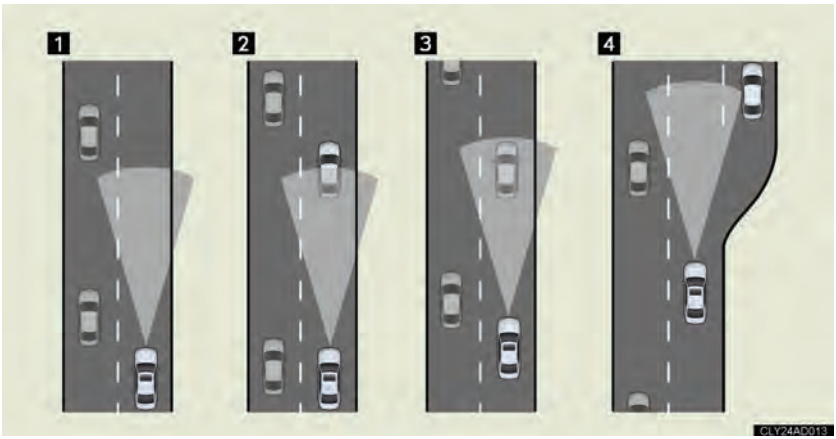
The vehicle-to-vehicle distance is set automatically to the long mode when the "POWER" switch is turned to ON mode.

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 up to approximately 400 ft. (120 m) ahead and to judge the distance between your vehicle and those the vehicle ahead of you.

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



1 Example of constant speed cruising
When there are no vehicles ahead

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.

2 Example of deceleration cruising
When the vehicle ahead is driving slower than the set speed

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 in on the vehicle ahead.

3 Example of follow-up cruising
When following a vehicle driving slower than the set speed

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.

4 Example of acceleration
When there are no longer vehicles driving slower than the set speed in the lane ahead

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.

Approach warning

When your vehicle is too close to a vehicle ahead, and sufficient automatic deceleration via the cruise control is not possible, the display will flash and the buzzer will sound to alert the driver. An example of this would be if another driver cuts in front of you while you are following a vehicle. Apply the brakes to ensure an appropriate vehicle-to-vehicle distance.

Warning lights and messages for dynamic radar cruise control

Warning lights and messages are used to indicate a system malfunction or to inform the driver of the need for caution while driving. (→P. 507)

Switching modes

The mode cannot be switched to constant speed control mode if vehicle-to-vehicle distance control mode has been used. The mode also cannot be switched from constant speed control to vehicle-to-vehicle distance control mode. Turn the system off by pressing the "ON-OFF" button, and turn it on again.

■ **Dynamic radar cruise control can be set when**

- The shift lever is in "D". (Recommended)
  Dynamic radar cruise control can also be set when the shift lever is in the "S" position and range "4", "5", "6", "7" or "8" has been selected.
- 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.

■ **Automatic cancelation of vehicle-to-vehicle distance control**

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

- Actual 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.
- The driving mode select switch is set to snow mode.

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.

■ **Automatic cancelation of constant speed control**

The cruise control will stop maintaining the vehicle speed in the following situations:

- Actual vehicle speed is more than 10 mph (16 km/h) below the preset vehicle speed.
  At this time, the memorized set speed is not retained.
- Actual vehicle speed falls below 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 160 ft. (50 m)
Medium	Approximately 130 ft. (40 m)
Short	Approximately 100 ft. (30 m)

Radar sensor and grille

Always keep the sensor and grille 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.



Radar sensor

Approach warning

In the following instances, there is a possibility that the warnings will not occur:

- When the speed of the vehicle ahead matches or exceeds your vehicle's speed
- Immediately after the cruise control speed has been set
- At the instant the accelerator is applied

■ **Certification**

▶ For vehicles sold in the U.S.A.

FCC ID: HYQDNMWR004

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

FCC WARNING

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

Radiofrequency radiation exposure Information:

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

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

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

▶ For vehicles sold in Canada

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.

⚠ 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.

■ Cautions regarding the driving assist systems

Observe the following precautions.
Failure to do so may cause an accident resulting in death or serious injury.

- Assisting the driver to measure following distance
  The dynamic radar cruise control is only intended to help the driver in determining the following distance between the driver's own vehicle and a designated vehicle traveling ahead. It is not a mechanism that allows careless or inattentive driving, and it is not a system that can assist the driver in low-visibility conditions. It is still necessary for driver to pay close attention to the vehicle's surroundings.
- Assisting the driver to judge proper following distance.
  The dynamic radar cruise control determines whether the following distance between the driver's own vehicle and a designated vehicle traveling ahead is appropriate or not. It is not capable of making any other type of judgement. Therefore, it is absolutely necessary for the driver to remain vigilant and to determine whether or not there is a possibility of danger in any given situation.
- Assisting the driver to operate the vehicle
  The dynamic radar cruise control has no capability to prevent or avoid a collision with a vehicle traveling ahead. Therefore, if there is ever any danger, the driver must take immediate and direct control of the vehicle and act appropriately in order to ensure the safety of all involved.

■ To avoid operating dynamic radar cruise control by mistake

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

⚠ CAUTION

■ Situations unsuitable for dynamic radar cruise control

Do not use dynamic radar cruise control in any of the following situations.
Doing so may result in inappropriate speed control and could cause an accident resulting in death or serious injury.

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

■ 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 approach warning (→P. 232) 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.)
- Motorcycles traveling in the same lane

⚠ CAUTION

■ 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 radar 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

■ To ensure the radar sensor functions correctly

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

- Stick or attach anything to it
- Leave it dirty
- Disassemble or subject it to strong shocks
- Modify or paint it
- Replace it with a non-genuine part

⚠ CAUTION

■ 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 your 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.

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.

Types of sensors



1 Front side sensors
2 Front corner sensors
3 Front center sensors
4 Rear corner sensors
5 Rear center sensors

Intuitive parking assist switch



On/off

When on, the indicator light comes on and the buzzer sounds to inform the driver that the system is operational.

Press the button to switch the on/off mode.

Display

When the sensors detect an obstacle, the graphic is shown on the multi-information display and touch screen according to position and distance to the obstacle.

Multi-information display



1 Front side sensors and front corner sensors operation
2 Front center sensors operation
3 Rear corner sensors operation
4 Rear center sensors operation

Touch screen



When the vehicle is moving forward

The graphic is automatically displayed when an obstacle is detected. The screen can be set so that the graphic is not displayed. (→P. 245)



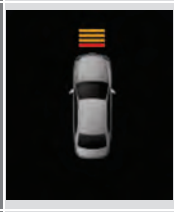
When the vehicle is moving backward

A simplified image is displayed on the right upper corner of the touch screen when an obstacle is detected.

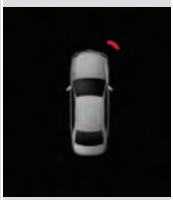
The distance display and buzzer

When a sensor detects an obstacle, the direction of and the approximate distance to the obstacle are displayed and the buzzer sounds.

▶ Center sensors

Level	1	2	3	4
Display example of front center sensor				
Buzzer	Slow	Medium	Fast	Continuous

▶ Corner sensors and side sensors

Level	1	2	3	4
Display example of front right sensor	-			
Buzzer	-	Medium	Fast	Continuous

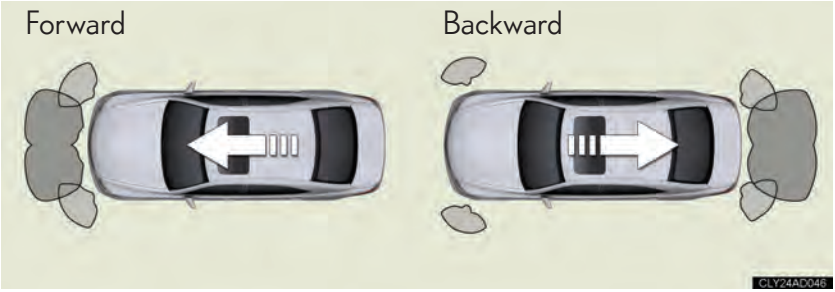
Detection level and approximate distance to an obstacle

Level	1	2	3	4
Front side sensors	-	1.6 to 1.2 ft. (50 to 37.5 cm)	1.2 to 1.0 ft. (37.5 to 30 cm)	1.0 ft. (30 cm) or less
Front corner sensors	-	2.0 to 1.2 ft. (60 to 37.5 cm)	1.2 to 1.0 ft. (37.5 to 30 cm)	1.0 ft. (30 cm) or less
Front center sensors	3.3 to 1.6 ft. (100 to 50 cm)	1.6 to 1.2 ft. (50 to 37.5 cm)	1.2 to 1.0 ft. (37.5 to 30 cm)	1.0 ft. (30 cm) or less
Rear corner sensors	-	2.0 to 1.2 ft. (60 to 37.5 cm)	1.2 to 0.8 ft (37.5 to 25 cm)	0.8 ft. (25 cm) or less
Rear center sensors	4.9 to 2.0 ft. (150 to 60 cm)	2.0 to 1.5 ft. (60 to 45 cm)	1.5 to 1.1 ft. (45 to 35 cm)	1.1 ft. (35 cm) or less

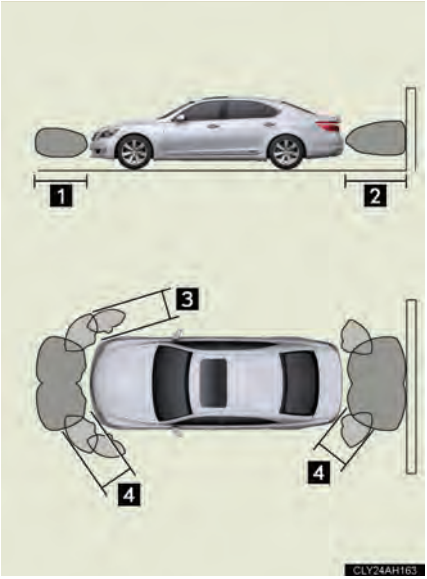
Sensors that operate and detection range

The following diagrams show the sensor detection range. Note that sensors may not be able to detect obstacles that are extremely close to the vehicle.

Sensors that operate



Detection range of the sensors



1 Approx. 3.3 ft. (100 cm)
2 Approx. 4.9 ft. (150 cm)
3 Approx. 1.6 ft. (50 cm)
4 Approx. 2.0 ft. (60 cm)

The diagram shows the detection range of the sensors. Note that the sensors may not be able to detect obstacles that are extremely close to the vehicle.

The range of the sensors may change depending on the shape of the object etc.

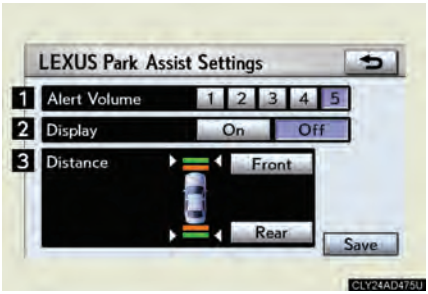
Customization of the intuitive parking assist

The buzzer volume, display and buzzer timing and display of the graphic on the screen can be customized.

STEP 1 Press "SETUP" to display the "Setup" screen. (→P. 329)

STEP 2 Touch "Vehicle" on the "Setup" screen.

STEP 3 Touch "LEXUS Park Assist" on the "Vehicle Settings" screen.



1 Alert volume setting
2 Display on/off
3 Alert distance setting

■ **Sensor detection information**

● Certain vehicle conditions and the surrounding environment may affect the ability of a sensor to correctly detect an obstacle. Particular instances where this may occur are listed below.

- There is dirt, snow or ice on a sensor.
- A sensor is frozen.
- A 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.
- A sensor is coated with a sheet of spray or heavy rain.
- The vehicle is equipped with a fender pole or radio antenna.
- Towing eyelets are installed.
- A bumper or sensor receives a strong impact.
- The vehicle is approaching a tall or right-angled curb.
- In harsh sunlight or intense cold weather
- A non-genuine Lexus suspension (lowered suspension etc.) is installed.

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

● The shape of the obstacle may prevent a sensor from detecting it. Pay particular attention to the following obstacles:

- Wires, fences, ropes, etc.
- Cotton, snow and other materials that absorb radio waves
- Sharply-angled objects
- Low obstacles
- Tall obstacles with upper sections projecting outwards in the direction of your vehicle

■ **Touch screen display**

If an obstacle is detected while the vehicle is reversing, the warning indicator will appear in the top right of the screen even if the display setting has been set to “Off”.

■ **If the display flashes and a message is displayed**

→P. 507

■ **Certification (Canada only)**

This ISM device complies with Canadian ICES-001.

⚠ CAUTION

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

Observe the following precautions.
Failure to do so may result in the vehicle being unable to be driven safely and possibly cause an accident.

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

LKA (Lane-Keeping Assist)*

While driving on a freeway or motor highway that has lane markings, this system recognizes the lanes using a camera as a sensor to assist the driver with staying in the lane. The LKA system has two functions.

Lane departure warning function

If the system judges that the vehicle may deviate from its lane, it alerts the driver using rapid beeping, indications on the multi-information display, and sensory warning* via the steering wheel.

*: A slight steering torque is applied for a short period of time in the direction of the center of the lane.

Lane keeping assist function

This function will be active when vehicle-to-vehicle distance control mode of the cruise control (→P. 228) is set with vehicle speed above approximately 45 mph (72 km/h) while the lane departure warning function is active. When the lane keeping assist function is active, a slight steering torque will be applied, to help the driver maintain the vehicle in a central position within the lane.

Turning the LKA system on

The lane departure warning function and lane keeping assist function will be activated depending on the recognition condition of lane markings, vehicle speed and the setting of radar cruise control (vehicle-to-vehicle distance control mode).



Press the "LKA" switch to activate the system.

Press the switch again to turn the LKA system off.

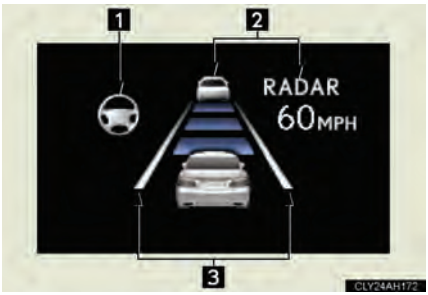
*: If equipped

Operating conditions for each function

LKA system	Cruise control (Vehicle-to-vehicle distance control mode)	Lane departure warning function Vehicle speed is between about 30 and 125 mph (48 and 200 km/h)	Lane keeping assist function Vehicle speed is between about 45 and 112 mph (72 and 180 km/h)
On	Off	Available	Not Available
	On While cruising in vehicle-to-vehicle distance control mode with the set vehicle speed approximately 44 mph (71 km/h) or less	Available	Not Available
	On While cruising in vehicle-to-vehicle distance control mode with the set vehicle speed approximately 45 mph (72 km/h) or more	Available	Available

Indications on the multi-information display

While the LKA system is on, the lane line display and steering wheel display are shown on the multi-information display to inform the driver that the LKA system is on.



1 Steering wheel display

When the steering wheel display is shown:
The lane keeping assist function is active.

2 Dynamic radar cruise control display

3 Lane line display

When outlines of the lane lines are shown:
A lane marking is not recognized by the system, or the LKA system functions are temporarily cancelled. (When the lane keeping assist function is cancelled, the signal will beep twice.)

When solid lane lines are shown:
The lane departure warning function is active.

■ **Temporary cancellation of the LKA system functions**

If any of the following occurs, the LKA system functions will be temporarily cancelled. The functions will resume after the necessary operating conditions have returned.

- The turn signal lever is operated.
- The steering wheel is turned as far as necessary to cause the vehicle to change lanes.
- The brake pedal is depressed.
  The lane keeping assist function will not resume even after the brake pedal is released because depressing the brake pedal also cancels the dynamic radar cruise control.
- The vehicle speed deviates from the operating range of the LKA system functions.
- While the lane lines cannot be recognized while driving.
- Low speed or high speed wiper operation states.
- The hands-free driving warning activates while the lane keeping assist function is active. (The signal will beep twice.)

■ **Hands-free driving warning**

If the steering wheel is not operated for about 15 seconds on a straight road or about 5 seconds on a curve, the signal will beep twice, indications on the multi-information display will flash, and the lane keeping assist function will be temporarily cancelled. If you drive the vehicle with your hands lightly touching the steering wheel, it may also be detected as hands-free driving.

■ **When the vehicle has been parked under the scorching sun or when the temperature in the cabin is extremely low**

The LKA system functions may not be available for a while after driving of the vehicle has been started. In such cases, turn the LKA system off and turn it on again after normal temperature returns. When the temperature in the cabin decreases or increases, and the temperature around the camera sensor becomes appropriate for its operation, the functions will begin operating. (→P. 254)

⚠ CAUTION

■ Before using the LKA system

Do not rely on the LKA system to remain within a selected lane. The LKA system is not designed to enable inattentive driving. The steering wheel should be operated by the driver to maintain the vehicle in a suitable position within its lane. Always drive carefully.

■ Turn the LKA off while driving in any of the following conditions:

Do not use LKA in any of the following situations. Otherwise, the system may not function correctly and could result in an accident.

- When driving with snow tires, snow chains, a spare tire, or similar equipment.
- When driving with non-standard parts or aftermarket equipment installed. (including modified tires and suspensions, etc.)
- When there are objects or structures along the roadside that might be misinterpreted as lane markers. (such as guardrails, curb, reflector posts, etc.)
- Where there are wheel ruts, icy trademarks, etc. or if snow remains on the road surface.
- When there are shadows on the road running parallel with lane markers, or if a shadow covers the lane markers.
- When there are visible lines on the pavement from road repairs, or if the remains of old lane markers are still visible on the road.
- When driving on slippery roads, such as those covered with rain, ice or snow.
- When driving in a lane other than the driving or passing lanes on a freeway, highway or motorway.
- When driving on a road with lane closures due to maintenance, or when driving in a temporary lane.
- When driving on winding roads or roads that are rough or uneven.

NOTICE

■ In the following situations, the LKA will not work, or will not perform reliably:

- When lane markers are interrupted or are not present, such as before a tollbooth (tollgate).
- When lane markers are only on one side of the road.
- When driving on a sharp curve.
- When lanes are extremely narrow or extremely wide.
- When the vehicle leans to one side an unusual amount due to a heavy load or improper tire inflation pressure.
- When the following distance between your vehicle and the vehicle ahead is extremely short.
- When the lane markers are broken, "Botts' dots", or "Raised pavement marker".
- When lane markers are obscured or partially obscured by sand, dirt, etc.
- When driving on a particularly bright road surface, such as concrete.
- When driving on a road surface that is bright due to reflected light.
- When driving in a location where the light level changes rapidly, such as the entrance to or exit from a tunnel.
- When sunlight or the headlights of oncoming vehicles are shining directly into the camera lens.
- When driving on roads that are branching or merging.
- When pavement lane markers are difficult to see due to rain, snow, fog, etc.
- When driving on a road surface that is wet due to rain, previous rainfall, standing water, etc.
- When the vehicle experiences strong up-and-down motion such as when driving on an extremely rough road or on a seam in the pavement.
- When headlight brightness is reduced due to dirt on the lenses, or when the headlights are misaligned.
- When driving with a strong crosswind.

⚠ NOTICE

Camera sensor



Observe the following to ensure that the LKA system functions correctly.

- Keep the windshield clean at all times.
  LKA performance may deteriorate due to the presence of raindrops, condensation, ice or snow on the windshield.
- Do not attach a sticker or other items to the windshield near the camera sensor.
- When adjusting the rear-view mirror, make sure that it does not block the camera lens.
- When it is cold, using the heater with air blowing to the feet may allow the upper part of the windshield to fog up. This will have a negative effect on the images. In such a case, use the windshield defogger to provide warm, dry air to the windshield.
- Do not place anything on the dashboard.
  The camera sensor may recognize the image reflected on the windshield as lane markers by mistake.
- Do not scratch the camera lens, or let it get dirty.
- Do not change the installation position of the camera sensor or remove it. The direction of the camera sensor is precisely adjusted.
- Do not subject the camera sensor to strong impact or force, and do not disassemble the camera sensor.

Electronically modulated air suspension

The vehicle adjusts the damping of the shock absorbers and maintains vehicle height automatically in response to driving conditions to help provide enhanced driving comfort and vehicle control.

Vehicle height adjustment

The vehicle's height is maintained at the selected level regardless of the number of occupants and luggage weight.



Turn the "HEIGHT HIGH" switch on.

The indicator light comes on.

Press the switch once more to cancel the high mode.

Damping mode selection

You can select the damping mode of the shock absorbers.



1 Sport
The indicator light comes on.

2 Normal

3 Comfort
The indicator light comes on.

Operating sound of the air suspension compressor

When the vehicle height is lowered, such as when entering or loading the vehicle, or high mode is selected, the compressor may operate and a whirring sound may be heard. This does not indicate a malfunction.

⚠ CAUTION

■ **Be sure to stop the hybrid system in the following situations in order to stop operation of the electronically modulated air suspension:**

- The vehicle is parked on a curb.
- Any of the wheels is stuck in a ditch.
- It is necessary to jack up the vehicle.
- It is necessary to tow the vehicle with part of it lifted.

If the "POWER" switch remains in ON mode, the vehicle height may change, resulting in accidental damage.

Advanced parking guidance system

The advanced parking guidance system supports the driver during reverse parking by displaying a rear-view image. When in assist mode, the system controls the steering wheel to help the driver reverse the vehicle into a target parking position set on the screen.

The illustrations of the display shown are examples only and may differ from actual images. When parking in a space on the opposite side to that shown in the examples, be sure to substitute left for right and vice versa when operating the steering wheel.



Advanced parking guidance system will activate when the shift lever is in "R" position.

If you move the lever out of "R" position, the advanced parking guidance system will be deactivated.

As the advanced parking guidance system only assists with parking in a set target parking position, there are times when the system will be unable to render this assistance, depending on factors such as road surface or vehicle condition, or the distance to the set target parking position.

The advanced parking guidance system is not an automatic parking system. It is a system to assist back up parking.

About the screen



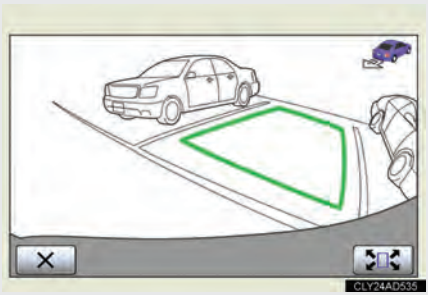
1 Parking assist mode button

Touching this button turns parking assist mode on. (→P. 261)

2 Parallel parking assist mode button

Touching this button turns parallel parking assist mode on. (→P. 270)

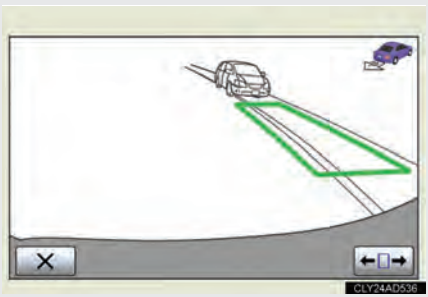
Perpendicular parking



● Parking assist mode (→P. 261)

This mode assists the driver during perpendicular parking by automatically controlling the steering wheel to move the vehicle into the target position set on the screen.

Parallel parking

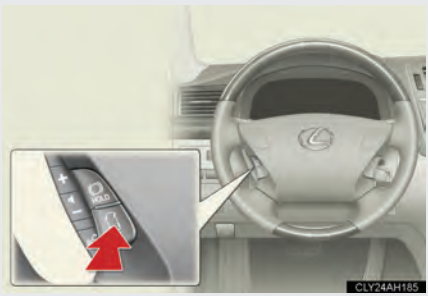


● Parallel parking assist mode (→P. 270)

This mode assists the driver during parallel parking by automatically controlling the steering wheel to move the vehicle into the target position set on the screen.

APGS pre-support switch

Use this switch to turn on/off the pre-support function and to switch assist mode between parallel parking assist mode and perpendicular parking assist mode.

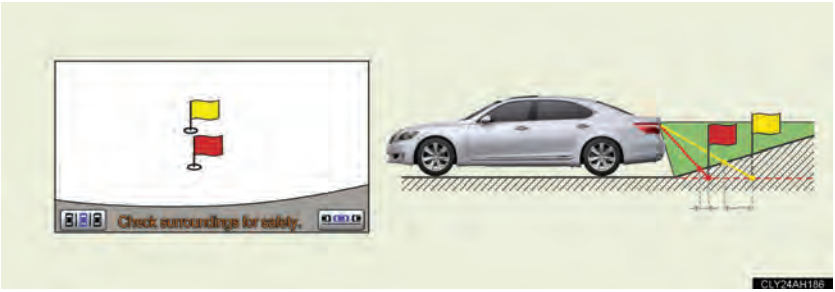


Pressing the pre-support switch while assist mode is on, the "POWER" switch is in ON mode and the vehicle is traveling below 9 mph (15 km/h) with the shift position in any position other than "P" or "R", will cause the screen to change in the following order:

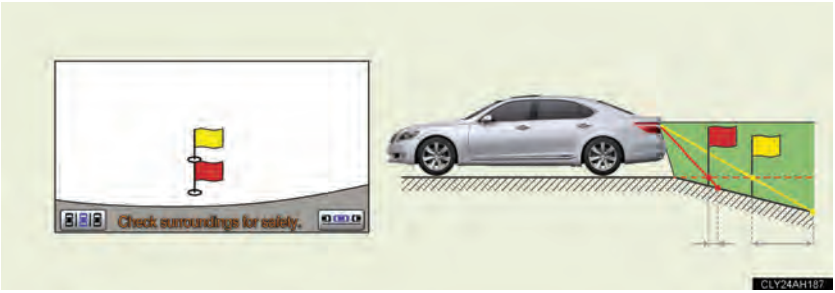
Pre-support function OFF → Parallel parking assist mode pre-support screen → Perpendicular parking assist mode pre-support screen → Pre-support function OFF

If the pre-support function cannot be used, two beeps will sound (the beeps will not sound if the shift lever is in the "R" position).

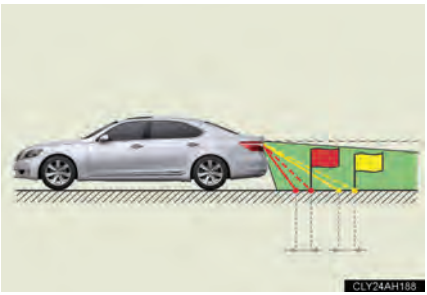
Driving precautions



When the grade behind the vehicle slopes up sharply, objects appear to be farther away than they actually are.



When the grade behind the vehicle slopes down sharply, objects appear to be closer than they actually are.



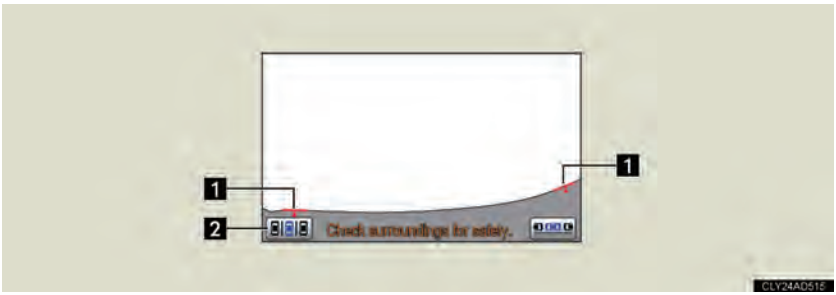
When any part of the vehicle sags due to the number of passengers or the distribution of the load, there is a margin of error between the set target parking position on the screen, and the actual distance/course on the road.

Parking assist mode (Perpendicular parking)

Screen description

Parking assist mode assists the driver with perpendicular parking by automatically controlling the steering wheel when backing up, in order to park in the target position set on the screen.

If a message is displayed while maneuvering (→P. 279)



1 Camera orientation confirmation lines

2 Parking assist mode button

Parking operation

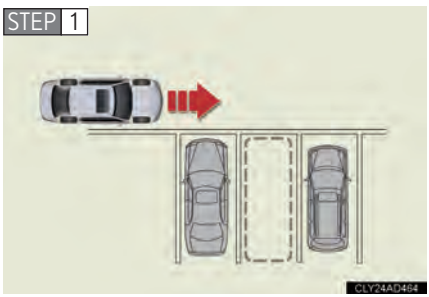
● Pre-support function

Pre-support is useful for parking perpendicular to another vehicle. This function detects the empty parking space beyond the parked vehicle and then guides the driver to the correct starting position for reversing. Chimes are used to inform the driver when it is time to turn the steering wheel and when it is time to start reversing.

● Before backing up

▶ When the pre-support function is in use

STEP 1



With the vehicle stopped or driving at 9 mph (15 km/h) or less, push the pre-support switch twice when your vehicle is positioned slightly before the target parking space. (→P. 259) Check that the screen changes.

STEP 2

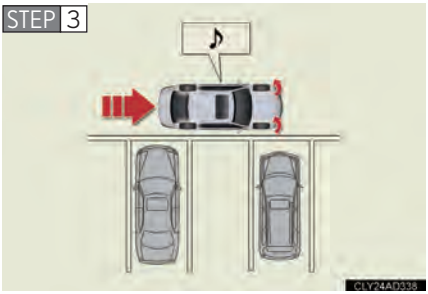


Move your vehicle slowly to a position perpendicular to and as close as possible to the target parking space.

Drive slowly enough to be able to turn the steering wheel immediately after the chime sounds.

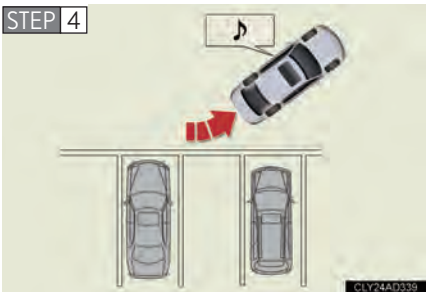
To discontinue the guidance, push the pre-support switch once to turn the pre-support function off. (→P. 259)

STEP 3



A chime will sound once when the center of the target parking space is visible right beside you. After this chime has sounded, turn the steering wheel about half a turn or more while driving forward.

STEP 4



When the chime sounds twice, stop your vehicle and straighten the steering wheel.

To enter the target parking space more accurately, position your vehicle with a larger heading angle.

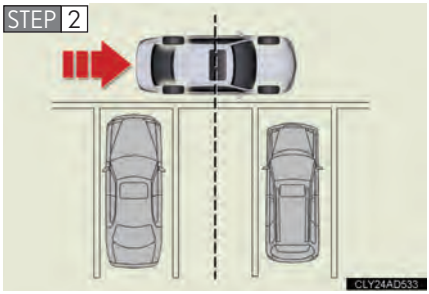
▶ When the pre-support function is not in use

STEP 1



Move your vehicle slowly to a position perpendicular to the parking space, and as close as possible to the parking space.

Positioning the vehicle perpendicular to the parking space allows the angle of the parking position to be identified easily.



Move your vehicle to a position where you can see the center of the parking space right besides you.

To facilitate the setting of the target parking position, the front side sensors detect the vehicles parked at the left and right of the parking space and identify the target parking position.

It is possible to identify the target parking position even if there is only a vehicle parked on one side of the parking space.

If no vehicle or small vehicles are parked on both sides of the desired parking space, stop with the steering wheel straight.

- By stopping the vehicle here, you can mostly identify the parking location, making it easier to set the target parking position.
- Make sure the steering wheel is straight when you stop. If not, the parking location cannot be identified.
- If you do not stop in front of the parking space, the system will refer to the angle of the vehicle relative to the target parking space, and display the target parking position (green or red frame) in the position used last time the parking assist mode was activated.



Position your vehicle so that you can enter the parking space, then stop the vehicle with the steering wheel straight.

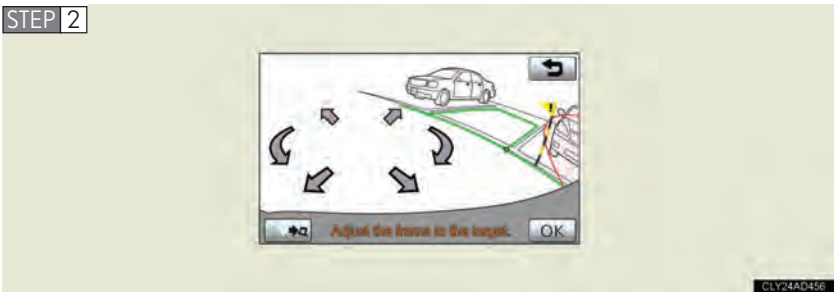
To enter the target parking space more accurately, position your vehicle with a larger heading angle.

● While backing up

STEP 1 Place the shift lever in "R" position.

Touch on the screen (only when the pre-support function is not in use).

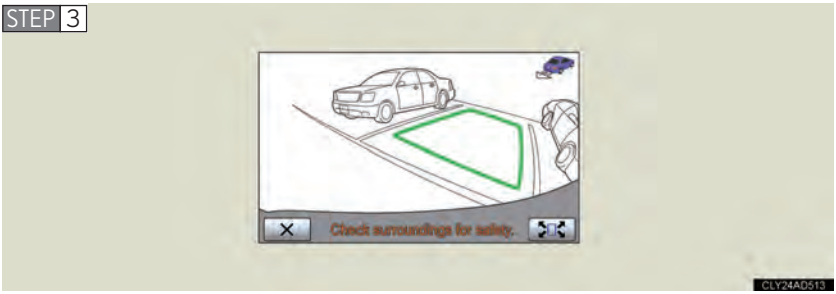
STEP 2



Use the arrow to align the green frame with the desired parking space, then touch "OK".

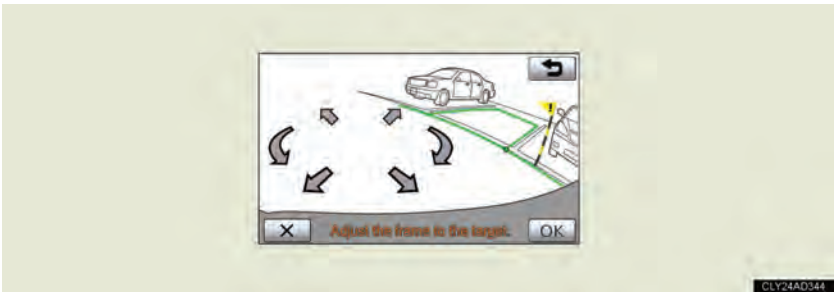
- You can also move the green frame by touching the screen (area other than the arrow).
- There are tricks to align the green frame. (→P. 267)
- Areas in which you are unable to park are displayed in red.
- If the frame is displayed in red, you cannot use the parking assist mode to park in that location. (→P. 284)
- When the green frame is displayed, if you begin backing up without touching "OK", the message "Parking position has not been set." appears. If you continue to back up, you will hear a warning tone and the system will be disabled.
- If the frame is red, there will be no guidance even if you begin backing up.
- If the orientation of the frame is opposite to that of the target parking space, touch .
- There may be times when, due to image distortion, the green frame does not match the parking space lines on the road surface. In this case, attempt an approximate match in an area where the warning flag does not overlap with any parked vehicles or obstacles.
- You may adjust the target parking position even after starting the parking assist mode.

STEP 3



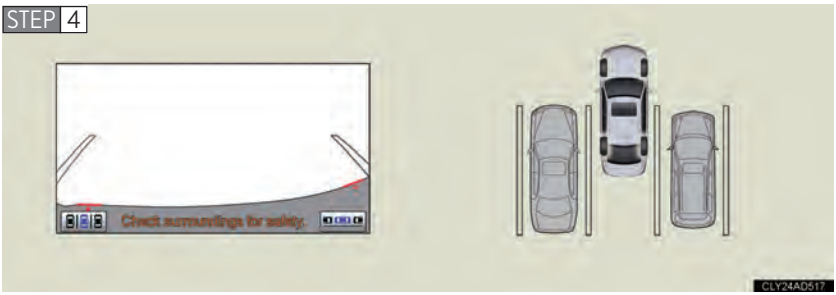
Position yourself as you would when backing up normally, and rest your hands on the steering wheel without applying any pressure. Check your surroundings and behind the vehicle for safety, and slowly back up, using the brake pedal to control the vehicle's speed.

If you touch “X”, assistance is canceled.



You can change the target parking position by touching . If you are backing up, or have already moved close to the target parking position, will turn gray, and you will be unable to change the target.

Touch the arrows to move the target parking position, and then touch “OK”.



Once the vehicle is mostly within the target parking position, voice guidance will inform you to finish the assist mode.

For safety, voice guidance is given slightly before the target parking position. Furthermore, at that point system control will finish, so grip the steering wheel firmly, and finish parking in the desired position, using the brake to control the vehicle's speed.

Check in front and behind the vehicle visually and check with the mirrors while backing up.

Tips for setting the target parking position

Useful information for setting the target parking position (green frame)

● The display position of the green frame

The system decides the initial positioning of the green frame by the position of the parking space detected by the front side sensors or the position of the vehicle when it stops, and by detecting the white lines of the parking space in the camera image to identify the parking space location.

The front side sensors identify the parking space location and the white lines near that location are detected.

The front side sensors cannot identify the parking space location, or the parking space location maybe misaligned in the following situations.

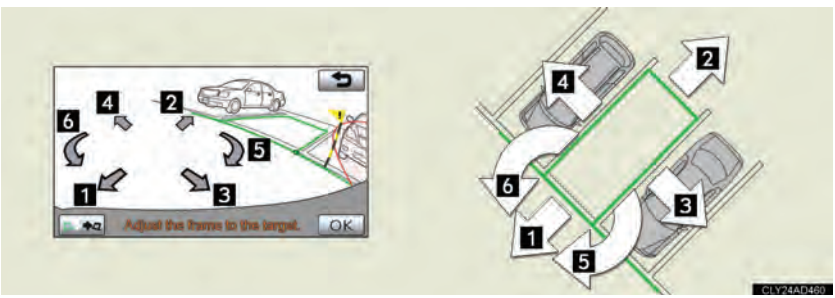
- A vehicle is parked at the back of the parking space or the sensors cannot detect a parked vehicle due to vehicle shape etc.
- The sensors cannot detect a pole or wall beside the parking space.
- The sensors detect a pedestrian or object near the parking space.

If the point at which you stop is correctly identified, the green frame will display the parking space accurately. If the white lines of the parking space have not been correctly identified, the green frame will not match the parking space even if you stop in the correct location. In this case, adjust the point at which you stop as needed.

● Aligning the green frame

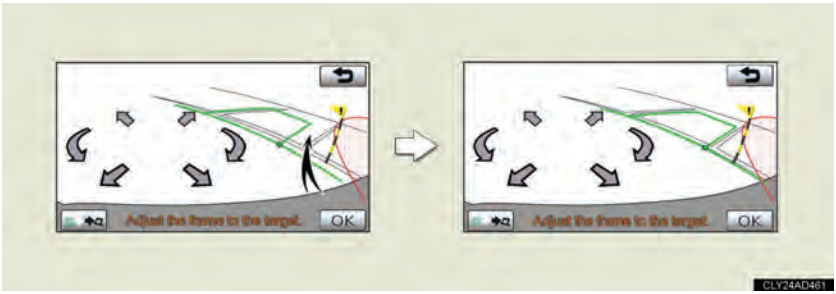
There are two ways to align the green frame with the parking space, either using the arrows on the screen, or by touching the screen at points other than the arrows.

▶ Using the arrows on the screen:



By touching the arrows displayed on the screen, you can move the green frame.

▶ Directly touching the target point:



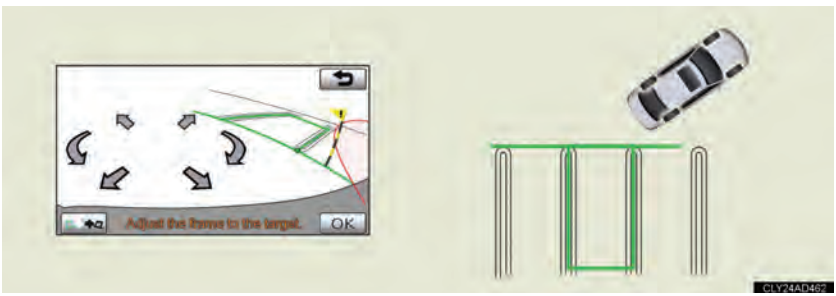
Touch the front edge of the place you wish to move.

By touching the point you wish to move the frame to, you can move the green frame.

If you touch the following areas, the green frame will not move:

- The area surrounding the arrows.
- The area near the lower button on the screen.
- Areas too far away to park in the range of 31.2 ft. (9.5 m) or more behind, and/or either left or right from the current position.

● If the parking space and the green frame do not match



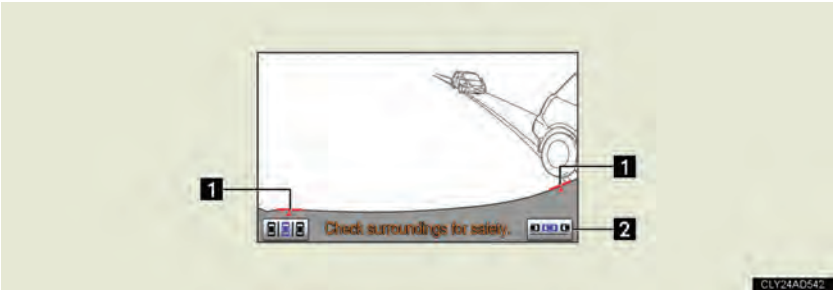
If the lines of the parking space are wider than the green frame, position the frame so that the difference between the frame and the parking space lines is equal on both sides.

Parallel parking assist mode

Screen description

Parallel parking assist mode assists the driver with parallel parking by automatically controlling the steering wheel when backing up, in order to park in the target position set on the screen.

If a message is displayed while maneuvering (→P. 279)



1 Camera orientation confirmation lines
2 Parallel parking assist mode button

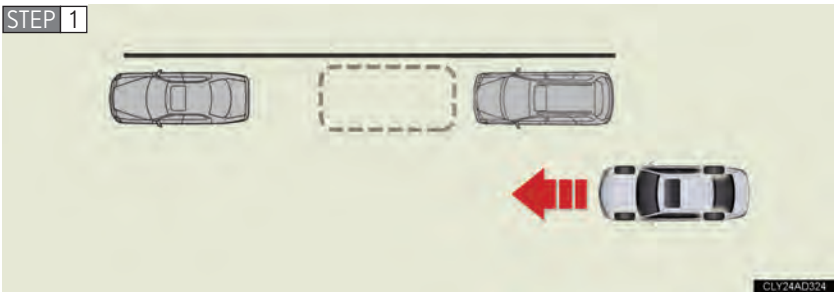
Parking operation

● Pre-support function

Pre-support is useful for parking between two vehicles that are parked along the shoulder of the road. This function detects the empty parking space between the parked vehicles and then guides the driver to the correct starting position for reversing. Chimes are used to inform the driver when it is time to start reversing.

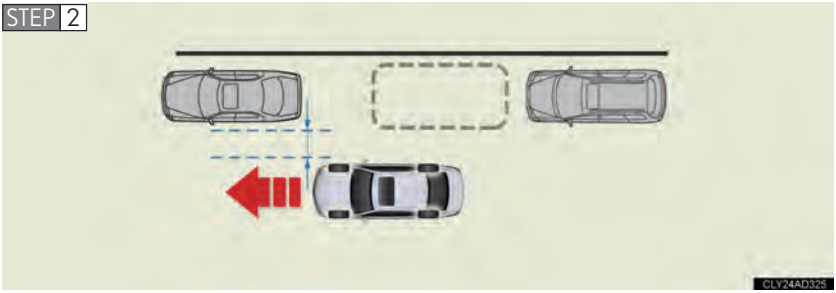
● Before backing up

▶ When the pre-support function is in use



With the vehicle stopped or driving at 9 mph (15 km/h) or less, push the pre-support switch once when your vehicle is positioned slightly before the target parking space. (→P. 259) Check that the screen changes.

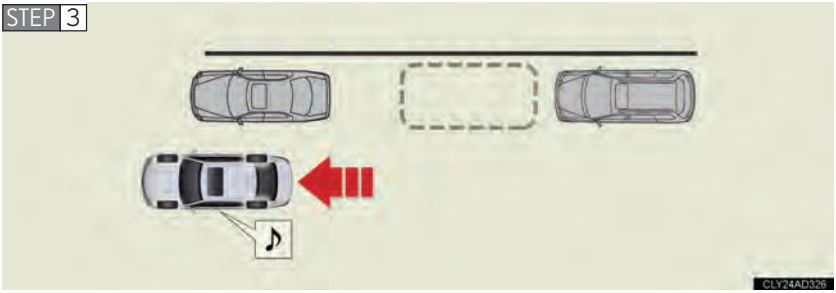
STEP 2



Move your vehicle slowly alongside the vehicle parked in front of the target parking space. Your vehicle should move parallel to the road or shoulder and be approximately 3 ft. (1 m) away from the side of the parked vehicle.

To discontinue the guidance, push the pre-support switch twice to turn the pre-support function off. (→P. 259)

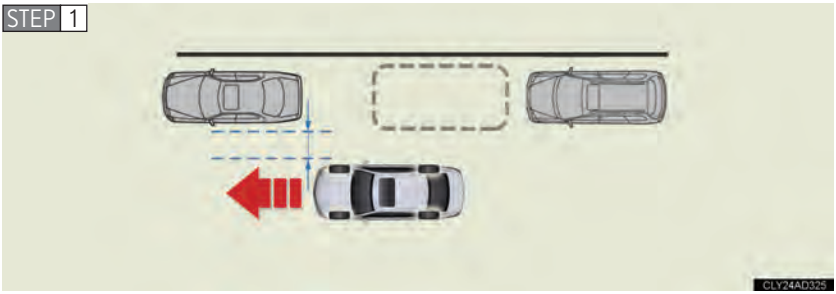
STEP 3



A chime will sound twice when the front edge of the vehicle parked in front of the target parking space is visible right beside you. When this chime sounds twice, stop your vehicle.

▶ When the pre-support function is not in use

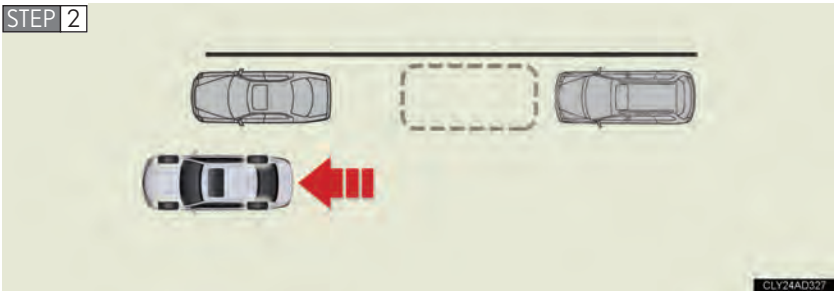
STEP 1



Move your vehicle slowly to a position parallel to the road or shoulder approximately 3 ft. (1 m) away from parked vehicles.

To facilitate the setting of the target parking position, the front side sensors detect the vehicles parked in front of and behind the parking space and identify the target parking position.

STEP 2



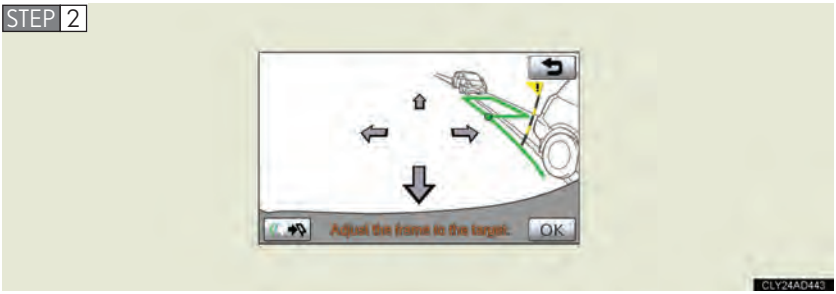
Stop your vehicle in a position where you can see the front edge of the leading parked vehicle right beside you, with the steering wheel straight.

If there is no leading parked vehicle, the system will display the target parking position (green or red frame) in the position used last time the parallel parking assist mode was activated.

● While backing up

STEP 1 Place the shift lever in the "R" position.
Touch on the screen (only when the pre-support function is not in use).

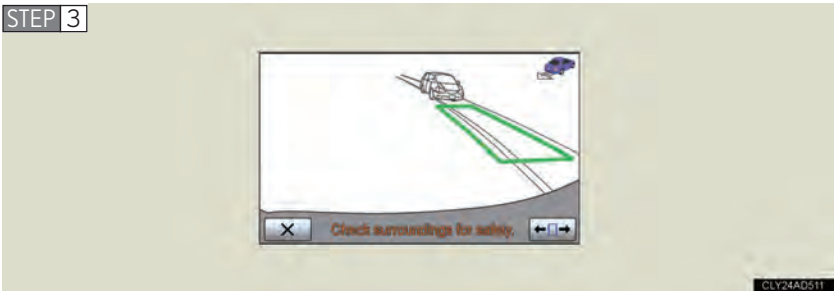
STEP 2



Use the arrow to align the green frame with your target parking space, and touch "OK".

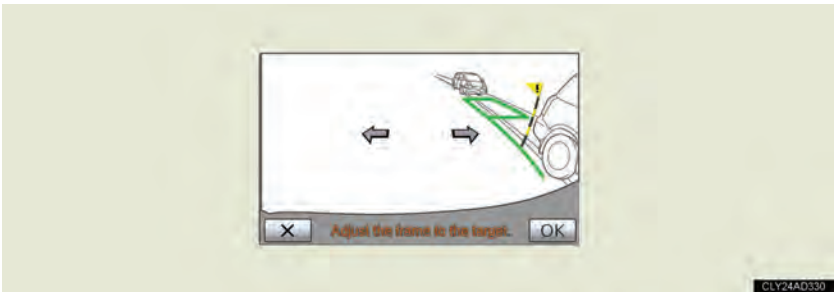
- You can also move the green frame by touching the screen (area other than the arrows).
- There are tricks to align the green frame. (→P. 276)
- If the frame is displayed in red, you cannot use the parallel parking assist mode to park in that location. (→P. 284)
- When the green frame is displayed, if you begin backing up without touching "OK", the message "Parking position has not been set." appears. If you continue to back up, you will hear a warning tone and the system will be disabled.
- If the frame is red, there will be no guidance even if you begin backing up.
- If the orientation of the frame is opposite to that of the target parking space, touch .
- There may be times when, due to image distortion, the green frame does not match the parking space lines on the road surface. In this case, use the warning flag and extended green line to set the target parking position.
- You may adjust the target parking position even after starting the parallel parking assist mode.

STEP 3



Position yourself as you would when backing up normally, and rest your hands on the steering wheel without applying any pressure. Check your surroundings and behind the vehicle for safety, and slowly back up, using the brake pedal to control the vehicle's speed.

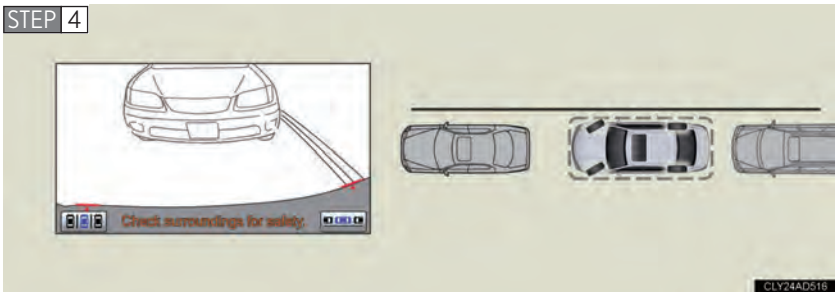
If you touch "X", assistance is canceled.



You can change the target parking position by touching ←□→. If you are backing up, or have already moved close to the target parking position, ←□→ will turn gray, and you will be unable to change the target.

Touch the arrows to move the target parking position, and then touch "OK".

You can only move the target parking position left or right, and the warning flag will not move even if you adjust the target parking position.



Once the vehicle is mostly within the target parking position, voice guidance will inform you to finish the assist mode.

For safety, voice guidance is given slightly before the target parking position. Furthermore, at that point system control will finish, so grip the steering wheel firmly, and finish parking in the desired position, using the brake to control the vehicle's speed.

Check in front and behind the vehicle visually and check with the mirrors while backing up.

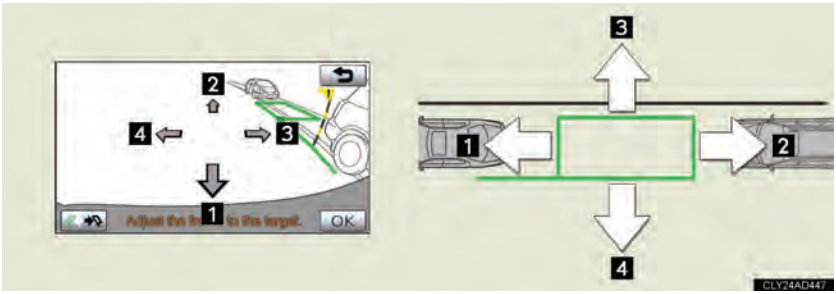
Tips for setting the target parking position

Useful information for setting the target parking position (green frame)

● Aligning the green frame

There are two ways to align the green frame with the parking space, either using the arrows on the screen, or by touching the screen at points other than the arrows.

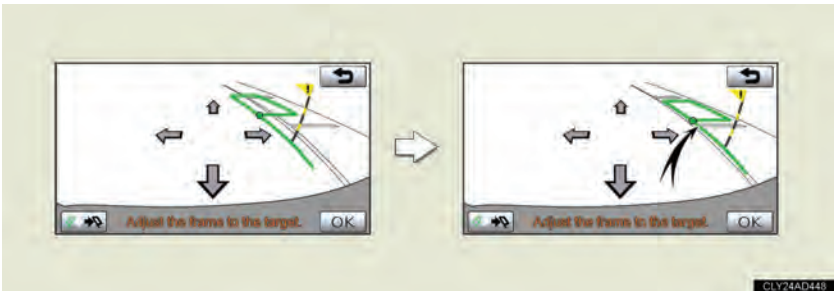
▶ Using the arrows on the screen:



By touching the arrows displayed on the screen, you can move the green frame.

Adjusting the left-right alignment first will make subsequent alignment easier.

▶ Directly touching the target point:



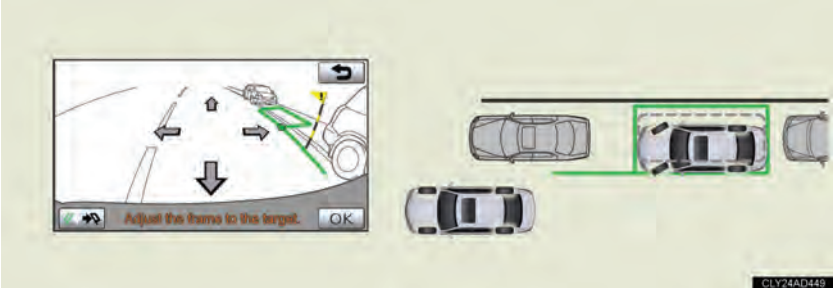
By touching the point you wish to move the frame to, you can move the green frame.

Touch the front edge of the place you wish to move.

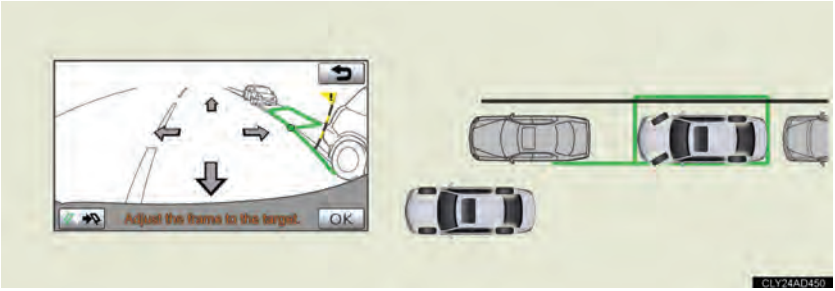
If you touch the following areas, the green frame will not move:

- The area surrounding the arrows.
- The area near the lower button on the screen.
- Areas too far away to park in the range of 34.4 ft. (10.5 m) or more behind the current position, and/or 16.4 ft. (5.0 m) or more either left or right from the current position.

● If there is a slope in the road



The assisted parking position will move left or right of the set target parking position.



In this case, if you align the warning flag with the rear of the forward parked vehicle, and the extended green line with the lower edge of the parked vehicle's rear wheel when setting the target parking position, the left side of your vehicle will be roughly in line with the left side of the front parked vehicle once assisted parking is complete. If you are parallel parking on the opposite side of the road, left and right will be reversed.

What to do when this sort of message is displayed

Message	Cause	What to do
! Parking position cannot be set.	Not in an area where system use is possible.	Change the vehicle's position, referring to the help function.
! Check APGS. Have your vehicle checked by a dealer.	There is a malfunction in the system.	Have your vehicle checked by your Lexus dealer.
! Use on flat surface.	• The vehicle has rolled forward on a sloped road. • The vehicle does not move even if you take your foot off the brake pedal. • You have depressed the accelerator pedal during the assist mode.	Do not attempt to use the system in those sorts of conditions. Use the system for flat parking spaces.
! System cannot guide under current conditions.	If the message is displayed only when the system is operating, it is likely that the tires are worn, or tire inflation pressure is low.	Check tires for wear and pressure.
	If the message is displayed constantly, there is most likely a malfunction.	Turn the "POWER" switch to OFF, then to ON mode. If the message is still displayed, have the vehicle checked by your Lexus dealer.
	The vehicle has skidded or the tires have been locked.	Do not attempt to use the system on a slippery road such as snowy road.

Message	Cause	What to do
! APGS not available now.	The system has temporarily overheated.	Turn the "POWER" switch to OFF, then to ON mode. Wait a few minutes before use.
	There is a malfunction in the voice guidance system.	Have your vehicle checked by your Lexus dealer.
	The hybrid system has not been started.	Turn the "POWER" switch to ON mode and start the hybrid system. If the message is still displayed, have the vehicle checked your Lexus dealer.
! Release parking brake.	The parking brake has been applied.	Release the parking brake.
! Too much force applied to the steering wheel.	You are exerting too much pressure on the steering wheel.	Loosen your grip on the steering wheel.
Steering position is not straight. Turn the steering wheel to LEFT (or RIGHT).	The steering wheel and tires are not straight.	Turn the steering wheel until tires are straight.

Message	Cause	What to do
Steer to left (or right) until the frame becomes green.	It is possible to begin to park if you turn the steering wheel in the direction indicated.	Turn the steering wheel in the direction indicated until the frame turns green (the message "Too much force applied to the steering wheel." is displayed). Turn the wheel slightly more than necessary to overcome tire resistance. Once you have turned the steering wheel, you can no longer change the target parking position. Be sure to align the frame before turning the steering wheel.
! Parking position has not been set.	You have begun to back up without touching "OK".	Stop the vehicle and touch "OK".
! Speed is too fast.	The speed at which you are backing up is too fast.	Using the brake pedal, back up at a speed that does not cause the warning chime to sound. The system will be disabled if you back up too quickly.
! Guidance canceled by user operation.	You have turned the steering wheel during the assist mode.	The system has been disabled. You will need to restart from the beginning.
! Accelerator pedal has been depressed.	You have depressed the accelerator pedal when setting the target parking position.	Do not depress the accelerator pedal.

Message	Cause	What to do
! Guidance unavailable.	Some sort of malfunction has occurred within the system.	Have your vehicle checked by your Lexus dealer.
! System not ready.	-	Take your vehicle to your Lexus dealer.
! Depress the brake pedal.	"OK" is touched while the brake hold system is on.	Depress the brake pedal and touch "OK".
! Clean Park Sonar.	The sensors may be affected by extreme cold or covered by foreign matter.	Rinse with water and wipe with a soft cloth. Wash with a mild cleanser and rinse if necessary. If the message is still displayed, have your vehicle checked by your Lexus dealer.

Message and voice guidance

In the parking assist function, voice guidance accompanies the following messages displayed during parking position setting and steering wheel control. (Voice guidance may not be given depending on the reason the message was displayed.)

Message	Voice Guidance (Warning tone)	
	During setting	During steering wheel control
! Check APGS. Have your vehicle checked by a dealer.	(One chime)	(Two beeps) The guidance has been canceled.
! System cannot assist under current conditions.	-	(Two beeps) The guidance has been canceled.
! APGS not available now.	(One chime)	(Two beeps) The guidance has been canceled.
! Release parking brake.	(One chime)	(Two beeps) The guidance has been canceled.
! Parking position has not been set.	(One chime)	-
! Speed is too fast.	-	(Several beeps and then two beeps) The guidance has been canceled.
! Guidance canceled by user operation.	-	(Two beeps) The guidance has been canceled.

For the adjustment of the volume, refer to the "Navigation System Owner's Manual".

When a red frame is displayed in the parking assist function

If the frame turns red and the message "Adjust the frame to the target." is displayed while setting the target parking position, you cannot use the parking assist function.

In this situation, move the target parking position, or move the position of the vehicle.

The frame may be displayed in red, depending on the location and angle of the vehicle when "R" position is selected.

Furthermore, even if the frame is displayed in green, if you move the frame to a location unsuitable for parking using the parking assist function, the frame will change to red.

● Help function

If you touch "OK", the reason the frame is displayed in red will be displayed. Move the vehicle appropriately, referring to the screen.

STEP 1 Touch "OK".

STEP 2 Move the vehicle in accordance with the message displayed.

See the following items for information on the messages displayed.If you move the frame to a position acceptable to the assist mode, a chime will sound.

STEP 3 If you have moved the vehicle forwards, place the shift lever in "R" position.

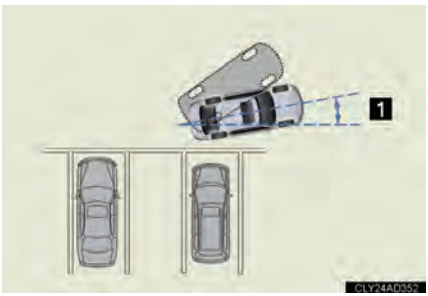
STEP 4 Check that the frame is green, and if that position is acceptable, touch "OK".

● Displayed message and vehicle position for parking assist mode



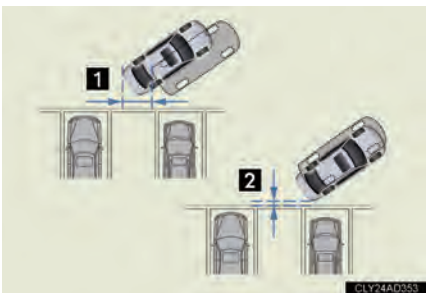
1 Too far

If the vehicle is too far from the parking space, the message "Start from a position nearer to the target parking area." will be displayed.



1 Angle too small

If the orientation of the vehicle is incorrect, the message "Start with larger vehicle heading angle." will be displayed.

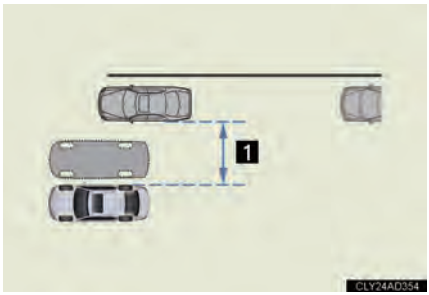


1 Near the front of the parking space

2 Too close

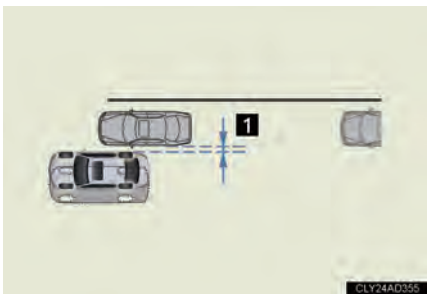
If the vehicle is near the front of the parking space, or too close, the message "Start from a position farther from the target parking area." will be displayed.

● Displayed message and vehicle position for parallel parking assist mode



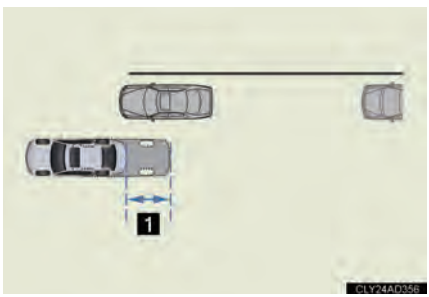
1 Too far

If the vehicle is too far from other parked vehicles, the message "Start from a position near to adjacent vehicle." will be displayed.



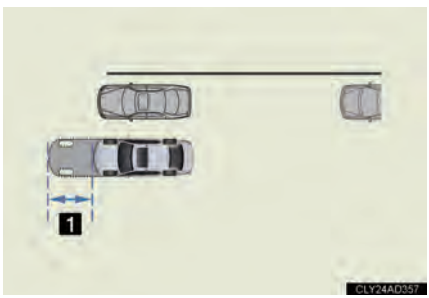
1 Too close

If the vehicle is too close to other parked vehicles, the message "Start from a position farther from adjacent vehicle." will be displayed.



1 Too far forward

If the vehicle is too far forward, the message "Start after moving slightly backward." will be displayed.



1 Too far back

If the vehicle is too far back, the message "Start after moving slightly forward." will be displayed.

Initializing the system



Make sure to initialize the system in the following situations.

- The 12-volt battery is disconnected and reconnected.
- The system initialization in progress screen is displayed when the shift lever is moved to "R" position (due to low battery etc.).

The help screen appears when "?" is touched. Make a correction using the following method in accordance with the display.

When the vehicle is stopped, turn the steering wheel all the way to the left, then all the way to the right. (It does not matter in which direction — right or left — you turn first.)

When the screen returns to the original display, correction is complete.

If the above screen remains, have the vehicle inspected at your Lexus dealer.

Disabling the system

Even if the shift lever is in "R" position, if you push any of the switches around the screen, such as "SETUP" or "INFO/PHONE", the screen will switch to that mode.

When in the parking assist mode or parallel parking assist mode, in the following case the voice guidance will say "The guidance has been canceled.", a message will be displayed, and the system will be disabled. (→P. 279)

After the following operations:

- Moving the steering wheel
- Using the accelerator
- Moving the shift lever out of "R" position
- Applying the parking brake
- Switching the screen display

In the following situations:

- If the vehicle slips forward or stops after taking your foot off the brake pedal
- If the backing speed is too fast
- If normal assistance cannot be rendered due to worn tires or low tire inflation pressure
- If the target parking position has not been confirmed on the target parking position setting screen before backing up
- Any warnings displayed on the screen are not acknowledged before backing up
- If there is a system malfunction
- If the system temperature protection function operates
- If a hands-free phone call is received

If the system is disabled while backing up, grip the steering wheel firmly and depress the brake pedal to bring the vehicle to a halt. The system has been completely disabled, so you may either start again from the beginning, or if you wish to finish parking manually, be sure to operate the steering wheel as you would normally.

■ **Notes for the pre-support function**

- If the detected parking space is too small, guidance will not start.
- To allow the pre-support system to activate accurately, move the vehicle as slowly as possible (at a speed that will allow the vehicle to stopped suddenly).
- The function cannot be used if the shift position is in "P" or "R" position, or if the vehicle speed is greater than 9 mph (15 km/h).
- In order to identify parking spaces and detect parked vehicle using the sensors on both sides of the front bumper, guidance cannot be given if a space is not detected.
- Parking space guidance and searching continues until the vehicle speed is greater than 9 mph (15 km/h) or until the function is turned off by pushing the pre-support switch.
- Perpendicular parking: The pre-support function can be only used for perpendicular parking when a vehicle is parked beside the target parking space on the side closest to your vehicle as it approaches.
  Parallel parking: The pre-support function can be only used for parallel parking when vehicles are parked both in front of and behind the target parking space.

■ **Detecting while lines in parking assist mode (perpendicular parking)**

If there are no vehicles parked on either side of the target parking space when your vehicle stops, the approximate parking space location is identified, and the white lines in that location are detected. For this reason, stopping in front of the parking space will make the detection of target parking space's white lines easier.

Successful detection of the parking space's white lines may not be possible, depending on the shape of the line.

In the following circumstances, detection of the parking space lines on the road surface may not be possible:

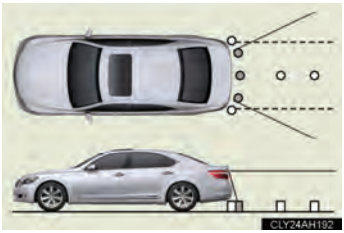
- The lines are faded or dirty, making them unclear.
- The road surface is of a light color which does not contrast well with the white lines.
- The parking space lines are a color other than white (yellow etc.).
- The area is dark, for example at night or in a covered parking lot.
- During or after rain, when the road surface is wet and reflects light, or puddles have formed.
- The sun is shining directly on the camera, for example early morning or late afternoon.
- The parking space is covered with snow or de-icing agent.
- There are markings or maintenance marks on the road surface.

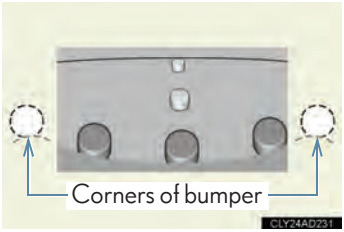
- The color or brightness of the road surface is not uniform.
- Hot or cold water has splashed on the camera, and the lens is fogged.
- There are dirt or water droplets on the lens.

Intuitive parking assist

When the Intuitive parking assist are turned on and an obstacle is detected in front of or behind your vehicle, a warning appears on the top right of the screen. (→P. 240)

Area displayed on screen





The area covered by the camera is limited. Objects which are close to either corner of the bumper or under the bumper cannot be seen on the screen.

The area displayed on the screen may vary according to vehicle orientation or road conditions.

If the edge of the bumper displayed on the screen does not match the camera orientation confirmation lines, the camera may not be aligned correctly. Have the vehicle checked by your Lexus dealer.

Advanced parking guidance system camera



In the following cases, it may become difficult to see the images on the screen, even when the system is functioning correctly:

- The vehicle is in a dark area, such as at night.
- The temperature near the lens is extremely high or low.
- Water droplets are on the camera lens or humidity is high, such as when it rains.
- Foreign matter, such as snow or mud, adheres to the camera lens.
- The sun or headlights are shining directly into the camera lens.



If a bright light, such as sunlight reflected off the vehicle body, is picked up by the camera, a smear effect* characteristic to the camera may occur.

*: Smear effect — A phenomenon that occurs when a bright light is picked up by the camera; when transmitted by the camera, the light source appears to have a vertical streak above and below it.

If you install the antenna of a wireless device close to the camera, the screen image may be affected by the electromagnetic waves, and the system may not function correctly. Install an antenna away from the camera.

The method for adjusting the picture quality of the advanced parking guidance system is the same as that for the screen.

⚠ CAUTION

When using the system

- Be sure to check that the vehicle can actually park in the target space before beginning operation.
- Depending on the circumstances of the vehicle (number of passengers, amount of luggage, etc.), the position of the green frame displayed on the screen may change. Be sure to check visually behind and all around the vehicle before proceeding.
- Never depend on the system entirely when backing up. Always make sure your intended path is clear.
  Use caution, just as you would when backing up any vehicle.
- When using the parking assist mode and parallel parking assist mode
  - When backing up, be sure to check your surroundings and behind the vehicle for safety, and back up slowly, depressing the brake pedal to control vehicle speed.
  - If you seem likely to hit nearby vehicles, obstacles or people, depress the brake pedal to stop the vehicle, and then disable the system by touching "X" on the screen.
  - If there is a problem, stop the vehicle and disable the system by touching "X" on the screen.
  - Keep clothing such as neckties, scarves and long sleeves away from the steering wheel, as they may become entangled. Also, keep children away from the steering wheel.
  - If you have long fingernails, be careful not to injure yourself when the steering wheel moves.

⚠ CAUTION

How to use the camera

- Never back up while looking only at the screen. The image on the screen is different from actual conditions. Depicted distances between objects and flat surfaces will differ from actual distances. If you back up while looking only at the screen, you may hit a vehicle, a person or an object. When backing up, be sure to check behind and all around the vehicle visually and with mirrors before proceeding.
- If the back of the vehicle is hit, the position and mounting angle of the camera may change. Be sure to have the camera's position and mounting angle checked by your Lexus dealer.
- If the camera is subjected to a collision, or the camera orientation confirmation lines are not in line with the bumper, it is likely that the camera position or angle of installation has become crooked. Contact your Lexus dealer.
- Use your own eyes to confirm the vehicle's surroundings, as the displayed image may become faint or dark, and moving images will be distorted, or not entirely visible when the outside temperature is low. When backing up, be sure to check behind and all around the vehicle visually and with mirror before proceeding.
- Do not use the system when the trunk is not completely closed.
- If the image may be hard to see due to dirt, direct sunlight, shadow or snow on the camera lens.
- If the camera lens becomes dirty, it cannot transmit a clear image. If water droplets, snow, or mud adhere to the lens, rinse with water and wipe with a soft cloth. If the lens is extremely dirty, wash it with a mild cleanser and rinse.
- If you scrape the camera cover, or scrub it with a hard brush or an abrasive agent, you may scratch the cover, leading to poor picture quality.
- Do not allow organic solvent, car wax, window cleaner or glass coat to adhere to the camera. If this happens, wipe it off as soon as possible.
- As the camera has a water proof construction, do not detach, disassemble or modify it. This may cause incorrect operation.

⚠ CAUTION

■ Conditions which may affect the sensor

- Do not attach any accessories within the detection range of the sensors.
- A sensor may not operate properly in the following situations:
  - There is ice, snow or mud on the sensor. (When it is removed, the normal operation will return.)
  - The sensor is frozen. (When the sensor warms up, it will return to normal.) At low temperatures in particular, sensors that are frozen may not detect a parked vehicle.
  - When the vehicle is tilted.
  - In extreme hot or cold weather.
  - When driving on bumpy roads, slopes, gravelled roads or grass.
  - Devices issuing ultrasonic waves are operated around your vehicle, such as a horn from another vehicle, motorcycle engine, air braking sound from heavy-duty vehicles.
  - When rain or water is splashed over the vehicle.
  - When a radio antenna or fender pole is mounted on your vehicle.
  - The sensor approaches too close to a parked vehicle.

⚠ CAUTION

■ Conditions which may affect the system

- If the temperature changes rapidly, such as when hot water is poured on the vehicle in cold weather, the system may not operate normally.
- Do not use the system in the following conditions:
  - Outside of parking areas
  - In unprepared parking area such as gravel or sand
  - On slippery or icy roads, or in snow
  - When using tire chains or emergency tires.
  - On roads that are not flat or straight, such as curves or slopes.
  - If the asphalt is melted due to harsh sunlight
  - If there are a large number of vehicles or pedestrians passing
  - In areas unsuitable for parking (overly small parking space, cliff etc.)
- Tire conditions
  - The tires are extremely worn, or the tire inflation pressure is low
  - Tires have received a strong impact, such as bumping against a curb, resulting in improper wheel alignment
  - Do not use tires other than those installed by the manufacturer, as the system may not function correctly. Furthermore, if you change the tires, there may be errors in the positions of the lines and frames displayed on the screen. If you wish to change your tires, contact your Lexus dealer.

NOTICE

■ When using the parallel parking assist mode

- Be sure to stop the vehicle parallel to the road or shoulder. If the vehicle is not parallel, the assist location will be very near the shoulder. If it looks like the vehicle will hit or mount the shoulder, depress the brake pedal to stop the vehicle, and touch "X" on the screen to deactivate the system.
- Always check that there are no obstacles in the green frame or between your vehicle and the parking space, and that the warning flag and extended green line do not overlap any parked vehicles or walls.
- If there are obstacles in the green frame or between your vehicle and the parking space, or the warning flag or extended green line overlaps a parked vehicle or wall, there is a danger of collision. In this case, do not use the parallel parking assist mode. The same applies if the green frame overlaps the shoulder.
- The warning flag is only a guide. Be sure to directly check your surroundings and behind the vehicle for safety, and back up carefully.
- If the road surface has level variations or a gradient between the starting position and target parking position, it will not be possible to correctly set the location, which may cause the parking position to be misaligned or crooked. In this case, do not use the parallel parking assist mode.
- When the vehicle in front of the empty space is parked on the shoulder or is not parallel with the road, parallel parking assist mode cannot be used.
- If the parked vehicle is narrow, or parked close to the shoulder, the assisted parking position may be quite close to the shoulder. If the vehicle seems likely to hit or mount the shoulder, depress the brake pedal to stop the vehicle, and disable the system by touching "X".

NOTICE

■ **When using the parking assist mode (perpendicular parking)**

- Always check that there are no obstacles in the green frame or between your vehicle and the parking space, and that the warning flag does not overlap any parked vehicles or walls.
- If there are obstacles in the green frame or between your vehicle and the parking space, or the warning flag overlaps a parked vehicle or wall, there is a danger of collision. In this case, do not use the parking assist mode.
- The warning flag is only a guide. Be sure to directly check your surroundings and behind the vehicle for safety, and back up carefully.
- If the road surface has level variations or a gradient between the starting position and target parking position, it will not be possible to correctly set the location, which may cause the parking position to be misaligned or crooked. In this case, do not use the parking assist mode.
- If the red area which denotes an area unsuitable for parking overlaps with the lines of the parking space, you will be unable to park, as the parking space is judged as being an area unsuitable for parking. Progress to a position where the parking space lines do not overlap with such an area.

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 any of the drive wheels from spinning when starting the vehicle or accelerating on slippery roads

Hill-start assist control

Prevents the vehicle from rolling backward when starting on an incline or slippery slope

EPS (Electric Power Steering)

Employs an electric motor to reduce the amount of effort needed to turn the steering wheel

VGRS (Variable Gear Ratio Steering)

Adjusts the wheel turning angle in accordance with the vehicle speed and steering wheel movement

Active stabilizer suspension system (if equipped)

Reduces sway when cornering according to steering wheel movement and the selected suspension damping mode, in order to maintain a stable vehicle posture

VDIM (Vehicle Dynamics Integrated Management)

Provides integrated control of the ABS, brake assist, TRAC, VSC, hill-start assist control, EPS, and VGRS systems
Maintains vehicle stability when swerving on slippery road surfaces by controlling the brakes and hybrid system output, steering assist, and steering ratio

Pre-Collision System (if equipped)

→P. 305

When the VSC/TRAC/hill-start assist control systems are operating



If the vehicle is in danger of slipping, rolling backward when starting on an incline, or any of the drive wheels spin, the indicator flashes to indicate that the VSC/TRAC/hill-start assist control systems have been engaged.

A buzzer (intermittent) sounds to indicate that VSC is operating.

The stop lights and high mounted stoplight turn on when the hill-start assist control system is operating.

The slip indicator light flashes as well when ABS is operating.

Disabling TRAC and/or VSC

If the vehicle gets stuck in fresh snow or mud, TRAC and VSC may reduce power from the hybrid system 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 TRAC

Quickly press and release the switch to turn off TRAC.

A message will be displayed on the multi-information display showing that TRAC has been disabled.

Press the switch again to turn the system back on.

● Turning off TRAC and VSC

Press and hold the switch for more than 3 seconds while the vehicle is stopped to turn off TRAC and VSC.

The VSC off indicator light will come on, and a message will be displayed on the multi-information display showing that TRAC has been disabled.

Press the switch again to turn the system back on.

■ **Automatic reactivation of TRAC and VSC**

Turning the "POWER" switch OFF after turning off the TRAC and VSC systems will automatically re-enable them.

■ **Automatic TRAC reactivation**

If only the TRAC system is turned off, the TRAC system will turn on when vehicle speed increases.

■ **Automatic TRAC/VSC reactivation**

If the TRAC/VSC systems are turned off, the systems will not turn on even when vehicle speed increases.

■ **Sounds and vibrations caused by the ABS, brake assist, VSC, TRAC, hill-start assist control and VGRS systems**

- A sound may be heard from the engine compartment when the hybrid system 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 steering wheel may be moved slightly or a sound may be heard when the hybrid system is started or stopped. None of these indicate that a malfunction has occurred.

■ **Hill-start assist control is operational when**

- The shift lever is in the "D" or "S" position.
- The brake pedal is not depressed.

■ **EPS operation sound**

When the steering wheel operates, a motor sound (whirring sound) may be heard. This does not indicate a malfunction.

■ **Conditions affecting VGRS operations**

In the following situations, the center position of the steering wheel may change. However, the position will return to normal after the conditions are improved.

- When the steering wheel has been operated quickly or operated for an extended period of time while the vehicle is stopped or is moving very slowly
- When the steering wheel has been held fully to the left or right
- When the 12-volt battery is low or the voltage temporarily drops
- After the hybrid system is started at lower than -22°F (-30°C)

■ **Reduced effectiveness of EPS**

The effectiveness of EPS is reduced to prevent the system from overheating when there is frequent steering input over an extended period of time. The steering wheel may feel heavy as a result. Should this occur, refrain from excessive steering input or stop the vehicle and turn the hybrid system off. The system should return to normal within 10 minutes.

■ **If the slip indicator comes on**

It may indicate a malfunction in the VSC, TRAC and hill start assist control function. (→P. 498)

⚠ CAUTION

■ 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 a 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.

■ If hill-start assist control does not operate effectively

Do not overly rely on the hill-start assist control. The hill-start assist control may not operate effectively on steep inclines and roads covered in ice.

⚠ CAUTION

■ When the VSC is activated

The slip indicator light flashes and a warning buzzer sounds. Always drive carefully. Reckless driving may cause an accident. Exercise particular care when the indicator light flashes and a buzzer sounds.

■ When TRAC and VSC are off

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

■ Handling of tires and suspension

Using tires with any kind of problem or modifying the suspension will affect the driving assist systems, and may cause the system to malfunction.

Pre-Collision System*

When the radar sensor detects an unavoidable frontal collision, safety systems such as the brakes and seat belts are automatically engaged to lessen impact and injuries to occupants as well as vehicle 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. (→P. 109)

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

Pre-collision brake assist

When there is a high possibility of a frontal collision, the system applies greater braking force in relation to how strongly the brake pedal is depressed.

Pre-collision braking

When there is a high possibility of a frontal collision, the system warns the driver using a warning light, warning display and buzzer. If the system determines that a collision is unavoidable, the brakes are automatically applied to help reduce the collision speed. Pre-collision braking can be disabled using the pre-collision braking off switch. (→P. 306)

Suspension control

When the system determines that a collision is unavoidable, the suspension switches to "SPORT" mode to help prevent the front of the vehicle from dropping when the brakes are applied suddenly.

*: If equipped

Driver monitor system (if equipped)

When the system determines that there is a possibility of a collision, and that the driver is not facing forward, PCS warnings are given in advance to warn the driver. If the situation does not improve, pre-collision alert braking will be applied. (→P. 308)

Steering gear control (VGRS) (with driver monitor system)

When the system determines that a collision is unavoidable, the steering gear ratio is changed to help improve the response to steering input.

Pre-collision alert braking (with driver monitor system)

When the system determines that the driver is not facing forward, and that the possibility of a collision persists, the brakes will be applied briefly to give the driver a sensory warning and encourage them to take preventive measures. Pre-collision alert braking can also be disabled using the pre-collision braking off switch.

Disabling pre-collision braking



1 Pre-collision braking and pre-collision alert braking (if equipped) disabled

2 Pre-collision braking and pre-collision alert braking (if equipped) enabled

The "PCS" warning light flashes when pre-collision braking is disabled.

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

Camera sensors (with driver monitor system)



Detect pedestrians and other three-dimensional objects on or near the road ahead together with the radar sensor while the vehicle is moving. When the headlights are on, near-infrared rays are projected to ensure proper detection performance in the night time.

1 Camera sensors
2 Near-infrared ray transmitters

Driver monitor sensor (with driver monitor system)



Detects the direction the driver is facing. The system determines whether the driver is facing forward.

Obstacles not detected

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

A camera sensor cannot detect obstacles in the following situations:

- A camera sensor is directly receiving intense light, such as sunlight.
- Visibility is poor because of bad weather or other reasons.
- The sensor temperature is extremely high.

The pre-collision system is operational when

- Pre-collision seat belts (linked to the radar sensor):
  - Vehicle speed is above 3 mph (5 km/h).
  - The relative speed difference between your vehicle and another vehicle that is forward of your vehicle, or the speed at which your vehicle is approaching an obstacle is greater than 18 mph (30 km/h).
  - The front occupants are wearing a seat belt.
- Pre-collision seat belts (linked to brake operation)
  - Vehicle speed exceeds 18 mph (30 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 relative speed difference between your vehicle and another vehicle that is forward of your vehicle, or the speed at which your vehicle is approaching an obstacle is greater than 18 mph (30 km/h).
  - The brake pedal is depressed.
- Pre-collision braking:
  - The pre-collision braking off switch is not pressed.
  - Vehicle speed is above 9 mph (15 km/h).
  - The relative speed difference between your vehicle and another vehicle that is forward of your vehicle, or the speed your vehicle is approaching an obstacle is greater than 12 mph (20 km/h).
- Suspension control:
  - Vehicle speed is above 3 mph (5 km/h).
  - The relative speed difference between your vehicle and another vehicle that is forward of your vehicle, or the speed at which your vehicle is approaching an obstacle is greater than 18 mph (30 km/h).
- Steering gear control (VGRS) (with driver monitor system):
  - Vehicle speed is above 18 mph (30 km/h).
  - The relative speed difference between your vehicle and another vehicle that is forward of your vehicle, or the speed at which your vehicle is approaching an obstacle is greater than 18 mph (30 km/h).
- Pre-collision alert braking (with driver monitor system):
  - The pre-collision braking off switch is not pressed.
  - The system determines that the driver is not facing forward.
  - Vehicle speed is above 9 mph (15 km/h).
  - The relative speed difference between your vehicle and another vehicle that is forward of your vehicle, or the speed at which your vehicle is approaching an obstacle is greater than 12 mph (20 km/h).
  - The steering is not being turned.

■ **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 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 it.

■ **When there is a malfunction in the system**

Warning light will flash and/or warning messages will turn on. (→P. 498, 507)

Certification

▶ For vehicles sold in the U.S.A.

FCC ID: HYQDNMWR004

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

FCC WARNING

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

Radiofrequency radiation exposure Information:

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

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

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

▶ For vehicles sold in Canada

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.

⚠ 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 is subject to a strong impact, always have the area inspected and adjusted by your Lexus dealer.

⚠ CAUTION

- 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.

■ Handling the driver monitor sensor (with driver monitor system)

Observe the following to ensure the driver monitor sensor can function effectively.

Failure to do so may result in a malfunction or may prevent the system from correctly determining the direction the driver is facing.

- Do not disassemble, damage, lift or pull on the sensor.
- Do not touch the sensor while driving.
- Do not wet or spill water on the sensor.
- Do not drop anything on or allow anything to hit against the sensor. Do not subject the sensor to an impact.
- Make sure that there are no scratches, dirt or stickers on the side of the sensor that faces the driver.
- Do not place any objects in front of the side of the sensor that faces the driver or cover the sensor.

■ Handling the camera sensors (with driver monitor system)

Observe the following to ensure that the PCS functions correctly:

- Keep the windshield clean at all times.
  PCS effectiveness may be reduced due to the presence of raindrops, condensation, ice or snow on the windshield.
- Do not change the installation position of a camera sensor, or remove and reinstall it. The direction of a camera sensor is precisely adjusted.
- When it is cold, using the heater with air blowing to the feet may allow the upper part of the windshield to fog up. This will have a negative effect on the images. In such a case, use the windshield defogger to provide warm, dry air to the windshield.
- Do not place anything on the dashboard.
  Images reflected on the windshield may reduce the effectiveness of a camera sensor.
- Do not attach a sticker or other items to the windshield near a camera sensor.

⚠ CAUTION

■ Determining the direction the driver is facing (with driver monitor system)

The driver monitor function does not operate when the vehicle is stopped.
The direction the driver is facing may not be determined correctly if any of the following conditions exist:

- There is an object between the driver monitor sensor and the driver's face, such as when the sensor is blocked.
- A part of the driver's face is covered.
- The sensor or the driver's face is exposed to intense light such as sunlight.
- The driving posture is improper.

■ Headlights (with driver monitor system)

The near-infrared ray transmitter projects strong energy that is not visible. Although the transmitter normally turns off when the vehicle is stopped, never look into the headlights for your safety.

■ 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.

■ Cautions regarding the assist contents of the system

By means of alarms and brake control, the pre-collision system is intended to assist the driver in avoiding collisions through the process of "LOOK-JUDGE-ACT". There are limits to the degree of assistance the system can provide, so please keep in mind the following important points.

- Assisting the driver in watching the road
  The pre-collision system is only able to detect obstacles directly in front of the vehicle, and only within a limited range. It is not a mechanism that allows careless or inattentive driving, and it is not a system that can assist the driver in low-visibility conditions. It is still necessary for the driver to pay close attention to the vehicle's surroundings.
- Assisting the driver in making correct judgment
  When attempting to estimate the likelihood of a collision, the only data available to the pre-collision system is that from obstacles it has detected directly in front of the vehicle. Therefore, it is absolutely necessary for the driver to remain vigilant and to determine whether or not there is a possibility of collision in any given situation.

⚠ CAUTION

- Assisting the driver in taking action
  The pre-collision system's braking assist feature is designed to help reduce the severity of a collision, and so only acts when the system has judged that a collision is unavoidable. This system by itself is not capable of automatically avoiding a collision or bringing the vehicle to a stop safely. For this reason, when encountering a dangerous situation the driver must take direct and immediate action in order to ensure the safety of all involved.

⚠ NOTICE

■ Camera sensors (with driver monitor system)

Observe the following to ensure that the PCS functions correctly:

- Do not subject a camera sensor to a strong impact or force, and do not disassemble a camera sensor.
- Do not scratch camera lens, or let it get dirty.

■ Headlights (with driver monitor system)

Observe the following to ensure proper near-infrared ray projection:

- Keep the headlights clean at all times.
- The detection performance may deteriorate if the high beams are misaligned or the high beams are inoperative.

■ Precautions for cleaning the driver monitor sensor (with driver monitor system)

- Gently wipe the sensor with a soft cloth to prevent damage.
- Wipe any excess dirt with a cloth dampened with neutral detergent, all liquids having been wringed out of the cloth. After that, wipe again with a dry cloth.
- Do not use benzene, thinner, glass cleaners, wax, etc.

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.

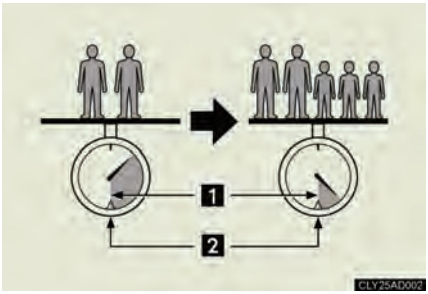
For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400 – 750 (5 × 150) = 650 lbs.)

(5) Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

(6)If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

Lexus does not recommend towing a trailer with your vehicle. Your vehicle is not designed for trailer towing.

Example based on your vehicle



1 Cargo capacity
2 Total load capacity

When 2 people with a combined weight of 366 lb. (166 kg) are riding in your vehicle, which has a total load capacity of 825 lb. (375 kg), the available amount of cargo and luggage load capacity will be as follows:

825 lb. – 366 lb. = 459 lb. (370 kg –166 kg = 204 kg)

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

459 lb. – 388 lb. = 71 lb. (204 kg – 176 kg = 28 kg)

As shown in the example above, if the number of occupants increases, the cargo and luggage load will be reduced by an amount that equals the increased weight due to the additional occupants. In other words, if an increase in the number of occupants causes an excess of the total load capacity (combined weight of occupants plus cargo and luggage load), you must reduce the cargo and luggage on your vehicle.

⚠ CAUTION

■ Things that must not be carried in the trunk

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

- Receptacles containing gasoline
- Aerosol cans

■ Storage precautions

Observe the following precautions.
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

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

Total load capacity:

▶ 5-seat models
825 lb (375 kg)
▶ 4-seat models
660 lb (300 kg)

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

Seating capacity:

▶ 5-seat models
5 occupants (Front 2, Rear 3)
▶ 4-seat models
4 occupants (Front 2, Rear 2)

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

Towing capacity

Lexus does not recommend towing a trailer with your vehicle.

Cargo capacity

Cargo capacity may increase or decrease depending on the weight and the number of occupants.

Total load capacity and seating capacity

These details are also described on the tire and loading information label.
(→P. 455)

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.

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/power control unit 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 rear tires.

  Ensure that all tires are the same size and brand, and that chains match the size of the tires.

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

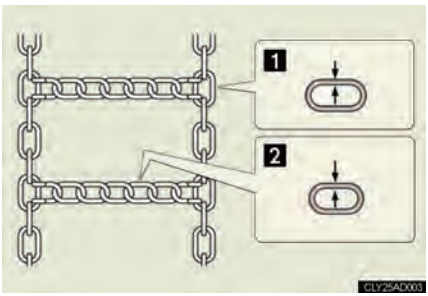
Accelerate the vehicle slowly and drive at a reduced speed suitable to road conditions.

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 size.



1 Side chain
(0.12 in. [3 mm] in diameter)
2 Cross chain
(0.16 in. [4 mm] in diameter)

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 rear tires.
- Retighten the chains after driving 1/4 - 1/2 mile (0.5 - 1.0 km).

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 rear tires only. Do not install tire chains on front tires.
- Install the tire chains on rear 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.

⚠ CAUTION

Driving with snow tires

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

- Use tires of the 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.
Failure to do so may result in the vehicle being unable to be driven safely, and may cause death or serious injury.

- Do not drive in excess of the speed limit specified for the tire chains being used, or 30 mph (50 km/h), whichever is lower.
- Avoid driving on bumpy road surfaces or over potholes.
- Avoid sudden 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 and obtain replacement of snow tires from Lexus dealers or legitimate tire retailers.
This is because the removal and attachment of snow tires affects the operation of the tire air pressure sensor.

■ **Fitting tire chains**

The tire air pressure sensor may not function correctly when tire chains are fitted.

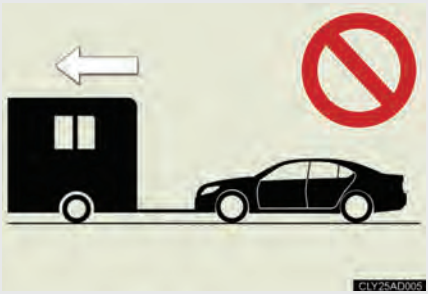
Trailer towing

Lexus does not recommend towing a trailer with your vehicle. Lexus also does not recommend the installation of a tow hitch or the use of a tow hitch carrier for a wheelchair, scooter, bicycle, etc. Your Lexus is not designed for trailer towing or for the use of tow hitch mounted carriers.



Dinghy towing

Your vehicle is not designed to be dinghy towed (with 4 wheels on the ground) behind a motor home.



NOTICE

■ To avoid serious damage to your vehicle

Do not tow your vehicle with four wheels on the ground.

Interior features 3

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Touch screen

By touching the screen with your finger, you can control the audio system and air conditioning system, and adjust the screen display, etc.



Button	Page
“CLIMATE”	P. 331
“AUDIO”	Navigation System Owner's Manual
“SETUP”	P. 329/ Navigation System Owner's Manual
“DISP”	Navigation System Owner's Manual
“MAP/VOICE”	Navigation System Owner's Manual
“DEST”	Navigation System Owner's Manual
“INFO/PHONE”	P. 330/ Navigation System Owner's Manual

Set up screen

You can change the touch screen to your desired settings.

Press “SETUP” to display the “Setup” screen.



Switch	Page
“General”	Navigation System Owner's Manual
“Clock”	Navigation System Owner's Manual
“Voice”	Navigation System Owner's Manual
“Navi.”	Navigation System Owner's Manual
“Phone”	Navigation System Owner's Manual
“Audio”	Navigation System Owner's Manual
“Vehicle”	P. 245/ Navigation System Owner's Manual
“Other”	Navigation System Owner's Manual

"Information" screen can be used to display the fuel consumption information or operate the hands-free system.

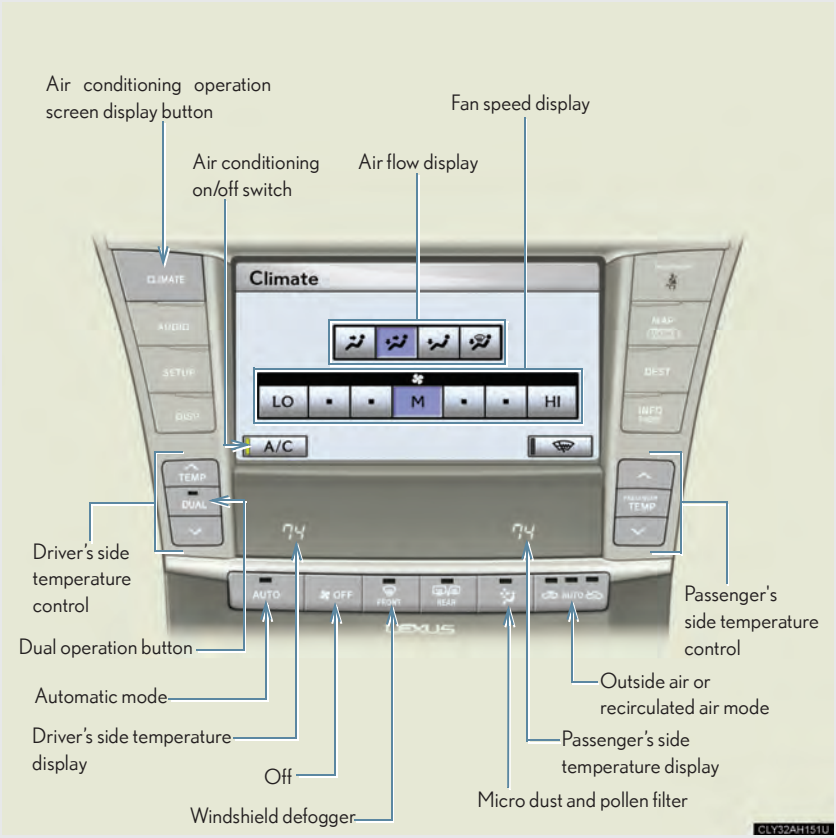
Press "INFO/PHONE" to display the "Information" screen.



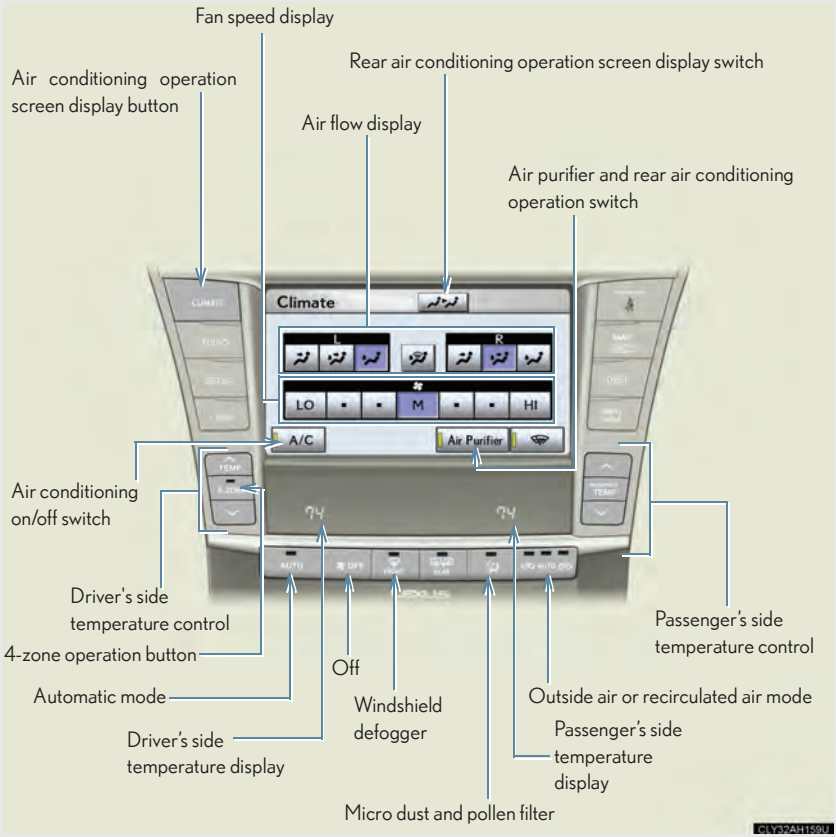
Switch	Page
"Phone"	Navigation System Owner's Manual
"Fuel Consumption"	P. 39
"MAP Data"	Navigation System Owner's Manual
"Calendar"	Navigation System Owner's Manual
"LEXUS Insider"	Navigation System Owner's Manual
"XM Sports"	Navigation System Owner's Manual
"XM Stocks"	Navigation System Owner's Manual
"XM Nav Weather™"	Navigation System Owner's Manual

Air flow and outlets are automatically adjusted according to the temperature setting.
Press "CLIMATE" to display the air conditioning operation screen.

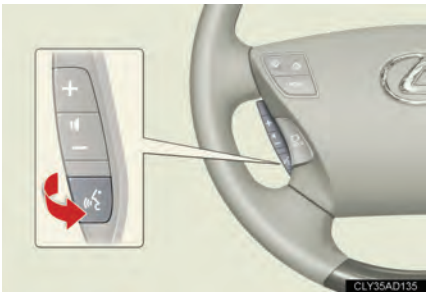
▶ Without rear air conditioning system



▶ With rear air conditioning system



Using the voice command system



Pull  to operate the voice command system. (→"Navigation System Owner's Manual")

Using the automatic mode

STEP 1 Press "AUTO".

➡ 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 air intake mode.

➡ The air conditioning system automatically switches between outside air and recirculated air modes.

STEP 3 Press "∧" on "TEMP" or "PASSENGER TEMP" to increase the temperature and "∨" to decrease the temperature.

The temperature for the driver and passenger seats can be set separately. (without rear air conditioning system)

Air outlets and fan speed for the right-hand and left-hand seats may be set separately depending on the temperature setting. (with rear air conditioning system)

Adjusting the settings

Adjusting the temperature setting

▶ Without rear air conditioning system

Press "∧" on "TEMP" or "PASSENGER TEMP" to increase the temperature and "∨" to decrease the temperature.

The air conditioning system switches between dual and simultaneous modes each time "DUAL" is pressed.

Dual mode (the indicator on "DUAL" is on): The temperature for the left-hand seat and right-hand seat can be adjusted separately. Operating the passenger's side temperature control will enter dual mode.

Simultaneous mode (the indicator on "DUAL" is off): Only "∧" and "∨" on "TEMP" (driver's side) can be used to adjust the temperature for all seats.

▶ With rear air conditioning system

Press "∧" on "TEMP" or "PASSENGER TEMP" to increase the temperature and "∨" to decrease the temperature.

The air conditioning system switches between individual and simultaneous modes each time "4-ZONE" is pressed.

Individual mode (the indicator on "4-ZONE" is on): The temperature for the driver's, front passenger's and rear seats (→P. 344) can be adjusted separately. Operating the passenger's side temperature control will enter individual mode.

Simultaneous mode (the indicator on "4-ZONE" is off): Only "∧" and "∨" on "TEMP" (driver's side) can be used to adjust the temperature for all seats.

Adjusting the fan speed

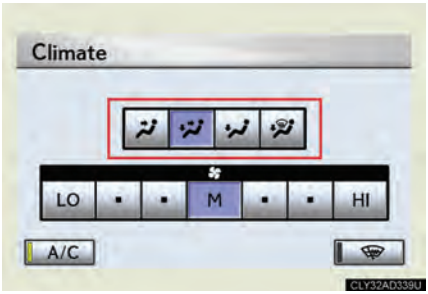
Touch any switch of 

(decrease ↔ increase) on the operation screen.

Press to turn the fan off.

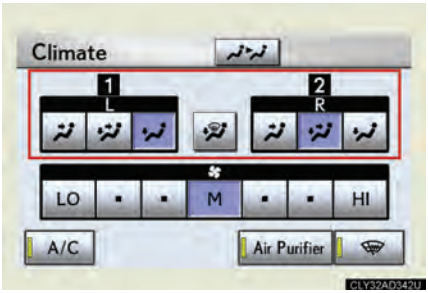
Changing the air outlets

▶ Without rear air conditioning system



Touch any mode on the operation screen.

▶ With rear air conditioning system



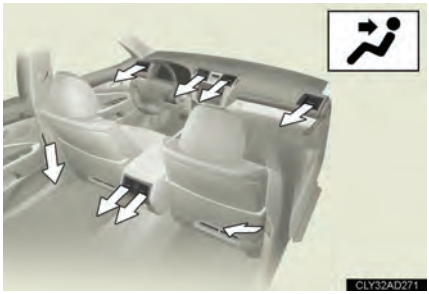
Touch any mode on the operation screen.

1 L: Left-hand front seat

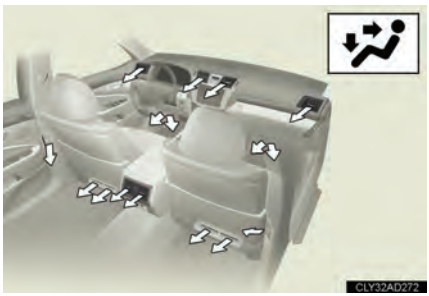
2 R: Right-hand front seat

Different air outlets for the left-hand and right-hand front seats can be chosen.

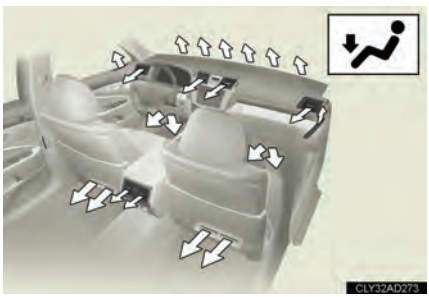
Air flows as shown below according to the mode selected.



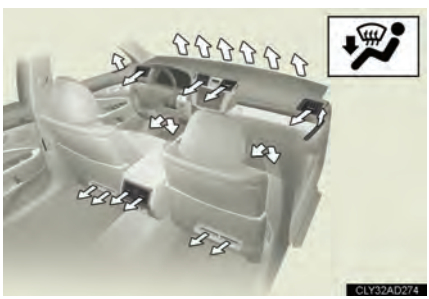
Upper body



Upper body and feet



Feet



Feet and windshield

Switching between outside air and recirculated air modes

Press .

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

When the air intake control system is switched to automatic mode, it operates automatically.

Turning the air purifier off (with rear air conditioning system)

Touch "Air Purifier" on the operation screen.

The air purifier will turn off when the indicator on the switch goes off. Air will not flow from the roof vents.

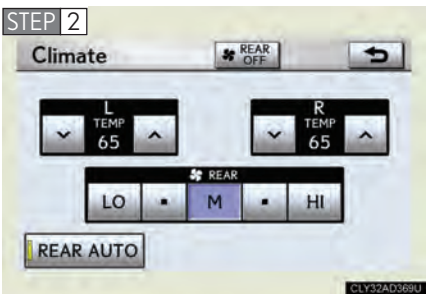
To turn the air purifier on, touch "Air Purifier" again.

Operating the rear air conditioning system on the operation screen (with rear air conditioning system)

Using the automatic mode

STEP 1 Touch on the operation screen.

STEP 2



Touch "REAR AUTO".

➡ The air conditioning system and air purifier will operate, and air outlets and fan speed will be set automatically.

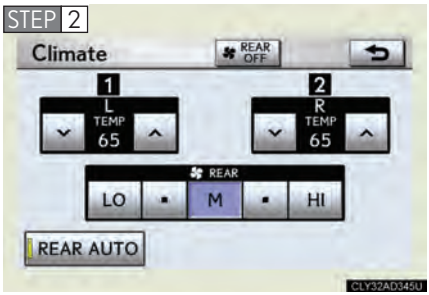
STEP 3 Touch "∧" on "TEMP" to increase the temperature and "∨" to decrease the temperature.

Air outlets and fan speed for the right-hand and left-hand seats may be set separately depending on the temperature setting.

Adjusting the temperature setting

STEP 1 Touch  on the operation screen.

STEP 2



Touch "∧" (increase) or "∨" (decrease) on the operation screen. Operating the switch will enter individual mode.

1 L: Left-hand rear seat

2 R: Right-hand rear seat

The air conditioning system switches between individual and simultaneous modes each time "4-ZONE" is pressed.

Adjusting the fan speed (air purifier and cooler from the roof vents)

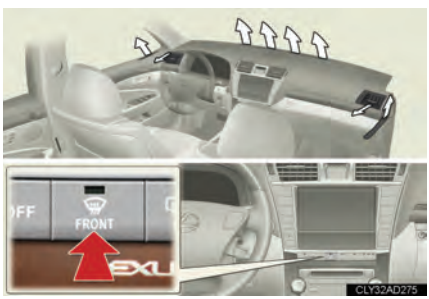
STEP 1 Touch  on the operation screen.

STEP 2 Touch any switch of  (decrease ↔ increase) on the operation screen.

According to the air outlets currently selected, the fan speed of either the cool air from the roof vents or air purifier will be adjusted. (→P. 347)

Touch  on the operation screen to turn the fan off.

Defogging the windshield



Press .

The air conditioning system operates automatically.

Micro dust and pollen filter



Press .

Outside air mode switches to  (recirculated air) mode. Pollen is removed from the air and the air flows to the upper part of the body.

Usually the system will turn off automatically after approximately 1 to 3 minutes.

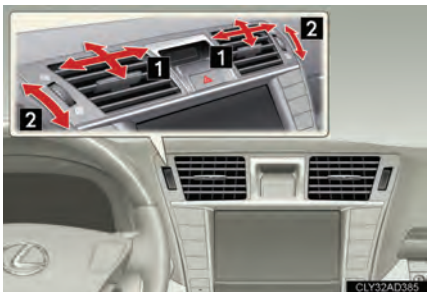
To stop the operation, press  again.

Adjusting the sensitivity of the air intake control in automatic mode

→ “Navigation System Owner's Manual”.

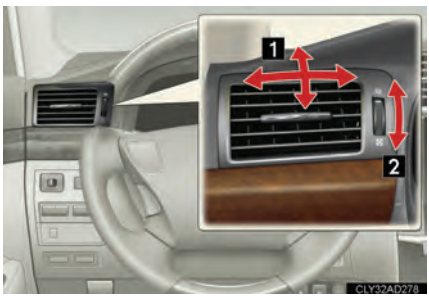
Adjusting the position and opening and closing the air outlets

▶ Front center outlets



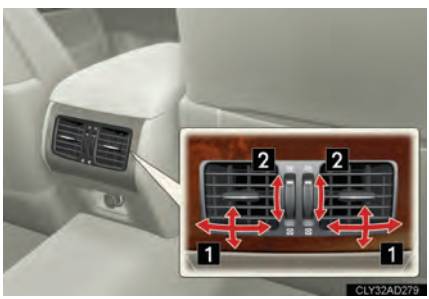
1 Direct air flow to the left or right, up or down.
2 Turn the knob to open or close the vent.

▶ Front side outlets



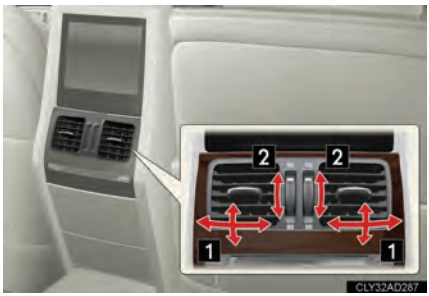
1 Direct air flow to the left or right, up or down.
2 Turn the knob to open or close the vent.

▶ Rear center outlets (without rear console display)



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

▶ Rear center outlets (with rear console display)



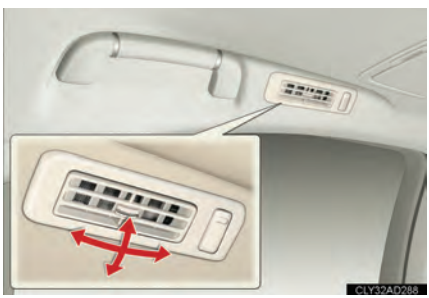
1 Direct air flow to the left or right, up or down.
2 Turn the knob to open or close the vent.

▶ Rear side outlets



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

▶ Roof side outlets (with rear air conditioning system)



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

■ **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 "AUTO" 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.

■ **When the hybrid battery cooling system operates**

- If the hybrid battery cooling system operates when the air conditioning is off, a message will be shown on the multi-information display and the air conditioning will automatically turn on. (→P. 208)
- The sound of the air flow may change when cool air flows from the rear roof vents or the air purifier is in operation. This occurs when the hybrid battery is being cooled and does not indicate a malfunction.

■ **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.

When the air conditioning is off, and the fan is operating, turning the "AUTO" mode on will activate the air conditioning system.

■ **Micro dust and pollen filter**

- In order to prevent the windows from fogging up when the outside air is cold, the following may occur:
  - Outside air mode does not switch to .
  - The air conditioning system operates automatically.
  - The operation cancels after 1 minute.
- In rainy weather, the windows may fog up. Press .

■ **Air purifier (with rear air conditioning system)**

The air purifier will turn on when turning the rear air conditioning system on.

■ **Customization**

Settings (e.g. A/C auto switch operation) can be changed.
(Customizable features →P. 563)

⚠ 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

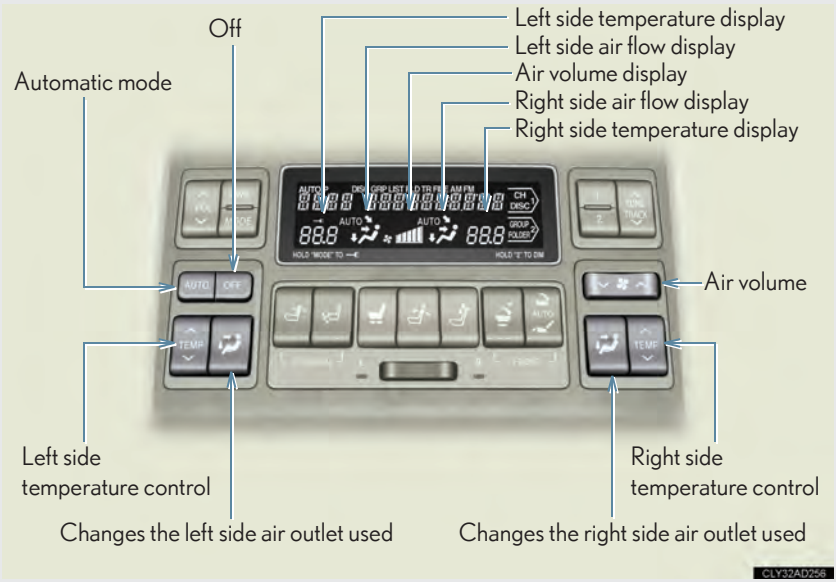
■ **To prevent 12-volt battery discharge**

Do not leave the air conditioning system on longer than necessary when the hybrid system is off.

Rear air conditioning system*

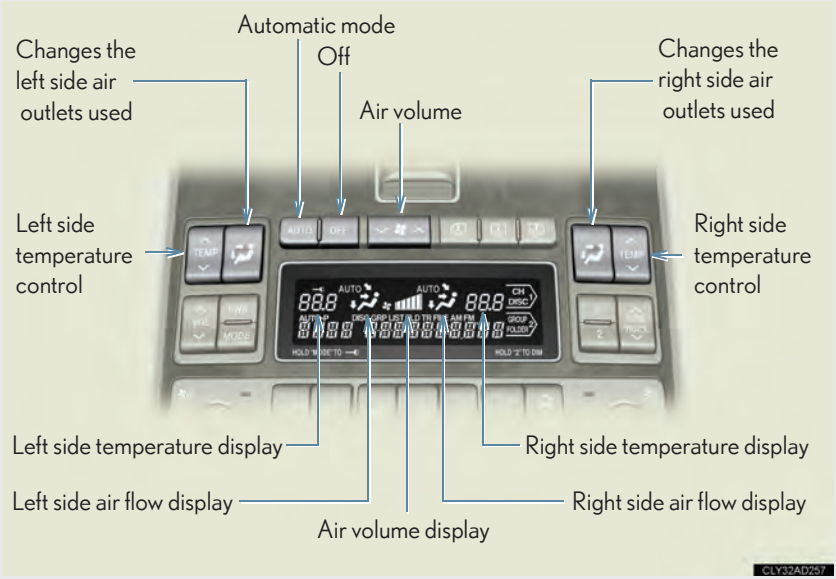
Air flow and outlets are automatically adjusted according to the temperature setting.

▶ 5-seat models



*: If equipped

▶ 4-seat models



Using the automatic mode

STEP 1 Press "AUTO".

➡ The air conditioning system and air purifier will operate, and air outlets and fan speed will be set automatically.

"AUTO" will be displayed on the control panel.

STEP 2 Press "∧" on "TEMP" to increase the temperature and "∨" to decrease the temperature.

Air outlets and fan speed for the right-hand and left-hand seats may be set separately depending on the temperature setting.

Adjusting the settings

Adjusting the temperature setting

Press "∧" on "TEMP" to increase the temperature and "∨" to decrease the temperature.

Air outlets and fan speed for the right-hand and left-hand seats may be set separately depending on the temperature setting.

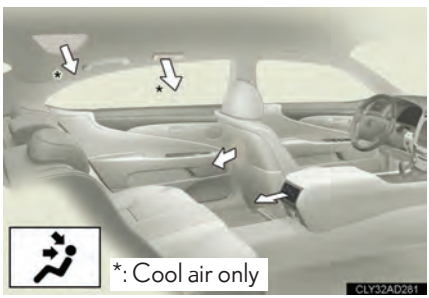
Changing the air outlets

Press  .

The air outlets change as follows each time  is pressed.

Different air outlets for the right-hand and left-hand rear seats can be chosen.

Air flows as shown below according to the mode selected.



Upper body

When the indicator on "A/C" (on the front operation screen) is on



Upper body

When the indicator on "A/C" (on the front operation screen) is off



Upper body and feet



Feet

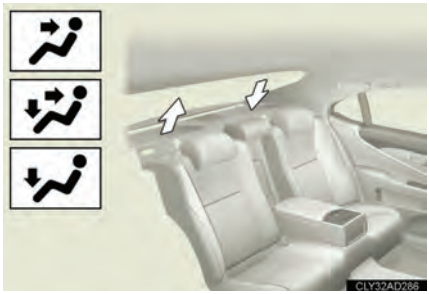
Adjusting the air volume

The volume of cool air or air from the air purifier can be adjusted according to the mode selected.

Press "∧" (increase) or "∨" (decrease) on .



Cool air flows from roof vents.

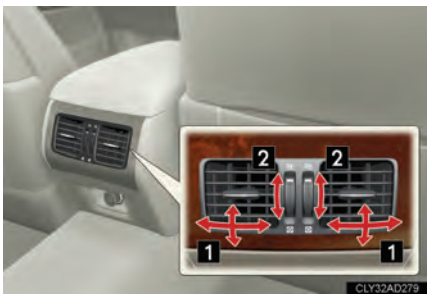


Air purifier operation (air flows from the rear package tray.)

Press “OFF” to turn the fan off.

Adjusting the position and opening and closing the air outlets

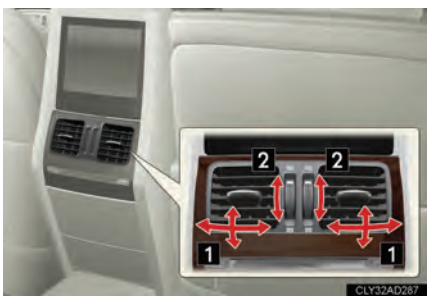
▶ Rear center outlets (without rear console display)



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

2 Turn the knob to open or close the vent.

▶ Rear center outlets (with rear console display)



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

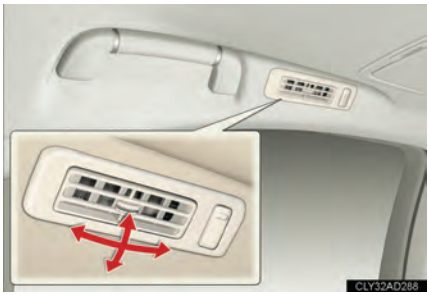
2 Turn the knob to open or close the vent.

▶ Rear side outlets



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

▶ Roof side outlets



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

Button lock function

▶ 5-seat models



To prevent inadvertent operation, the buttons on the rear armrest can be locked. Press “MODE” until you hear a beep to lock the buttons. Pressing “MODE” again until you hear a beep will release the lock.

The indicator appears on the display when the buttons are locked.

▶ 4-seat models



Rear control panel illumination off function

▶ 5-seat models



Control panel illumination on the rear armrest can be turned off. Press "2" until you hear a beep to turn the illumination off. Pressing "2" again until you hear a beep will turn the illumination on.

▶ 4-seat models



Replacing the rear air conditioning filter

Replacing the air conditioning filter when using rear air conditioning or air purifier reduces air flow or deodorizing performance. (→P. 461).

NOTICE

To prevent 12-volt battery discharge

Do not leave the air conditioning system on longer than necessary when the hybrid system is off.

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



On/off

Press  to turn on the rear window and outside rear view mirror defoggers. The defoggers will automatically turn off after 15 minutes. The operation time changes according to the ambient temperature and vehicle speed. Pressing the button again also turns the defoggers off.

The defogger can be operated when

The "POWER" switch is in ON mode.

CAUTION

When the outside rear view mirror defoggers are on

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

Windshield wiper de-icer*
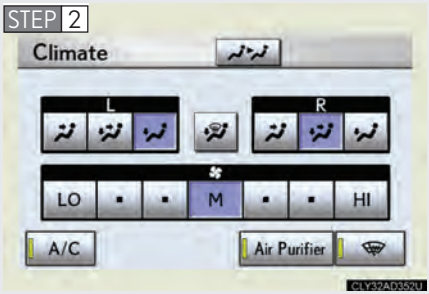
This feature is used to prevent ice from building up on the windshield and wiper blades.

STEP 1



Press "CLIMATE" to display the air conditioning operation screen.

STEP 2



Touch  to turn on the windshield wiper de-icer. The windshield wiper de-icer will automatically turn off after approximately 15 minutes. Touching the switch again also turns the de-icer off.

■ **The windshield wiper de-icer can be operated when**

The "POWER" switch is in ON mode.

⚠ CAUTION

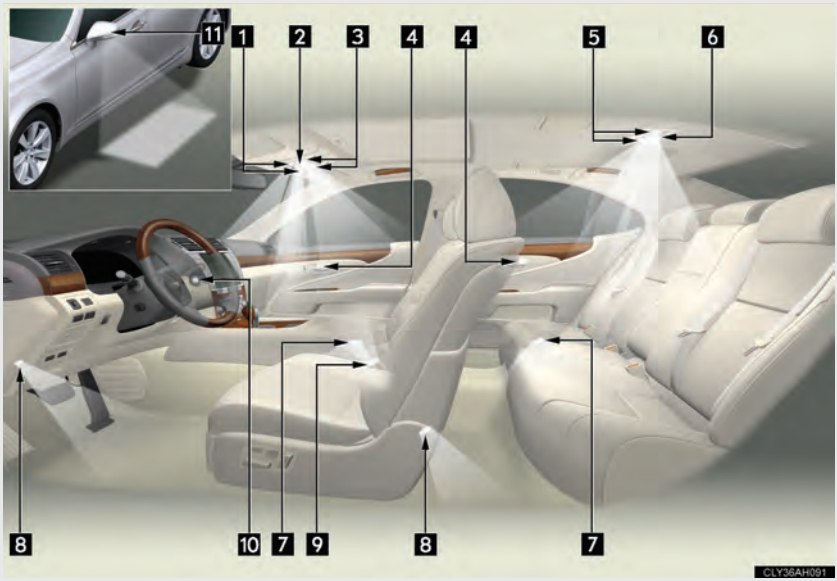
■ **When the windshield wiper de-icer is on**

Do not touch the glass at the lower part of the windshield or to the side of the front pillars as the surfaces can become very hot and burn you.

*: If equipped

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 "POWER" switch mode.



1 Front personal lights (→P. 356)
2 Shift lever lighting (when the "POWER" switch is in ACCESSORY or ON mode)
3 Front interior lights (→P. 355)
4 Inside door handle lighting
5 Rear personal lights (→P. 356)
6 Rear interior light (→P. 355)
7 Door courtesy lighting

8 Footwell lighting
9 Seat belt buckle lighting
10 “POWER” switch lighting
11 Outer foot lights

Interior lights

▶ Front



1 “OFF”
2 Door position on/off
3 “ON”

▶ Rear



On/off

If door position on is selected for the front interior light, the rear interior light is also turned on/off by the opening and closing of a door.

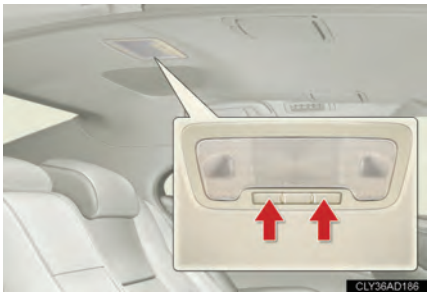
Personal lights

▶ Front



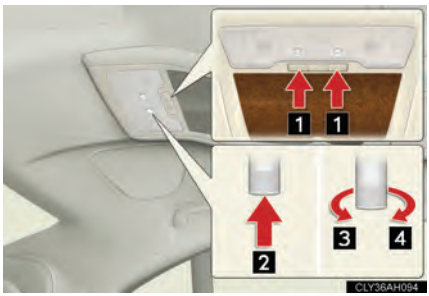
On/off

▶ Rear (without rear seat entertainment system)



On/off

▶ Rear (with rear seat entertainment system)



1 On/off
2 Press the knob to release it, and turn the knob to the desired brightness.
3 Darker
4 Brighter

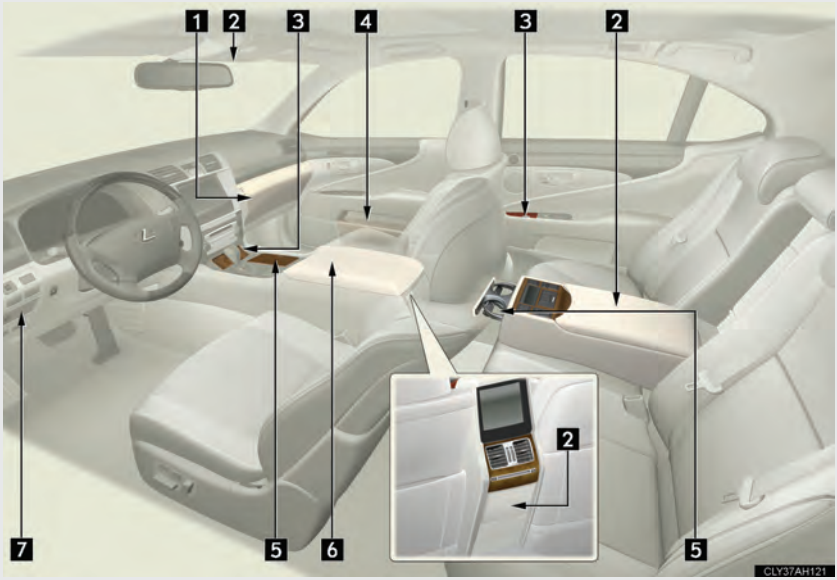
■ **To prevent the 12-volt battery from being discharged**

If the interior lights remain on when the door is not fully closed and the front interior light switch (door position on/off) is on, the lights will go off automatically after 20 minutes.

■ **Customization**

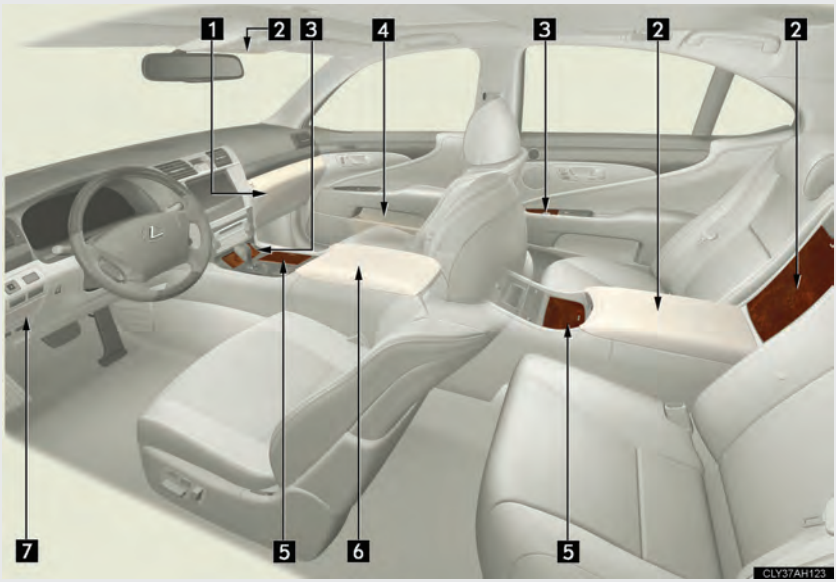
Settings (e.g. The time elapsed before lights turn off) can be changed.
(Customizable features →P. 563)

▶ 5-seat models



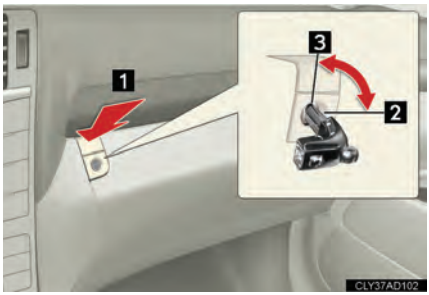
1 Glove box
2 Auxiliary boxes (if equipped)
3 Non smokers boxes (if equipped)
4 Door pockets
5 Cup holders
6 Console box
7 Coin holder

▶ 4-seat models



1 Glove box
2 Auxiliary boxes
3 Non smokers boxes (if equipped)
4 Door pockets
5 Cup holders
6 Console box
7 Coin holder

Glove box



1 Open (push button)
2 Lock with the mechanical key
3 Unlock with the mechanical key

Trunk opener main switch

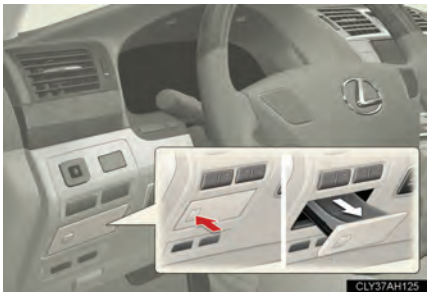
The trunk opener main switch is located in the glove box. (→ P. 74)

CAUTION

Caution while driving

Keep the glove box closed.
Injuries may result in the event of an accident or sudden braking.

Coin holder



Press in the button.

CAUTION

Caution while driving

Keep the coin holder closed.
Injuries may result in the event of an accident or sudden braking.

Door pockets (front)



The front door pockets can be opened and closed.

CAUTION

Caution while driving

Keep the door pockets closed.
Injuries may result in the event of an accident or sudden braking.

Cup holders

▶ Front



Press down and release the right side of the cup holder lid.

▶ Rear (5-seat models)



Press in and release the cup holder.

▶ Rear (4-seat models)



Press in and release the lid.

CAUTION

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.

Console box

▶ Without rear console display



1 Slide the armrest while pressing the button.
2 Lift the armrest.

▶ With rear console display



1 Press the button.
2 Lift the armrest.

Tray in the console box (without rear console display)



The tray can be raised backward.

Opening and closing assist function (without rear console display)

When the console box is opened or closed partway, this function will apply force in the appropriate direction, helping open or close the console box.

CAUTION

Caution while driving

Keep the console box closed.
Injuries may result in the event of an accident or sudden braking.

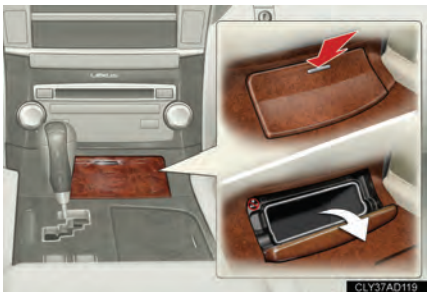
NOTICE

Tray

Do not insert items exceeding the height of the tray. Doing so may prevent opening and closing of the lid.

Non smokers boxes (if equipped)

▶ Front



Press in the lid.

▶ Rear



Open the lid.

Removing the non smokers box (front)



Holding the left edge of the non smokers box, pull upward.

CAUTION

■ Using the non smokers box

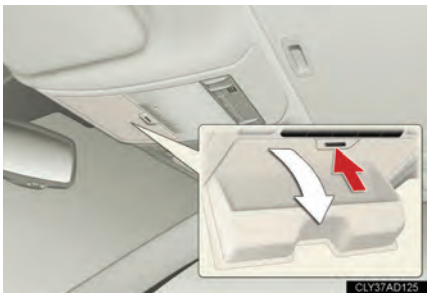
Do not use the non smokers boxes as an ashtray.

■ Caution while driving

Keep the non smokers boxes closed.
Injuries may result in the event of an accident or sudden braking.

Auxiliary boxes

▶ Overhead



Press in the button.

This box is useful for temporarily storing sunglasses and similar small items.

▶ Rear console (with rear console display)

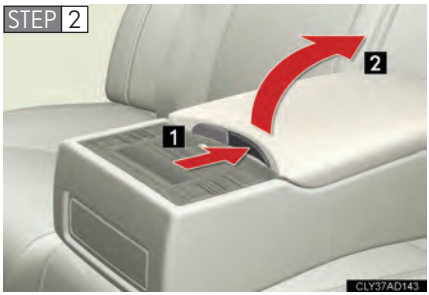


Press in the lid.

▶ Rear seat (5-seat models)

STEP 1 Pull down the armrest. (→P. 384)

STEP 2



1 Press the button.

2 Lift the lid.

The lid cannot be lifted while it is slid back. (→P. 384)

▶ Rear seat (4-seat models — seatback)



Press in the lid.

This box is useful for storing DVD discs and headphones.

▶ Rear seat (4-seat models — armrest)



Pull up the lever to release the lock and lift the lid.

Tray in the rear console



The tray can be removed.

CAUTION

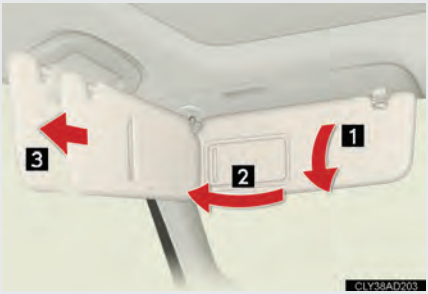
Items that should not be left in the auxiliary box (overhead type)

Do not leave glasses or lighters in the box.
If the interior of the vehicle becomes hot, lighters may explode and glasses may warp or crack.

Caution while driving

Do not leave the auxiliary box open while driving.
Items may fall out and cause death or serious injury in case of an accident or sudden stop.

Sun visors



1 Forward position:
Flip down.

2 Side position:
Flip down, unhook, and swing to the side.

3 Side extender:
Place in side position, then slide backward.

▶ Front



Slide the cover to open.

The light turns on when the cover is opened.

▶ Rear



Press the button to open.

The vanity light turns on.

⚠ NOTICE

■ **When not in use**

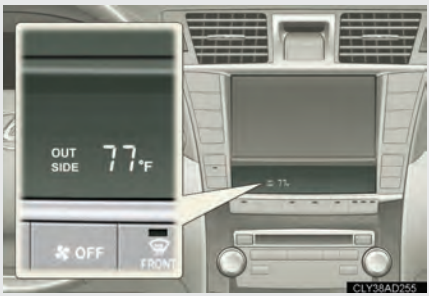
Keep the rear vanity mirror closed.

■ **To prevent the 12-volt battery from being discharged**

Do not leave the vanity lights on for extended periods while the hybrid system is off.

Outside temperature display

The displayed temperature ranges from -40°F (-40°C) up to 122°F (50°C) when the "POWER" switch is in ON mode.



■ When "– –" or "E" is displayed

The system may be malfunctioning. Take your vehicle to your Lexus dealer.

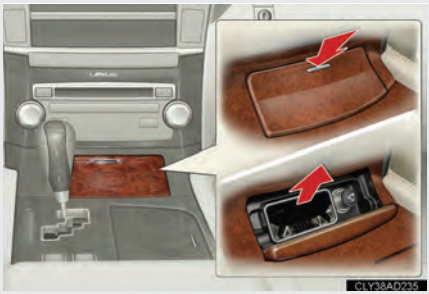
■ Display

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.)

Ashtrays*

▶ Front



Push the front part of the lid to open. Push the lid again to close.

To remove, pull the ashtray upwards.

▶ Rear



Open the ashtray lid.

To remove, pull the ashtray upwards.

⚠ 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.

*: If equipped

▶ Front



Push the front part of the lid to open, and push the cigarette lighter down.

The cigarette lighter will pop up when it is ready for use.

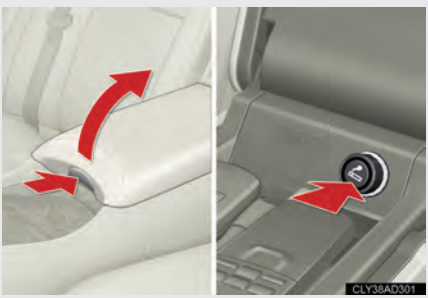
▶ Rear (5-seat models without rear console display)



Push the cigarette lighter.

The cigarette lighter will pop out when it is ready for use.

▶ Rear (4-seat models)



Open the auxiliary box and push the cigarette lighter.

The cigarette lighter will pop out when it is ready for use.

■ **The cigarette lighter can be used when**

The "POWER" switch is in ACCESSORY or ON mode.

*: If equipped

⚠ 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.

■ When not in use

Keep the ashtray closed.
Injuries may result in the event of an accident or sudden braking.

The power outlet can be used for the following components:

12 V: Accessories that run on less than 10 A
115 VAC: Accessories that use less than 100 W

12 V

▶ Front



▶ Rear (5-seat models without rear console display)*



▶ Rear (5-seat models with rear console display)*



▶ Rear (4-seat models)*

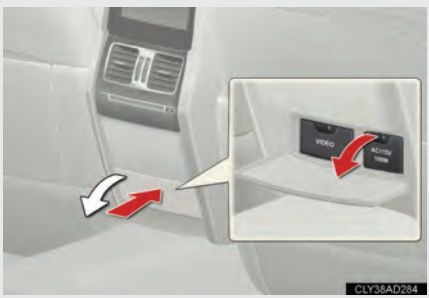


115 VAC

▶ Without rear console display*



▶ With rear console display*



*: If equipped

■ **The power outlet can be used when**

▶ **12 V**

The "POWER" switch is in ACCESSORY or ON mode.

▶ **115 VAC**

The "POWER" switch is in ON mode.

⚠ NOTICE

■ **To avoid damaging the power outlet**

Close the power outlet lid when the power outlet is not in use.
Foreign objects or liquids that enter the power outlet may cause a short circuit.

■ **To prevent the fuse from being blown**

▶ **12 V**

Do not use an accessory that uses more than 12 V 10 A.

▶ **115 VAC**

Do not use a 115 VAC appliance that requires more than 100 W.

If a 115 VAC appliance that consumes more than 100 W is used, the protection circuit will cut the power supply.

■ **To prevent the 12-volt battery from being discharged**

Do not use the power outlet longer than necessary when the hybrid system is off.

■ **Appliances that may not operate properly (115 VAC)**

The following 115 VAC appliances may not operate properly even if their power consumption is under 100 W:

- Appliances with high initial peak wattage
- Measuring devices that process precise data
- Other appliances that require an extremely stable power supply

Heated steering wheel

The heated steering wheel can be used to heat the leather portion of the steering wheel.



On/off

The indicator light comes on when the heater is operating.

■ **Operating condition**

The "POWER" switch is in ON mode.

■ **Timer**

The heated steering wheel will automatically turn off after about 30 minutes.

■ **If the indicator light flashes**

Press the button to turn the heated steering wheel off and then press the button again. If the indicator light still flashes, a malfunction may be occurring. Turn the heated steering wheel off and have the vehicle inspected by your Lexus dealer.

⚠ CAUTION

■ Burns

Only appropriately qualified and capable non-impaired persons should operate the vehicle. However, care should be taken to prevent injury if anyone in the following categories comes into contact with the steering wheel when the heated steering wheel is on:

- 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.)

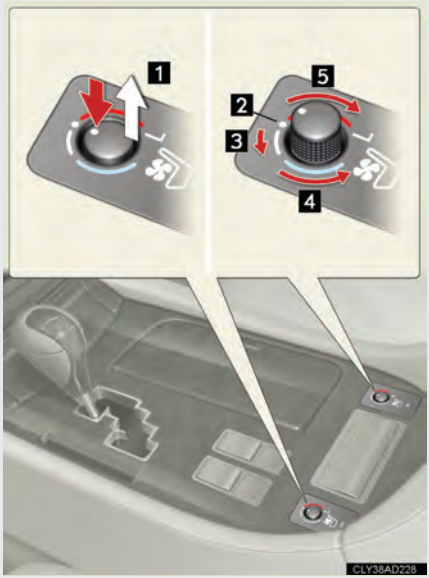
⚠ NOTICE

■ To prevent the 12-volt battery from being discharged

Turn the switch off when the hybrid system is off.

The temperature of the seats can be adjusted individually.

Front climate control seats



1 Press the knob to release it, and turn the knob to the desired temperature setting.

2 Off

Press the knob to lock it when not in use.

3 Ventilation

4 Cool air

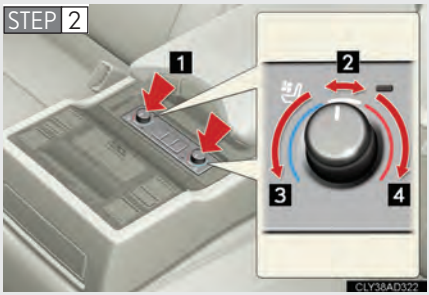
5 Warm air

■ Rear climate control seats (if equipped)

▶ 5-seat models

STEP 1 Slide the armrest lid. (→P. 384)

STEP 2



1 Press the knob to turn the system on, and turn the knob to the desired temperature setting.

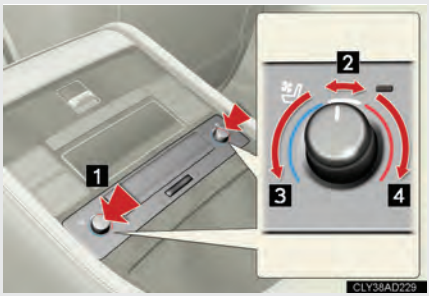
Press the knob again to turn the system off.

2 Ventilation

3 Cool air

4 Warm air

▶ 4-seat models



1 Press the knob to turn the system on, and turn the knob to the desired temperature setting.

Press the knob again to turn the system off.

2 Ventilation

3 Cool air

4 Warm air



The rear climate control seats can also be turned on and off from the front seats.

■ Rear seat heaters (if equipped)

STEP 1 Slide the armrest lid. (→P. 384)

STEP 2



Press the knob to turn the system on, and turn the knob to the desired temperature setting.

The further you turn the knob clockwise, the warmer the seat temperature becomes. Press the knob again to turn the system off.



The rear seat heaters can also be turned on and off from the front seats.

■ **Operating condition**

The "POWER" switch is in ON mode.

■ **Replacing the air filters**

Filters are installed in the climate control seats. For replacement of the filters, contact your Lexus dealer.

⚠ CAUTION

■ Burns/excessive cooling

- Use caution when seating the following persons in a seat to avoid the possibility of burns or excessive cooling:
  - Babies, small children, elderly persons, sick persons and persons with a physical disability
  - Persons who have sensitive skin
  - Persons who are fatigued
  - Persons who have taken alcohol or drugs which induce sleep, such as sleeping drugs and cold remedies
- Do not cover the seat with anything when using the climate control seat or seat heater. Using the climate control seat or seat heater with a blanket or cushion may increase or decrease the temperature of the seat, resulting in overheating or overcooling.
- Do not use the climate control seat or seat heater more than necessary. Doing so may cool the occupants excessively or may cause minor burns or overheating.

NOTICE

■ To prevent damage to the climate control seat and seat heater

Do not put heavy objects that have an uneven surface on the seat and do not stick sharp objects, such as needles and nails, into the seat.

■ To prevent the 12-volt battery from being discharged

Do not leave the system on longer than necessary when the hybrid system is off.

Armrest (5-seat models)



Pull the armrest down for use.

When operating the switches in the armrest



Press the button to release the lock, and slide the lid back.

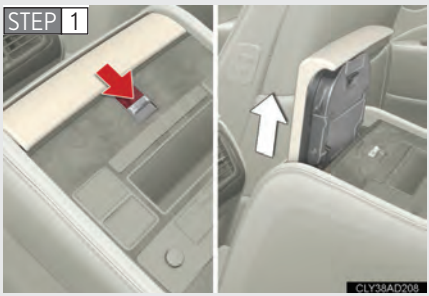
Press the button again for returning the lid.

NOTICE

To prevent damage to the armrest

Do not place too much strain on the armrest.

Retractable table (4-seat models)



Slide the lever to raise the table.



Pull the table up and pull down the table.



The position of the table can be changed. Before using the table, make sure that the table is securely locked.

When the table is in use, the front seats will stop if they are going to contact the table. (→P. 83, 101)



When returning the table, pull it up while pulling the lock release lever.

⚠ CAUTION

■ When not in use

To avoid injury, return the table.

■ Caution while driving

Keep the table stowed properly in its place. In the event of an accident, contact with the table may result in death or serious injury.

■ When using the table

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

- Make sure the table is securely locked.
- Do not lean on the table.
- Do not put anything heavier than 22 lb. (10 kg) on the table.

⚠ NOTICE

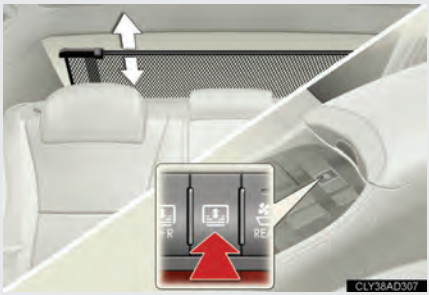
■ To prevent damage to the table

Do not place too much strain on the table.

Rear sunshade

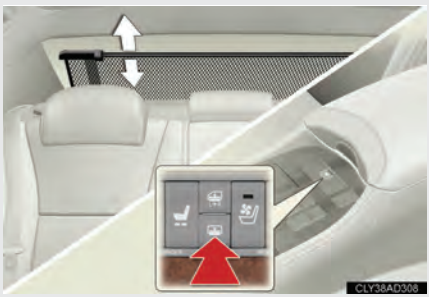
The rear sunshade can be raised and lowered by operating any of the buttons shown below.

▶ From front seat (without rear console display)



Extend/retract

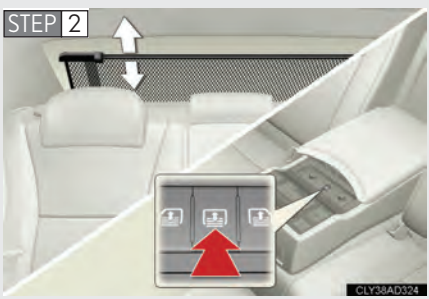
▶ From front seat (with rear console display)



Extend/retract

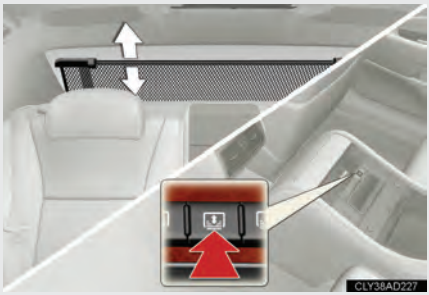
▶ From rear seat (5-seat models)

STEP 1 Slide the armrest lid. (→P. 384)



Extend/retract

▶ From rear seat (4-seat models)



Extend/retract

■ **The rear sunshade can be used when**

The "POWER" switch is in ON mode.

■ **Operating the rear sunshade after turning the hybrid system off**

The rear sunshade can be operated for approximately 60 seconds even after the "POWER" switch is switched to ACCESSORY mode or turned OFF.

■ **Reverse operation feature**

To ensure adequate rear visibility, the rear sunshade automatically lowers when the shift lever is shifted to "R".

However, the rear sunshade is raised again if any of the following occurs:

- The button is pressed again.
- The shift lever is shifted to "P".
- The shift lever is shifted out of "P" or "R", and the vehicle reaches a speed of 9 mph (15 km/h).

If the hybrid system is off when the rear sunshade has been lowered due to the reverse operation feature, it will not be raised even when the hybrid system is turned on again and the vehicle reaches a speed of 9 mph (15 km/h). To raise the sunshade again, press the button.

■ **Button lock function**

To prevent inadvertent operation, some buttons on the rear armrest can be locked. (→P. 350)

⚠ CAUTION

■ When the rear sunshade is being raised or lowered

Do not place fingers or any objects in the shade mechanism or in the opening as injury may result.

⚠ NOTICE

■ To prevent the 12-volt battery from being discharged

Do not operate the rear sunshade when the hybrid system is off.

■ To ensure normal operation of the sunshade

Observe the following precautions:

- Do not place excessive load on the motor or other components.
- Do not place objects where they may hinder opening and closing operations.
- Do not attach items to the rear sunshade.
- Keep the opening clean and clear of obstructions.
- Do not operate the rear sunshade continuously for long periods of time.

Rear door sunshades*

The rear door sunshades can be extended and retracted by operating any of the buttons shown below.

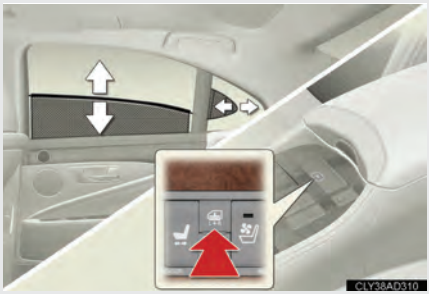
▶ From front seat (without rear console display)



Extend/retract

The rear door sunshades can be extended only when both of left and right rear door sunshades are retracted. Pressing the button with either side retracted will cause both sides to be retracted.

▶ From front seat (with rear console display)



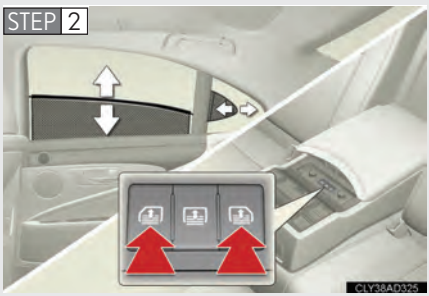
Extend/retract

The rear door sunshades can be extended only when both of left and right rear door sunshades are retracted. Pressing the button with either side retracted will cause both sides to be retracted.

▶ From rear seat (5-seat models)

STEP 1 Slide the armrest lid. (→P. 384)

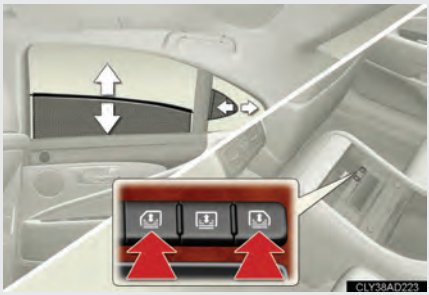
STEP 2



Extend/retract

*: If equipped

▶ From rear seat (4-seat models)



Extend/retract

■ **Operating conditions**

- The "POWER" switch is in ON mode.
- The rear windows are fully closed.
  The rear door sunshades automatically retract when the rear windows are opened.

■ **Operating the rear door sunshades after turning the hybrid system off**

The rear door sunshades can be operated for approximately 60 seconds even after the "POWER" switch is switched to ACCESSORY mode or turned OFF.

■ **Jam protection function**

If an object becomes caught between a rear door sunshade and the window frame, the jam protection function will cause the sunshade to detach from its drive mechanism and retract.

▶ If the jam protection function operates when extending the rear door sunshades

Pressing the button will reconnect the sunshade.
Pressing the button again will allow the sunshades to be operated.
If the sunshade does not operate after the button is pressed, press the button again.

▶ If the jam protection function operates when retracting the rear door sunshades

Press and hold the button to re-extend the rear door sunshades, and continue pressing for more than 5 seconds after the sunshades have fully extended and stopped.

■ **Button lock function**

To prevent inadvertent operation, some buttons on the rear armrest can be locked. (→P. 350)

■ **When reconnecting the 12-volt battery**

The rear door sunshades will always be retracted the first time the button is pressed.

⚠ CAUTION

■ **When the rear door sunshades are being extended or retracted**

Do not place fingers or any objects in the shade mechanism or in the opening as injury may result.

■ **Jam protection function**

Never use any part of your body to intentionally activate the jam protection function.

⚠ NOTICE

■ **To prevent the 12-volt battery from being discharged**

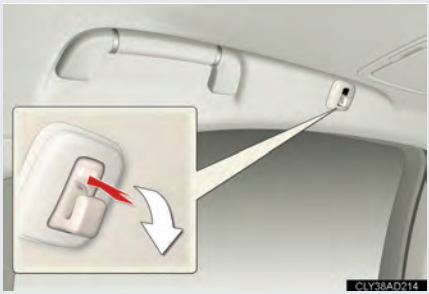
Do not operate the rear door sunshades when the hybrid system is off.

■ **To ensure normal operation of the sunshades**

Observe the following precautions:

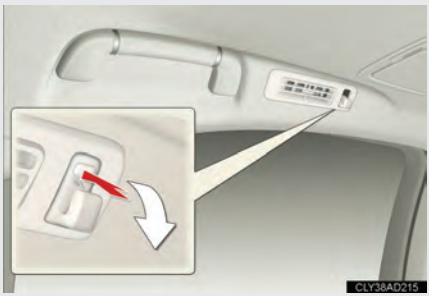
- Do not place excessive load on the motor or other components.
- Do not place objects where they may hinder opening and closing operations.
- Do not attach items to the rear door sunshades.
- Keep the opening clean and clear of obstructions.
- Do not operate the rear door sunshades continuously for long periods of time.

▶ Without rear air conditioning system



To use the coat hook, push it on.

▶ With rear air conditioning system



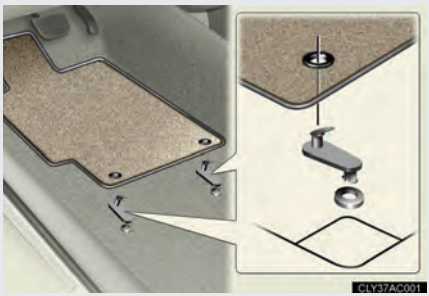
To use the coat hook, push it on.

⚠ CAUTION

■ Items that must not be hung on the hook

Do not hang a coat hanger or other hard or sharp objects on the hook. If the SRS curtain shield airbags deploy, these items may become projectiles that cause death or serious injury.

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



Fix the floor mat in place using the retaining hooks (clips) provided.

For details, refer to the floor mat retention clip installation instructions supplied with the clips.

⚠ CAUTION

Observe the following precautions.
Failure to do so may cause the driver's floor mat to slip, possibly interfering with the pedals while driving. An unexpectedly high speed may result or it may become difficult to stop the vehicle, leading to a serious accident.

■ When installing the driver's floor mat

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

■ Before driving



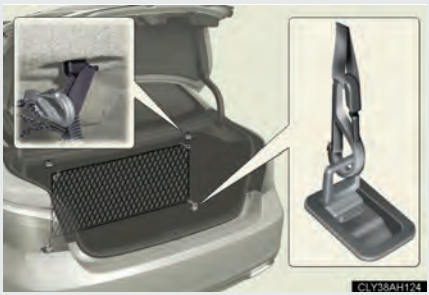
- Check that the floor mat is securely fixed in the right place with all the provided retaining hooks (clips). Be especially careful to perform this check after cleaning the floor.
- With the engine stopped and the shift lever in P, fully depress each pedal to the floor to make sure it does not interfere with the floor mat.

Cargo net



The cargo net is provided for securing loose items on the floor or items inside the trunk.

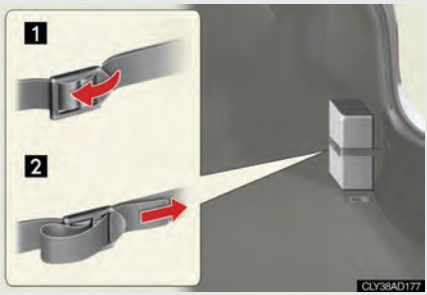
Raise the cargo hooks on the floor. Hook the net on the cargo hooks.



Shopping bag hooks



First-aid kit storage belt



1 Loosen
2 Tighten

CAUTION

When the cargo net is not in use

To avoid injury, always return the cargo hooks on the floor to their stowed positions.

The garage door opener can be programmed to operate garage doors, gates, entry doors, door locks, home lighting systems, security systems, and other devices.

The garage door opener (HomeLink® Universal Transceiver) is manufactured under license from HomeLink®.

Programming HomeLink®

The HomeLink® 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.



1 Indicator
2 Buttons

Programming 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® buttons.

Keep the HomeLink® indicator light in view while programming.

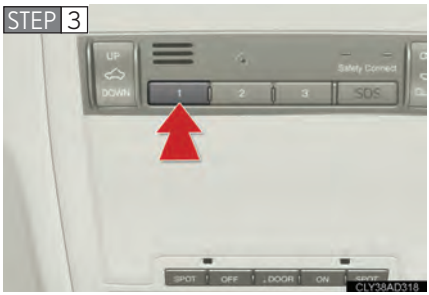
STEP 2



Press and hold one of the HomeLink® buttons and the transmitter button. When the HomeLink® indicator light changes from a slow to a rapid flash, you can release both buttons.

If the HomeLink® indicator light comes on but does not flash, flashes rapidly for 2 seconds and remains lit, the HomeLink® button is already programmed. Use the other buttons or follow the "Reprogramming a HomeLink® button" instructions. (→P. 400)

STEP 3



Test the HomeLink® operation by pressing the newly programmed button.

If a HomeLink® 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® 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".

STEP 4 Repeat the steps above to program another device for each of the remaining HomeLink® 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 HomeLink®" before proceeding with the steps listed below.

STEP 1 Locate the learn button on the ceiling mounted garage door 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.

STEP 3 Press and hold the vehicle's programmed HomeLink® 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 HomeLink® signal and operate the garage door.

STEP 4 Repeat the steps above to program another rolling code system for any of the remaining HomeLink® 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®.

Keep the HomeLink® 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 completed.

STEP 4 When the indicator light on the HomeLink® compatible transceiver starts to flash rapidly, release the buttons.

STEP 5 Test the operation of the HomeLink® 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® 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® buttons cannot be erased but can be reprogrammed. To reprogram a button, follow the "Reprogramming a HomeLink® button" instructions.

Operating HomeLink®

Press the appropriate HomeLink® button. The HomeLink® indicator light should come on.

The HomeLink® 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® 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® button.

Certification for the garage door opener

▶ For vehicles sold in the U.S.A.

FCC ID: CB2070NHL4

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.

When support is necessary

Visit on the web at www.homelink.com or call 1-800-355-3515.

⚠ CAUTION

When programming a garage door or other remote control devices

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® compatible transceiver with any garage door opener or device that lacks safety stop and reverse features as required by federal safety standards.
This includes any garage door that cannot detect an interfering object. A door or device without these features increases the risk of death or serious injury.

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



1 Microphone
2 LED light indicators
3 "SOS" button

*: If equipped

■ **Services**

Subscribers have the following Safety Connect services available:

- Automatic Collision Notification*
  Helps drivers receive necessary response from emergency service providers. (→P. 406)

  *: U.S. Patent No. 7,508,298 B2
- Stolen Vehicle Location
  Helps drivers in the event of vehicle theft. (→P. 407)
- Emergency Assistance Button (SOS)
  Connects drivers to response-center support. (→P. 407)
- Enhanced Roadside Assistance
  Provides drivers various on-road assistance. (→P. 407)

■ **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 "POWER" switch is turned to 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.

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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 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.

■ **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.
- Do not use detergent on the wheels when they are hot, for example after driving for long distance in the hot weather.
- Wash detergent from the wheels immediately after use.

■ **Bumpers and side moldings**

Do not scrub with abrasive cleaners.

⚠ CAUTION

■ **Caution about the exhaust pipes and rear bumper diffusers**

Exhaust gasses cause the exhaust pipes and rear bumper diffusers to become quite hot.

When washing the vehicle, be careful not to touch the pipes and diffusers until they have cooled sufficiently, as touching hot exhaust pipes and rear bumper diffusers can cause burns.

NOTICE

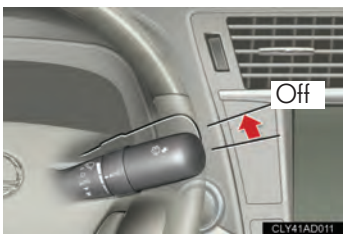
To prevent paint deterioration and corrosion on the body and components (aluminum wheels etc.)

- Wash the vehicle immediately in the following cases:
  - After driving near the sea coast
  - After driving on salted roads
  - If you see coal tar or tree sap on the paint surface
  - If you see dead insects, insect droppings or bird 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.
- To prevent the wheels from corroding, remove any dirt and store in a place with low humidity when storing the wheels.

Cleaning the exterior lights

- Wash carefully. Do not use organic substances or scrub with a hard brush. This may damage the surfaces of the lights.
- Do not apply wax on the surfaces of the lights. Wax may cause damage to the lenses.

When using an automatic car wash



Set the wiper switch to 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. 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.

CAUTION

Water in the vehicle

- Do not splash or spill liquid in the vehicle, such as on the floor, in the hybrid battery (traction battery) air vents, or in the trunk.
  Doing so may cause the hybrid battery, electrical components, etc. to malfunction or catch fire.
- Do not get any of the SRS components or wiring in the vehicle interior wet. (→P. 140)
  An 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 or antenna. Use a cloth dampened with lukewarm water to gently wipe the window clean. Wipe the window in strokes running parallel to the heater wires or antenna.
- Be careful not to scratch or damage the heater wires or antenna.

Maintenance requirements

To ensure safe and economical driving, day-to-day care and regular maintenance are essential. It is the owner's responsibility to perform regular checks. Lexus recommends the following maintenance:

General maintenance

General maintenance should be performed on a daily basis. This can be done by yourself or by a Lexus dealer.

Scheduled maintenance

Scheduled maintenance should be performed at specified intervals according to the maintenance schedule.

For details about maintenance items and schedules, refer to the "Warranty and Service Guide", "Owner's Manual Supplement" or "Scheduled Maintenance".

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, refer to the separate "Owner's Guide", "Warranty and Service 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.

⚠ CAUTION

■ **If your vehicle is not properly maintained**

It could result in serious damage to the vehicle and possible serious injury or death.

■ **Warning in handling of 12-volt 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.
- 12-volt battery posts, terminals and related accessories contain lead and lead compounds which are known to cause brain damage. Wash your hands after handling. (→P. 444)

Listed below are the general maintenance items that should be performed at the intervals specified in the "Warranty and Service Guide" or "Owner's Manual Supplement". It is recommended that any problem you notice should be brought to the attention of your Lexus dealer or qualified service shop for advice.

Engine compartment

Items	Check points
Brake fluid	At the correct level? (→P. 440)
Coolant	At the correct level? (→P. 437)
Engine oil	At the correct level? (→P. 433)
Exhaust system	No fumes or strange sounds?
Radiator/condenser/hoses	Not blocked with foreign matter? (→P. 439)
Washer fluid	At the correct level? (→P. 441)

Luggage compartment

Items	Check points
12-volt battery	Check the connections. (→P. 442)

Vehicle interior

Items	Check points
Accelerator pedal	• Moves smoothly (without uneven pedal effort or catching)?
Transmission "Park" mechanism	• Can the vehicle be held securely on an incline with the shift lever in "P"?
Brake pedal	• Moves smoothly? • Does it have appropriate clearance and correct amount of free play?
Brakes	• No pull to one side when applied? • Loss of brake effectiveness? • Spongy feeling brake pedal? • Pedal almost touches floor?
Head restraints	• Move smoothly and lock securely?
Indicators/buzzers	• Function properly?
Lights	• Do all the lights come on? • Headlights aimed correctly? (→P. 472)
Parking brake	• Moves smoothly? • Can hold the vehicle securely on an incline?
Seat belts	• Does the seat belt system operate smoothly? • Are the belts undamaged?
Seats	• Do the seat controls operate properly?

Items	Check points
Steering wheel	• Moves smoothly? • Has correct free play? • No strange noises?

Vehicle exterior

Items	Check points
Doors/trunk	• Operate smoothly?
Engine hood	• The lock system works properly?
Fluid leaks	• Is there any leakage after parking?
Tires	• Inflation pressure is correct? • Tire surfaces not worn or damaged? • Tires rotated according to the maintenance schedule? • Wheel nuts are not loose?

⚠ CAUTION

■ If the hybrid system is operating

Turn the hybrid system 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 in the following situations

- When the 12-volt 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 by yourself, be sure to follow the correct procedure given in these sections.

Items	Parts and tools
12-volt battery condition (→P. 442)	• Grease • Conventional wrench (for terminal clamp bolts)
Brake fluid level (→P. 440)	• FMVSS No.116 DOT 3 or SAE J1703 brake fluid • Rag or paper towel • Funnel (used only for adding brake fluid)
Engine/power control unit coolant level (→P. 437)	• "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. For the U.S.A.: "Toyota Super Long Life Coolant" is pre-mixed with 50% coolant and 50% deionized water. For Canada: "Toyota Super Long Life Coolant" is pre-mixed with 55% coolant and 45% deionized water. • Funnel (used only for adding coolant)

Items	Parts and tools
Engine oil level (→P. 433)	• "Toyota Genuine Motor Oil" or equivalent • Rag or paper towel • Funnel (used only for adding engine oil)
Fuses (→P. 466)	• Fuse with same amperage rating as original
Tire inflation pressure (→P. 455)	• Tire pressure gauge • Compressed air source
Headlight aim (→P. 472)	• Phillips-head screwdriver
Light bulbs (→P. 475)	• Bulb with same number and wattage rating as original • Phillips-head screwdriver • Flathead screwdriver • Wrench
Radiator and condenser (→P. 439)	—
Washer fluid (→P. 441)	• Water or washer fluid containing antifreeze (for winter use) • Funnel (used only for adding water or washer fluid)

⚠ 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, observe the following precautions:

■ When working on the engine compartment

- Make sure that the indicator on the "POWER" switch and the "READY" indicator are both off.
- Keep hands, clothing and tools away from the moving fans and engine drive belt.
- Be careful not to touch the engine, power control unit, 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. Fuel fumes are flammable.

■ When working near the electric cooling fan or radiator grille

Be sure the "POWER" switch is OFF.
With the "POWER" switch in ON mode, the electric cooling fans may automatically start to run if the air conditioning is on and/or the coolant temperature is high. (→P. 439)

■ Safety glasses

Wear safety glasses to prevent flying or falling material, fluid spray, etc. from getting in your eyes.

⚠ NOTICE

■ If you remove the air cleaner filter

Driving with the air cleaner filter removed may cause excessive engine wear due to dirt in the air. Also a backfire could cause a fire in the engine compartment.

Release the lock from the inside of the vehicle to open the hood.

STEP 1



Pull the hood release lever.

The hood will pop up slightly.

STEP 2



Lift the auxiliary catch lever and lift the hood.

⚠ CAUTION

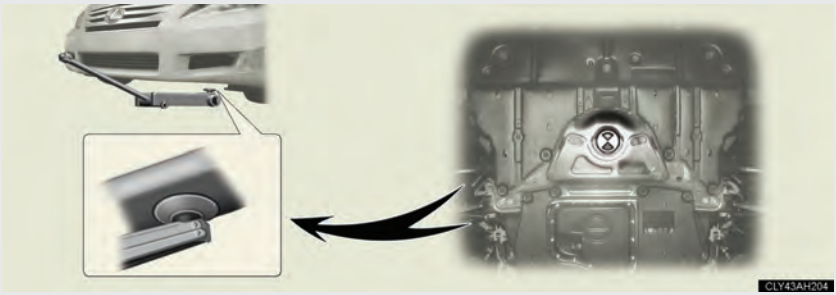
■ Pre-driving check

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.

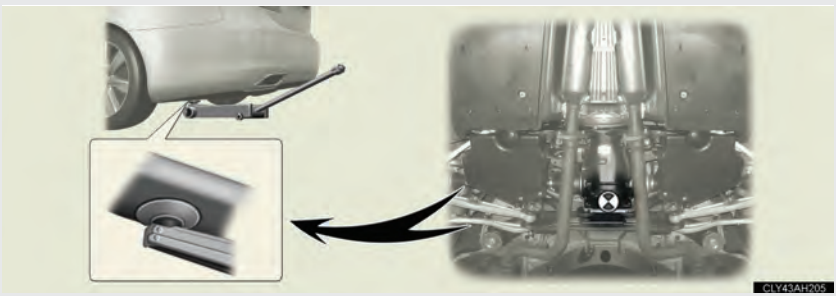
Positioning a floor jack

When raising your vehicle with a floor jack, position the jack correctly. Improper placement may damage your vehicle or cause injury.

Front



Rear



⚠ CAUTION

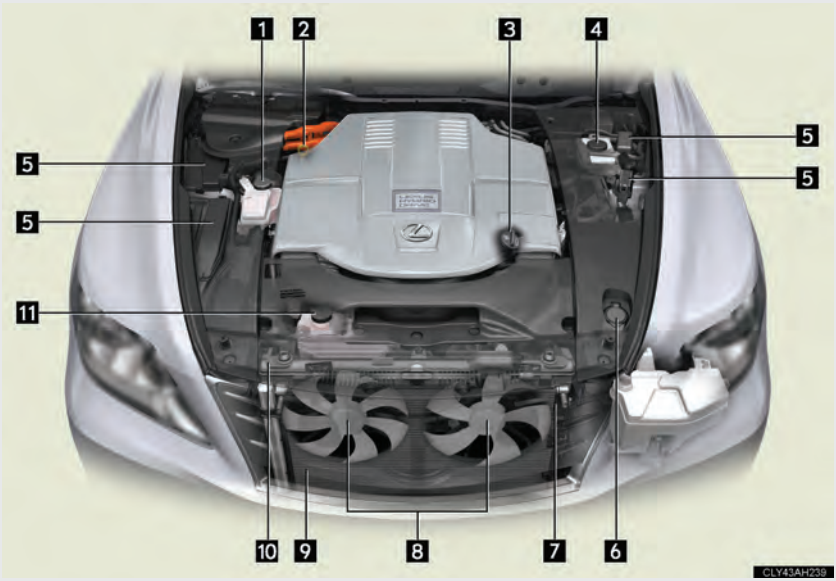
■ When raising your vehicle

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 hybrid system 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.
- Be sure to turn off the height control and stop the hybrid system. Otherwise, the vehicle height may change due to the automatic leveling function. (→P. 255)

Engine compartment

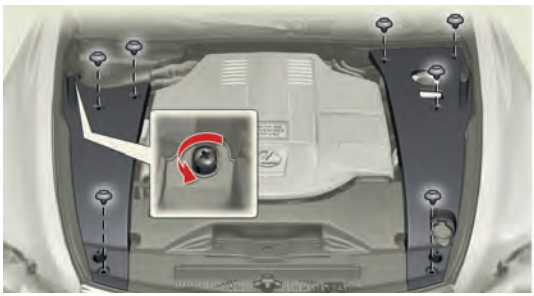


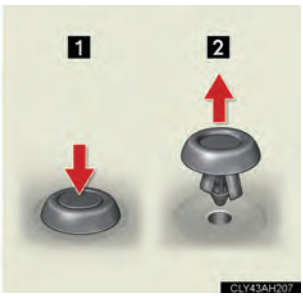
1 Power control unit coolant reservoir (→P. 437)
2 Engine oil level dipstick (→P. 433)
3 Engine oil filler cap (→P. 433)
4 Brake fluid reservoir (→P. 440)
5 Fuse boxes (→P. 466)
6 Washer fluid tank (→P. 441)
7 Power control unit coolant radiator (→P. 439)
8 Electric cooling fans
9 Condenser (→P. 439)
10 Engine coolant radiator (→P. 439)
11 Engine coolant reservoir (→P. 437)

Engine compartment covers

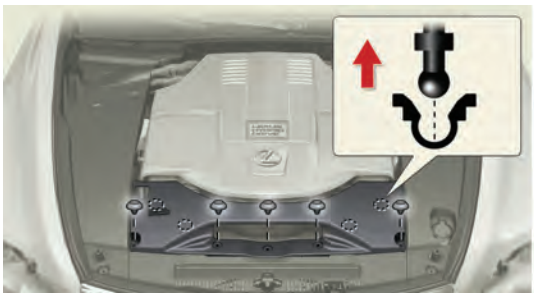
Removing the engine compartment covers

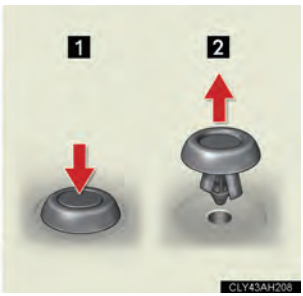
▶ Outside





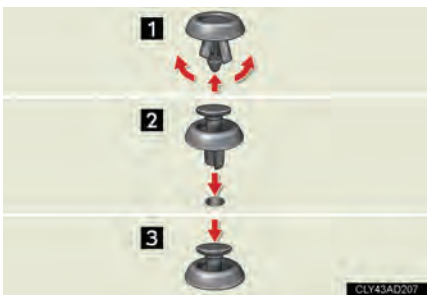
▶ Front





Installing the clips

▶ Type A



▶ Type B



NOTICE

■ **After installing an engine compartment cover**

Make sure that the cover is securely installed in its original position.

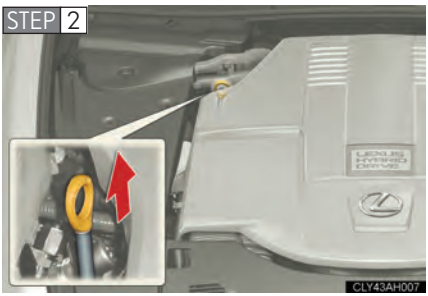
Engine oil

With the engine at operating temperature and turned off, check the oil level on the dipstick.

Checking the engine oil

STEP 1 Park the vehicle on level ground. After turning off the hybrid system, wait more than five minutes for the oil to drain back into the bottom of the engine.

STEP 2



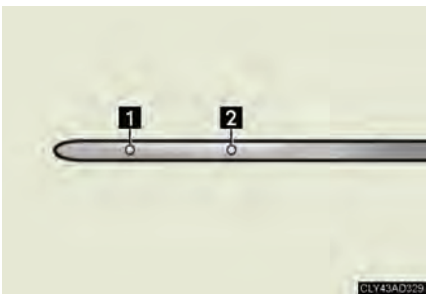
Hold a rag under the end and pull the dipstick out.

STEP 3 Wipe the dipstick clean.

STEP 4 Reinsert the dipstick fully.

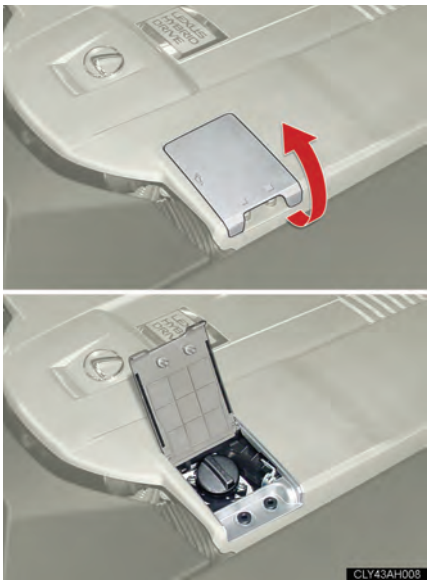
STEP 5 Holding a rag under the end, pull the dipstick out and check the oil level.

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. 540
Oil quantity (Low → Full)	1.6 qt. (1.5 L, 1.3 Imp. qt.)
Item	Clean funnel

STEP 1 Remove the oil filler cap by turning it counterclockwise.

STEP 2 Add engine oil slowly, checking the dipstick.

STEP 3 Install the oil filler cap by 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, 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 Imp. qt./600 miles, 1.0 L/1000 km)
- If your vehicle consumes more than 1.1 qt. (1.0 L, 0.9 Imp. qt.) every 600 miles (1000 km), contact your Lexus dealer.

■ **After changing the engine oil (U.S.A. only)**

The oil change system should be reset. Perform the following procedures:

STEP 1 Switch the display to the trip meter "A" when the hybrid system is operating. (→P. 199)

STEP 2 Turn the "POWER" switch OFF.

STEP 3 While pressing the trip meter reset button, turn the "POWER" switch to ON mode (but do not start the hybrid system because otherwise the reset mode will be canceled). Press and hold the button until the multi-information display indicates that the reset is complete.

⚠ 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 a regular basis.

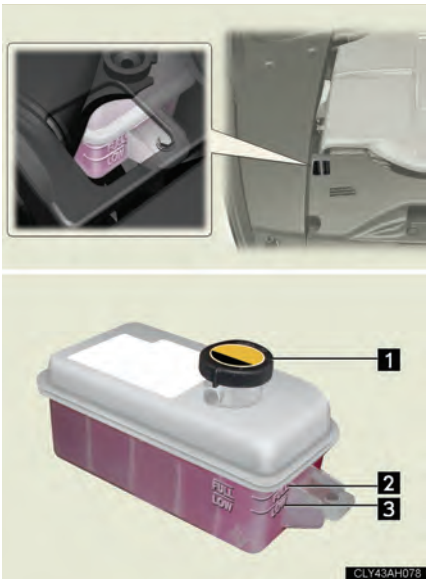
■ When replacing the engine oil

- Be careful not to spill engine oil on the vehicle components.
- Avoid overfilling, or the engine could be damaged.
- Check the oil level on the dipstick every time you refill the vehicle.
- Be sure the engine oil filler cap is properly tightened.

Coolant

The coolant level is satisfactory if it is between the "FULL" and "LOW" lines on the reservoir when the hybrid system is cold.

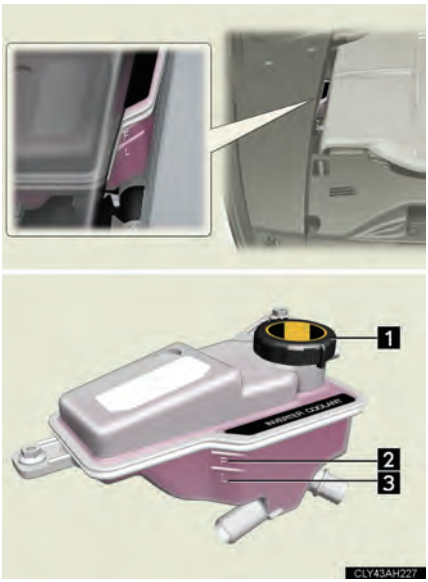
▶ Engine coolant reservoir



1 Reservoir cap
2 "FULL"
3 "LOW"

If the level is on or below the "LOW" line, add coolant up to the "FULL" line. (→P. 529)

▶ Power control unit coolant reservoir



1 Reservoir cap
2 “F”
3 “L”

If the level is on or below the “L” line, add coolant up to the “F” line. (→P. 530)

■ **If the coolant level drops within a short time after replenishing**

Visually check the radiators, hoses, coolant reservoir caps, 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 systems.

■ **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.

U.S.A.: “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 coolant, contact your Lexus dealer.

CAUTION

When the hybrid system is hot

Do not remove the coolant reservoir 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 the coolant

Coolant is neither plain water nor straight antifreeze. The correct mixture of water and antifreeze must be used to provide proper lubrication, corrosion protection and cooling. Be sure to read the antifreeze or coolant label.

If you spill coolant

Be sure to wash it off with water to prevent damage to parts or paint.

Radiator and condenser

Check the radiators and condenser, and clear any foreign objects.
If either of the above parts is extremely dirty or you are not sure of their condition, have your vehicle inspected by your Lexus dealer.

CAUTION

The radiators and condenser may be hot after driving

Do not touch the radiators or condenser as they may be hot and cause burns.

Brake fluid

Checking fluid level



The brake fluid level should be between the "MAX" and "MIN" lines on the tank.

Adding fluid

Make sure to check the fluid type and prepare the necessary item.

Fluid type	FMVSS No.116 DOT 3 or SAE J1703 brake fluid
Item	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.

CAUTION

When filling the reservoir

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.

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.

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.

CAUTION

When refilling the washer fluid

Do not refill the washer fluid when the hybrid system is hot or operating, 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.

Location



The 12-volt battery is located in the left-hand side of the luggage compartment.

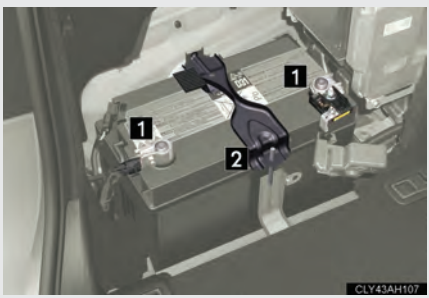
Removing the 12-volt battery cover



Remove the 12-volt battery cover after removing the clip.

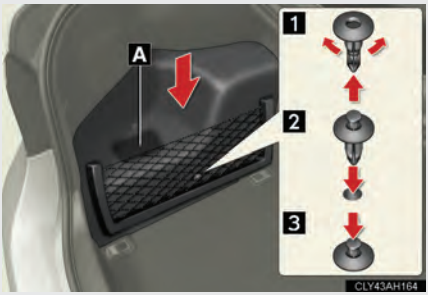
Exterior

Make sure that the 12-volt battery terminals are not corroded and that there are no loose connections, cracks, or loose clamps.



1 Terminals
2 Hold-down clamp

Installing the 12-volt battery cover



Install the 12-volt battery cover with the clip. Press down on the cover at position "A" to secure it.

Before recharging

When recharging, the 12-volt battery produces hydrogen gas which is flammable and explosive. Therefore, observe the following before recharging:

- If recharging with the 12-volt 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 12-volt battery.

After recharging/reconnecting the 12-volt battery

In some cases, the hybrid system may not start. Follow one or both of the following procedures:

- After opening and closing the driver's door, wait 10 seconds then attempt to start the hybrid system. (If the system does not start first time, repeat the procedure.)
- With the shift lever in "P" and the "POWER" switch OFF, open and close any door, then attempt to start the hybrid system.

If the system will not start even after multiple attempts at both methods, contact your Lexus dealer.

⚠ CAUTION

■ Chemicals in the 12-volt battery

The 12-volt battery contains poisonous and corrosive sulfuric acid and may produce hydrogen gas which is flammable and explosive. To reduce the risk of death or serious injury, take the following precautions while working on or near the 12-volt battery:

- Do not cause sparks by touching the 12-volt battery terminals with tools.
- Do not smoke or light a match near the 12-volt battery.
- Avoid contact with eyes, skin and clothes.
- Never inhale or swallow electrolyte.
- Wear protective safety glasses when working near the 12-volt battery.
- Keep children away from the 12-volt battery.

■ Where to safely charge the 12-volt battery

Always charge the 12-volt battery in an open area. Do not charge the 12-volt battery in a garage or closed room where there is not sufficient ventilation.

■ How to recharge the 12-volt battery

Only perform a slow charge (5 A or less). The 12-volt 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.

CAUTION

When replacing the 12-volt battery

Use a 12-volt battery designed for the LS600hL. Failure to do so may cause gas (hydrogen) to enter the passenger compartment, causing a fire or explosion.

For replacement of the 12-volt battery, contact your Lexus dealer.

NOTICE

When recharging the 12-volt battery

Never recharge the 12-volt battery while the hybrid system is operating. Also, be sure all accessories are turned off.

Replace or rotate tires in accordance with maintenance schedules and treadwear.

Checking tires

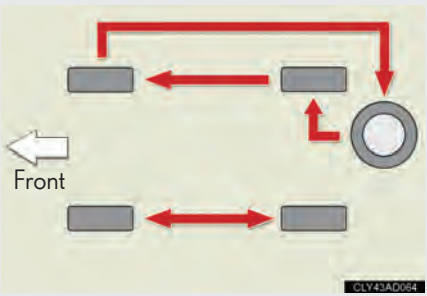


1 New tread
2 Treadwear indicator
3 Worn tread

The location of treadwear indicators is shown by the "TWI" or "Δ" marks, etc., molded on the sidewall of each tire.

Check spare tire condition and inflation pressure if not rotated.

Tire rotation



Rotate the tires in the order shown.

To equalize tire wear and extend tire life, Lexus recommends that tire rotation is carried out at the same interval as tire inspection.

Do not fail to initialize the tire pressure warning system after tire rotation.

Tire pressure warning system

Your Lexus is equipped with a tire pressure warning system that uses tire pressure warning valves and transmitters to detect low tire inflation pressure before serious problems arise. (→P. 501, 507)

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. (→P. 449)

Initializing the tire pressure warning system

The tire pressure warning system must be initialized in the following circumstances:

- When rotating the tires on vehicles differing with front and rear tire inflation pressures.
- When changing the tire inflation pressure by changing traveling speed.

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 a safe place and turn the "POWER" 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. 546)

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.

STEP 3 Turn the "POWER" switch to ON mode.

STEP 4



Push and hold the tire pressure warning reset switch until the tire pressure warning light blinks slowly 3 times.

STEP 5 Wait a few minutes for the multi-information display to show the tire inflation pressures (5 tires), and then turn the "POWER" switch OFF.

Registering ID codes

The tire pressure warning valve and transmitter is equipped with a unique ID code. When replacing a tire pressure warning valve and transmitter, it is necessary to register the ID code of tire pressure warning valve and transmitter. Have the ID code registered by your Lexus dealer.

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 the tires as 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. (→P. 552)

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. (→P. 320)

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 warning 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 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**

TPMS Transmitter FCC ID: PAXPMV107J
IC ID: 3729A-PMV107J

TPMS Receiver FCC ID: HYQ13BCX
IC ID: 1551A-13BCX

▶ For vehicles sold in the U.S.A.

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.

⚠ CAUTION

■ Tire pressure warning system operation

The tire pressure warning system may not provide warning immediately if a tire bursts or if sudden air leakage occurs.

■ 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.

■ 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, tire pressure warning valves and transmitters and tire valve caps**

- When removing or fitting the wheels, tires or the tire pressure warning valves and transmitters, contact your Lexus dealer as the tire pressure warning valves and transmitters may be damaged if not handled correctly.
- When replacing tire valve caps, do not use tire valve caps other than those specified. The cap may become stuck.

■ **To avoid damaging the tire pressure warning valves and transmitters**

Do not use liquid sealants on flat tires.

■ **Driving on rough roads**

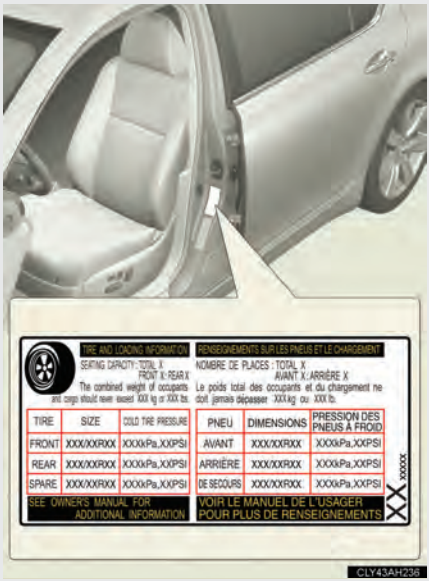
Take particular care when driving on roads with loose surfaces or potholes. These conditions may cause losses in tire inflation pressure, reducing the cushioning ability of the tires. In addition, driving on rough roads may cause damage to the tires themselves, as well as the vehicle's wheels and body.

■ **If tire inflation pressures become low while driving**

Do not continue driving, or your tires and/or wheels may be ruined.

Tire inflation pressure

The recommended cold tire inflation pressure and tire size are displayed on the tire and loading information label. (→P. 546)



Inspection and adjustment procedure



1 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 tire pressure.
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.

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.

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. (→P. 447)

⚠ 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.

Air conditioning filter

The air conditioning filter must be changed regularly to maintain air conditioning efficiency.

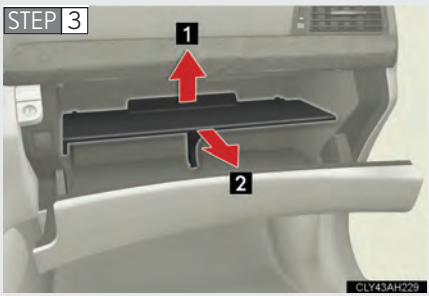
Front air conditioning filter

STEP 1 Set the air conditioning system to recirculated air mode. (→P. 337)

The air conditioning filter case cannot be removed with the system in outside air mode.

STEP 2 Turn the "POWER" switch OFF.

STEP 3



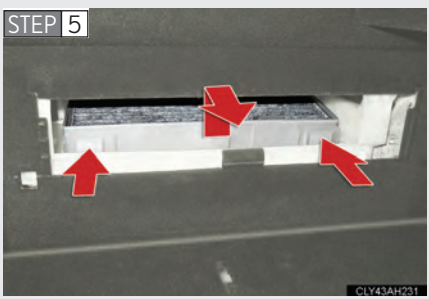
Open the glove box. Lift and remove the partition.

STEP 4



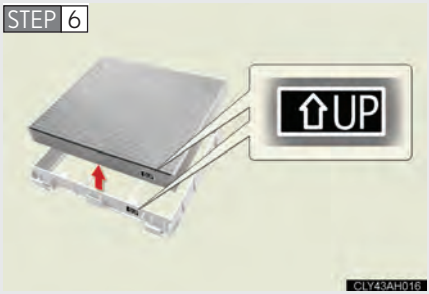
Remove the filter cover.

STEP 5



Remove the filter case.

STEP 6



Remove the air conditioning filter from the filter case and replace it with a new one.

The "↑UP" marks shown on the filter and the filter case should be pointing up.

STEP 7 Reset the air conditioning filter maintenance data. (→P. 463)

Rear air conditioning filter (if equipped)

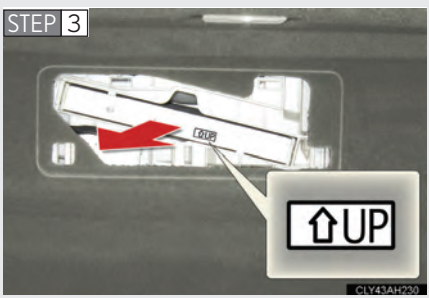
STEP 1 Turn the "POWER" switch OFF.

STEP 2



Open the trunk lid. Remove the filter cover.

STEP 3



Remove the air conditioning filter and replace it with a new one.

The "↑UP" mark shown on the filter should be pointing up.

■ **Replacement interval for the front air conditioning filter**

Inspect and replace the air conditioning filter when a message appears on the multi-information display. In dusty areas or areas with heavy traffic flow, early replacement may be required.

■ **If air flow from the vents decreases dramatically**

The filter may be clogged. Check the filter and replace if necessary.

■ **After changing the front air conditioning filter**

The air conditioning filter maintenance data should be reset. Perform the following procedures:

STEP 1 Turn the "POWER" switch to ON mode.

STEP 2 Press and hold  (on the air conditioning panel) for 4 seconds or more.

A buzzer will sound to indicate that the maintenance data has been successfully reset.

■ **Rear air conditioning filter (if equipped)**

If it is necessary to clean or replace the filter, contact your Lexus dealer.

■ **Climate control seat filter**

Filters are installed in the seats. When it is necessary to clean or replace the filters, contact your Lexus dealer.

⚠ NOTICE

■ **When using the air conditioning system**

Make sure that a filter is always installed.
Using the air conditioning system without a filter may cause damage to the system.

Electronic key battery

Replace the battery with a new one if it is depleted.

You will need the following items:

- Flathead screwdriver
- Small Phillips-head screwdriver
- Lithium battery (CR1632)

Replacing the battery

STEP 1



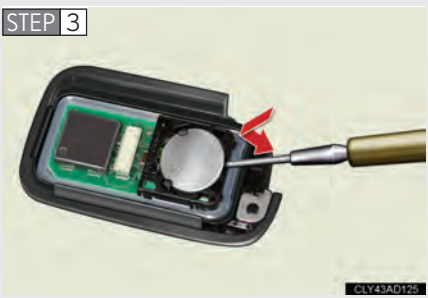
Take out the mechanical key.

STEP 2



Remove the cover.

STEP 3



Remove the depleted battery.

Insert a new battery with the "+" terminal facing up.

■ **If the electronic key battery is depleted**

The following symptoms may occur:

- The smart access system with push-button start and wireless remote control will not function properly.
- The operational range 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 the manufacturer.
- Dispose of used batteries according to the local laws.

■ **When the card key battery needs to be replaced**

The battery for the card key is available only at Lexus dealers. Your Lexus dealer can replace the battery for you.

⚠ 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 "POWER" switch OFF.

STEP 2 Remove the engine compartment cover (→P. 431) and the 12-volt battery cover (→P. 442).

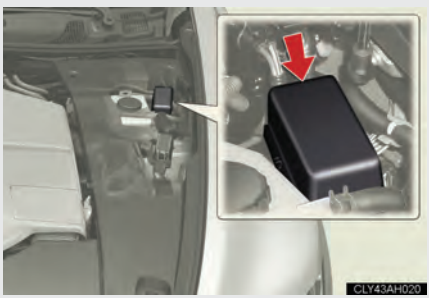
STEP 3 Open the fuse box cover.

▶ Engine compartment (type A fuse box)



Push the tab in and lift the lid off.

▶ Engine compartment (type B fuse box)



Push the tab in and lift the lid off.

▶ Engine compartment (type C fuse box)



Push the tab in and lift the lid off.

▶ Engine compartment (fuse box near the power control unit)



There are high voltage parts and wiring near the fuse box. For inspection and replacement of the fuses, contact your Lexus dealer.

▶ Driver's side instrument panel



Remove the lid.

▶ Passenger's side instrument panel



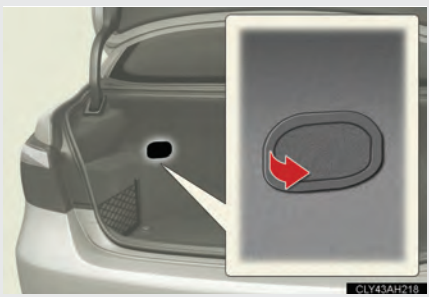
Remove the lid.

▶ Trunk (type A fuse box)



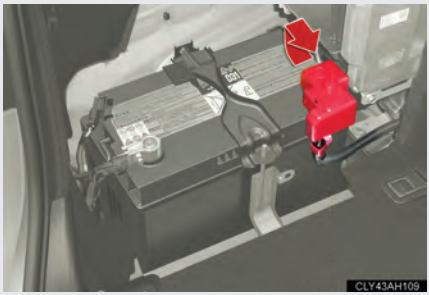
Remove the lid.

▶ Trunk (type B fuse box)



Remove the cover.

▶ Trunk (type C fuse box)



Remove the terminal cover.

STEP 4

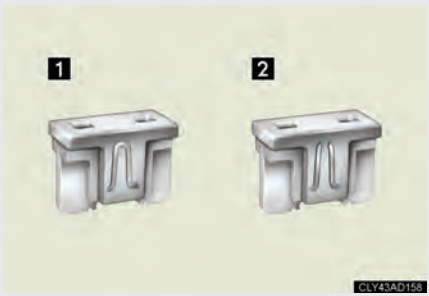


Take out the pullout tool.

Only type A fuse can be removed using the pullout tool.

STEP 5 Check if the fuse has blown.

▶ Type A

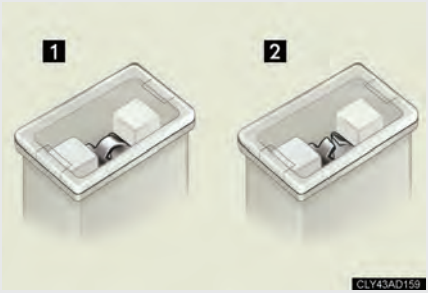


1 Normal fuse

2 Blown fuse

Replace it with one of an appropriate amperage rating. The amperage rating can be found on the fuse box lid.

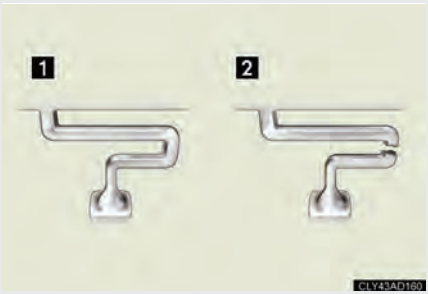
▶ Type B



1 Normal fuse
2 Blown fuse

Replace it with one of an appropriate amperage rating. The amperage rating can be found on the fuse box lid.

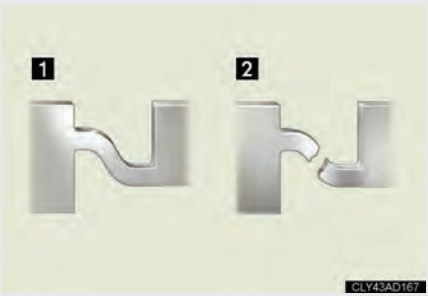
▶ Type C



1 Normal fuse
2 Blown fuse

Contact your Lexus dealer.

▶ Type D



1 Normal fuse
2 Blown fuse

Contact your Lexus dealer.

■ **After a fuse is replaced**

- If the lights do not turn on even after the fuse has been replaced, a bulb may need replacement. (→P. 475)
- If the replaced fuse blows again, have the vehicle inspected by your Lexus dealer.

■ **If there is an overload in a circuit**

The fuses are designed to blow before the entire wiring harness is damaged.

⚠ CAUTION

■ **To prevent system breakdowns and vehicle fire**

Observe the following precautions.
Failure 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.

■ **Fuse box near the power control unit**

Never check or replace the fuses as there are high voltage parts and wiring near the fuse box.
Doing so may cause electric shock, resulting in death or serious injury.

⚠ NOTICE

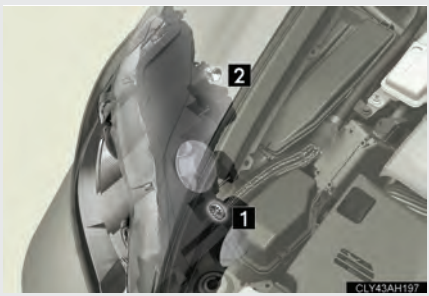
■ **Before replacing fuses**

Have the cause of electrical overload determined and repaired by your Lexus dealer.

■ Removing the engine compartment cover.
→P. 431

■ Vertical movement adjusting bolts

▶ With discharge headlights



1 Adjustment bolt A
2 Adjustment bolt B

▶ With LED headlights



1 Adjustment bolt A
2 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.

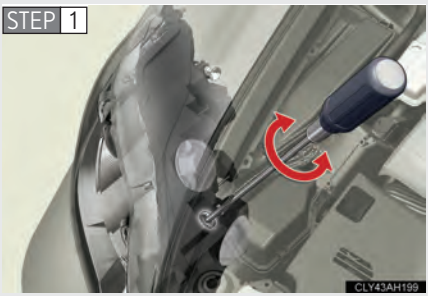
STEP 3 Sit in the driver's seat.

STEP 4 Bounce the vehicle several times.

Adjusting the headlight aim

▶ With discharge headlights

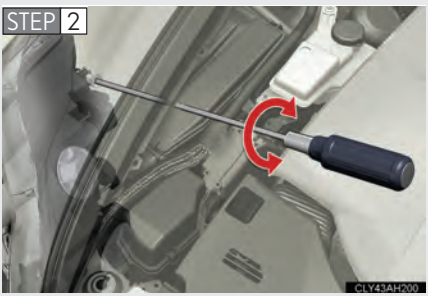
STEP 1



Turn bolt A in either direction using a Phillips-head screwdriver.

Remember the turning direction and the number of turns.

STEP 2



Turn bolt B the same number of turns and in the same direction as step 1 using a Phillips-head screwdriver.

If the headlight cannot be adjusted using this procedure, take the vehicle to your Lexus dealer to adjust the headlight aim.

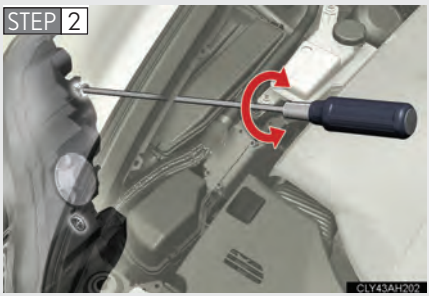
▶ With LED headlights

STEP 1



Turn bolt A in either direction using a Phillips-head screwdriver.

Remember the turning direction and the number of turns.



Turn bolt B the same number of turns and in the same direction as step 1 using a Phillips-head screwdriver.

If the headlight cannot be adjusted using this procedure, take the vehicle to your Lexus dealer to adjust the headlight aim.

Light bulbs

You may replace the following bulbs by yourself. The difficulty level of replacement varies depending on the bulb. If necessary bulb replacement seems difficult to perform, contact your Lexus dealer.
For more information about replacing other light bulbs, contact your Lexus dealer.

Preparing for light bulb replacement

Check the wattage of the light bulb to be replaced. (→P. 548)

Removing the engine compartment cover

→P. 431

Front bulb locations

▶ With discharge headlights



▶ With LED headlights



Rear bulb locations



Replacing light bulbs

Headlight high beams

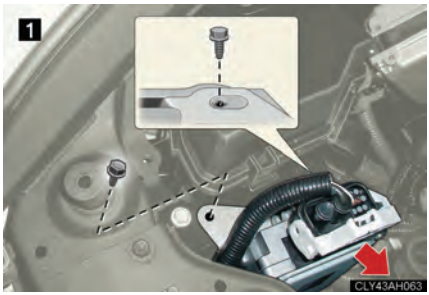
STEP 1 Before replacing the bulbs:

▶ Left side

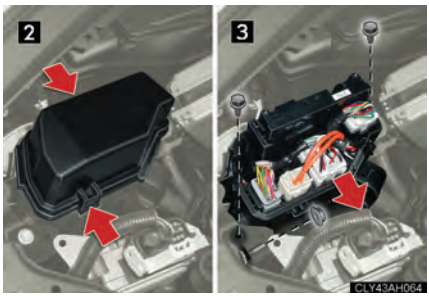


Remove the securing bolt and move the washer fluid filler opening.

▶ Right side

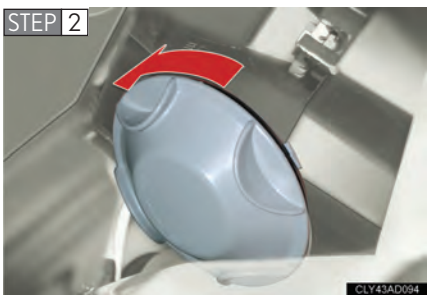


1 Remove the securing bolts and move the ECU.

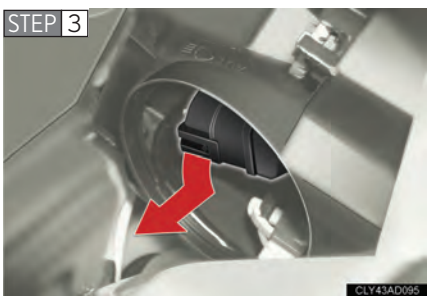


2 Remove the relay block cover.

3 Remove the securing bolts and nut, and move the relay block.



Turn the cover counterclockwise and remove it.



Turn the bulb base counterclockwise.

STEP 4



Unplug the connector while pulling the lock release.

Front fog lights

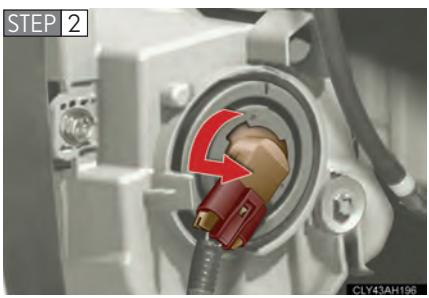
STEP 1



To allow enough working clearance, turn the steering wheel to the opposite side of the bulb to be replaced.

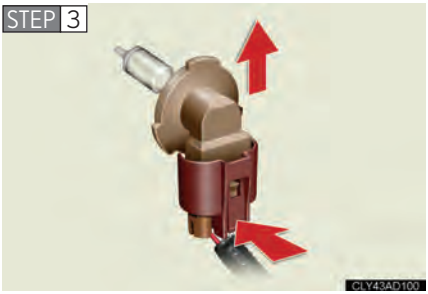
Remove the fender liner bolt and clips, and then remove the fender liner.

STEP 2



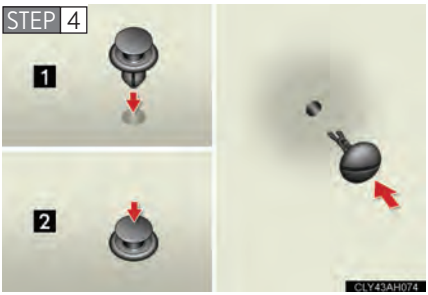
Turn the bulb base counterclockwise.

STEP 3



Unplug the connector while depressing the lock release.

STEP 4



Install the bolt and clips.

Front turn signal lights (with discharge headlights)

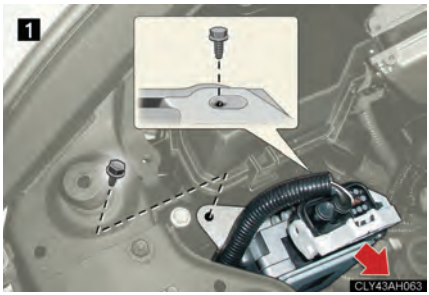
STEP 1 Before replacing the bulbs:

▶ Left side

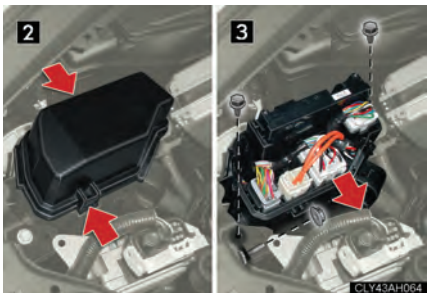


Remove the securing bolt and move the washer fluid filler opening.

▶ Right side

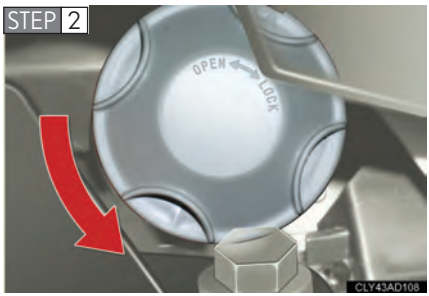


1 Remove the securing bolts and move the ECU.

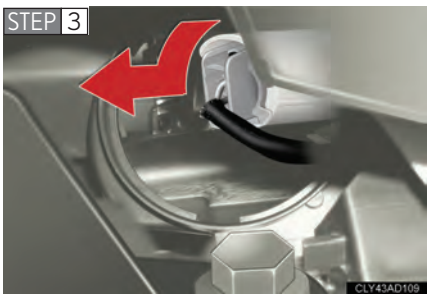


2 Remove the relay block cover.

3 Remove the securing bolts and nut, and move the relay block.



Turn the cover counterclockwise and remove it.



Turn the bulb base counterclockwise.

STEP 4



Remove the light bulb.

Front turn signal lights (with LED headlights)

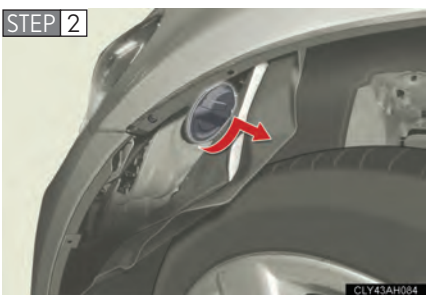
STEP 1



To allow enough working clearance, turn the steering wheel to the opposite side of the bulb to be replaced.

Remove the fender liner bolt and clips, and then remove the fender liner.

STEP 2



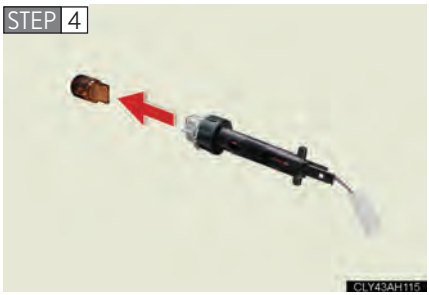
Turn the back cover counterclockwise.

STEP 3



Disconnect the connector and turn the bulb socket counterclockwise.

STEP 4



Remove the light bulb.

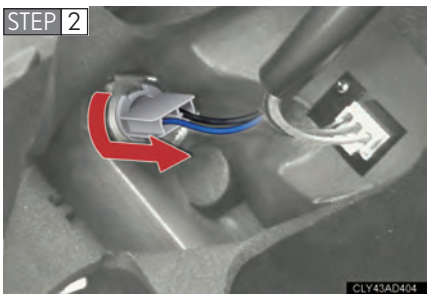
Back-up lights

STEP 1



Open the trunk lid and remove the cover.

STEP 2



Turn the bulb base counterclockwise.

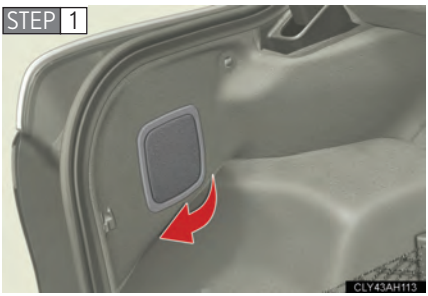
STEP 3



Remove the light bulb.

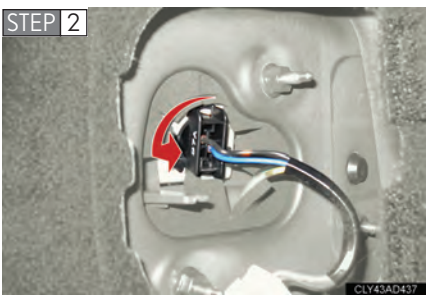
Rear turn signal lights

STEP 1



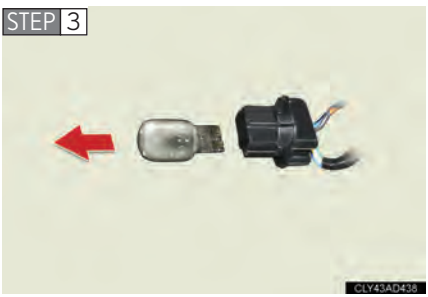
Open the trunk lid and remove the cover.

STEP 2



Turn the bulb base counterclockwise.

STEP 3



Remove the light bulb.

Lights other than the above

If any of the lights listed below has burnt out, have it replaced by your Lexus dealer.

- Headlight low beams
- Parking lights
- Side turn signal lights
- Side marker lights
- Stop/tail 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 equipped)

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 headlight low beams (if equipped), parking lights, side turn signal lights, side marker lights, stop/tail 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.

⚠ CAUTION

■ Replacing light bulbs

- Turn off the lights. Do not attempt to replace the bulb immediately after turning off the lights.
  The bulbs become very hot and may cause burns.
- Do not touch the glass portion of the light bulb with bare hands. 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. Failure to do so may result in heat damage, fire, or water entering the headlight unit. This may damage the headlights or cause condensation to build up on the lens.

■ Discharge headlights (if equipped)

- 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.
- Do not attempt to take apart or repair the low beam discharge headlight bulbs, connectors, power supply circuits, or related components.
  Doing so could result in electric shock and serious injury or death.

■ To prevent damage or fire

Make sure bulbs are fully seated and locked.

When trouble arises 5

5-1. Essential information

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If you think something is wrong 495

Event data recorder 496

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If your vehicle has to be stopped in an emergency..... 534

Emergency flashers

Use the emergency flashers if the vehicle malfunctions or is involved in an accident.



Press the switch to flash all the turn signal lights. To turn them off, press the switch once again.

NOTICE

To prevent 12-volt battery discharge

Do not leave the emergency flashers on longer than necessary when the hybrid system is not operating.

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 flatbed truck.
Use a safety chain system for all towing, and abide by all state/provincial and local laws.
If the vehicle is damaged, use a towing dolly or flatbed truck.

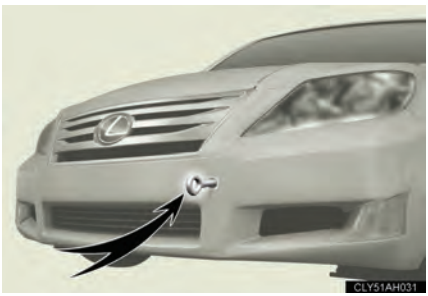
Before towing

The following may indicate a problem with your transmission. Contact your Lexus dealer before towing.

- The hybrid system is operating, 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(s). This should only be 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

■ Before emergency towing

- Release the parking brake.
- Shift the shift lever to "N".
- Turn the "POWER" switch to ACCESSORY (hybrid system off) or ON mode (hybrid system operating).

⚠ CAUTION

■ Caution while towing

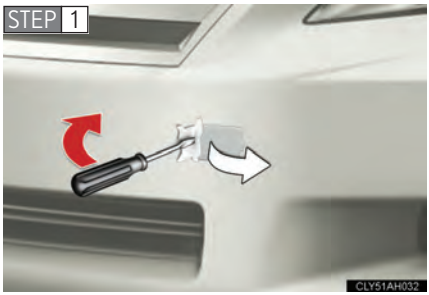
- Use extreme caution when towing the vehicle.
  Avoid sudden starts or erratic driving maneuvers which place excessive stress on the emergency towing eyelets and the cables or chains. Always use caution for the surroundings and other vehicles while towing.
- If the hybrid system is off, the power assist for the brakes and steering will not function, making steering and braking more difficult.

⚠ NOTICE

■ To prevent causing serious damage to the transmission and the transfer

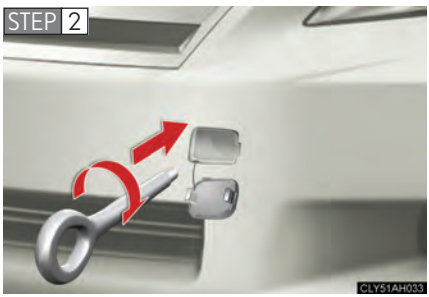
Never tow this vehicle with any of the wheels in contact with the ground.
This may cause serious damage to the transmission and the transfer.

Installing towing eyelets

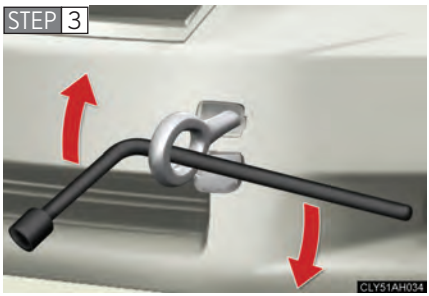


Remove the eyelet cover using a flathead screwdriver.

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**

→P. 510

CAUTION

Installing towing eyelets to the vehicle

Make sure that towing eyelets are installed securely.
If not securely installed, towing eyelets may come loose during towing. This may lead to accidents that cause serious injury or even death.

Towing with a sling-type truck



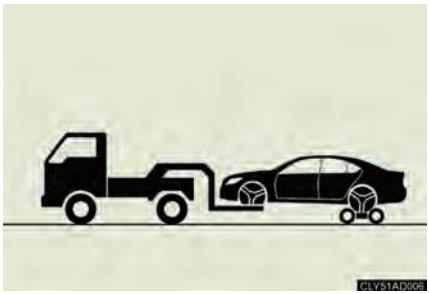
NOTICE

To prevent body damage

Do not tow with a sling-type truck, either from the front or rear.

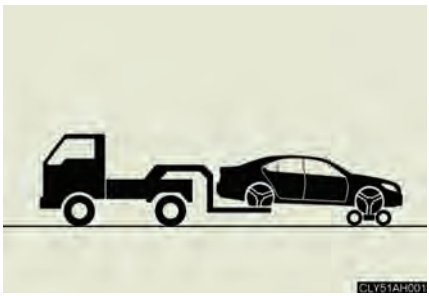
Towing with a wheel-lift type truck

▶ From the front



Use a towing dolly under the rear wheels.

▶ From the rear



Use a towing dolly under the front wheels.

NOTICE

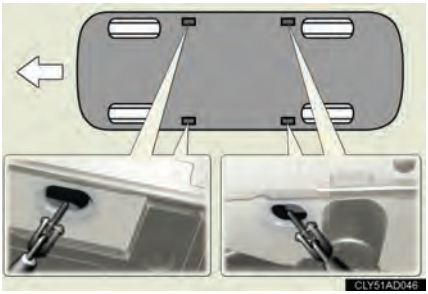
■ **To prevent causing serious damage to the transmission and the transfer**

Never tow this vehicle with any of the wheels in contact with the ground.

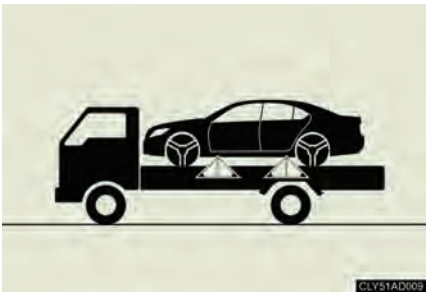
■ **To prevent damaging the vehicle**

- Do not tow the vehicle with the "POWER" switch OFF.
  The steering lock mechanism is not strong enough to hold the front wheels straight.
- When raising the vehicle, ensure adequate ground clearance for towing at the opposite end of the raised vehicle. Without adequate clearance, the vehicle could be damaged while being towed.

Using a flatbed truck



If your Lexus is transported by a flatbed truck, it should be tied down at the locations shown in the illustration.



If you use chains or cables to tie down your vehicle, the angles shaded in black must be 45°.

Do not overly tighten the tie downs or the vehicle may be damaged.

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. (→P. 199)

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 hybrid system

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

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 an event data recorder (EDR) that records 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:

- Gasoline engine speed
- Whether the brake pedal was depressed 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 of 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

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
 (U.S.A.)  (Canada)	**Brake system warning light** • Low brake fluid • Malfunction in the electronically controlled brake system

Stop the vehicle immediately.

The following warning indicates 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

Have the vehicle inspected immediately.

Failure 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
 (U.S.A.)  (Canada)	**Malfunction indicator lamp** Indicates a malfunction in: • The hybrid system; • The electronic engine control system; • The electronic throttle control system; or • The electronic transmission control system
	**SRS warning light** Indicates a malfunction in: • The SRS airbag system; • The seat belt pretensioner system; or • The active head restraints system
 (U.S.A.)  (Canada)	**ABS warning light** Indicates a malfunction in: • The ABS; or • The brake assist system
	**Brake system warning light** Indicates a malfunction in: • The regenerative brake system; • The electronically controlled brake system; or • The electric parking brake
	**Electric power steering system warning light** Indicates a malfunction in the EPS (Electric Power Steering) system

Warning light	Warning light/Details
 (Flashes)	**Pre-collision system warning light (if equipped)** Indicates a malfunction in the pre-collision system (The warning light may go off after the correction procedure is performed. This indicates that the system has returned to normal.)
	**Slip indicator** Indicates a malfunction in: • The VSC system; • The TRAC system; or • The hill-start assist control system
 (Flashes)	**Cruise control indicator** Indicates a malfunction in the cruise control system
 (Flashes)	**"AFS OFF" indicator** Indicates a malfunction in the adaptive front lighting system
 (Flashes)	**Automatic High Beam indicator light (if equipped)** Indicates a malfunction in the automatic high beam system.

■ **If the malfunction indicator lamp comes on while driving**

First check the following:

- Is the fuel tank empty?
  If it is, fill the fuel tank immediately.
- Is the fuel tank cap loose?
  If it is, tighten it securely.

The light will go off after taking several driving trips.
If the light does not go off even after several trips, contact your Lexus dealer as soon as possible.

■ **Electric power steering system warning light**

When the voltage is low or drops, the electric power steering system warning light may come on.

⚠ CAUTION

■ When the electric power steering system warning light comes on

The steering wheel may become extremely heavy.
If the steering wheel becomes heavier than usual when operating, firmly hold and operate it using more force than usual.

Follow the correction procedures.

After taking the specified steps to correct the suspected problem, check that the warning light turns off.

Warning light	Warning light/Details	Correction procedure
	**Open door warning light (warning buzzer)*1** Indicates that a door or the trunk is not fully closed	Check that all doors and the trunk are closed.
 In the fuel gauge	**Low fuel level warning light** Indicates remaining fuel is approximately 3.4 gal. (13 L, 2.8 Imp. gal.) or less	Refuel the vehicle.
	**Driver's seat belt reminder light (warning buzzer)*2** Warns the driver to fasten his/her seat belt	Fasten the seat belt.
	**Front passenger's seat belt reminder light (warning buzzer)*2** Warns the front passenger to fasten his/her seat belt	Fasten the seat belt.

Warning light	Warning light/Details	Correction procedure
	**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.
	**High coolant temperature warning light** Indicates high engine coolant temperature	→P. 529
	**Master warning light** A buzzer sounds and the warning light comes on or flashes to indicate that the master warning system has detected a malfunction.	→P. 507

*1: **Open door warning buzzer:**

The open door warning buzzer sounds to alert one or more of the doors is not fully closed (with the vehicle having reached a speed of 3 mph [5 km/h]).

*2: **Driver's and front passenger's seat belt buzzer:**

The driver's and front passenger's seat belt buzzer sound to alert the driver and front passenger that his or her seat belt is not fastened. The buzzer sounds intermittently for 10 seconds after the vehicle reaches a speed of 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.

■ **Front passenger detection sensor and passenger seat belt reminder**

- If luggage is placed on the front passenger seat, the front passenger detection sensor may cause the warning light to flash, even if a passenger is not sitting in the seat.
- If a cushion is placed on the seat, the sensor may not detect a passenger, and the warning light may not operate properly.

■ **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**

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.

■ **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 inflation pressure is 73 psi (500 kPa, 5.1 kgf/cm^2 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 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 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

■ **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 "POWER" switch is turned to ON mode, have it checked by your Lexus dealer.

■ **Customization**

The vehicle speed linked seat belt reminder buzzer can be disabled.
(Customizable features →P. 563)

⚠ 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 telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS (tire pressure warning system) to continue to function properly.

⚠ 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.

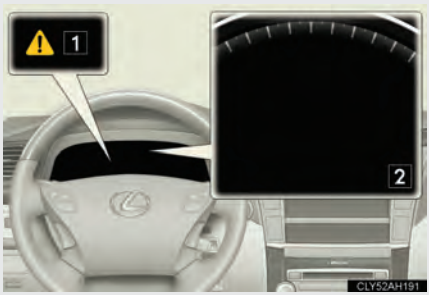
⚠ NOTICE

■ 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.

If a warning message is displayed

The multi-information display shows warnings of system malfunctions, incorrectly performed operations, or shows messages that indicate a need for maintenance. When a message is shown, perform the correction procedure appropriate to the message.



1 Master warning light

The master warning light comes on or flashes when a message is being shown on the multi-information display.

2 Multi-information display

If any of the warning messages is shown again after its correction procedure has been performed, contact your Lexus dealer.

Messages and warnings

The warning lights and warning buzzers operate as follows depending on the content of the message. If a message indicates the need for inspection by a dealer, have the vehicle inspected by your Lexus dealer immediately.

	System warning light	Warning buzzer*	Warning
Comes on	—	Sounds	Indicates an important situation, such as when a system related to driving is malfunctioning or that danger may result if the correction procedure is not performed
—	Comes on or flashes	Sounds	Indicates an important situation, such as when the system shown on the multi-information display may be malfunctioning
Flashes	—	Sounds	Indicates a situation, such as when damage to the vehicle or danger may result
Comes on	—	Does not sound	Indicates a condition, such as malfunction of electrical components, their condition, or indicates the need for maintenance
Flashes	—	Does not sound	Indicates a situation, such as when an operation has been performed incorrectly, or indicates how to perform an operation correctly

*: A buzzer sounds the first time a message is shown on the multi-information display.

■ **System warning lights**

The master warning light does not come on or flash in the following cases. Instead, a separate system warning light will come on or flash along with the message shown on the multi-information display.

- Malfunction of the AFS (Adaptive Front-lighting System)
  The "AFS OFF" indicator light flashes. (→P. 213)
- Malfunction of the brake system
  The brake system warning light (red indicator) comes on. (→P. 498)
- Malfunction of the regenerative brake system, electronically controlled brake system or electric parking brake
  The brake system warning light (yellow indicator) comes on. (→P. 499)
- Malfunction of the ABS
  The ABS warning light comes on. (→P. 499)
- Malfunction of the charging system
  The charging system warning light comes on. (→P. 498)
- High engine coolant temperature
  The high coolant temperature warning light comes on or flashes. (→P. 501)

■ **If "Hybrid System Overheat" is shown**

→P. 530

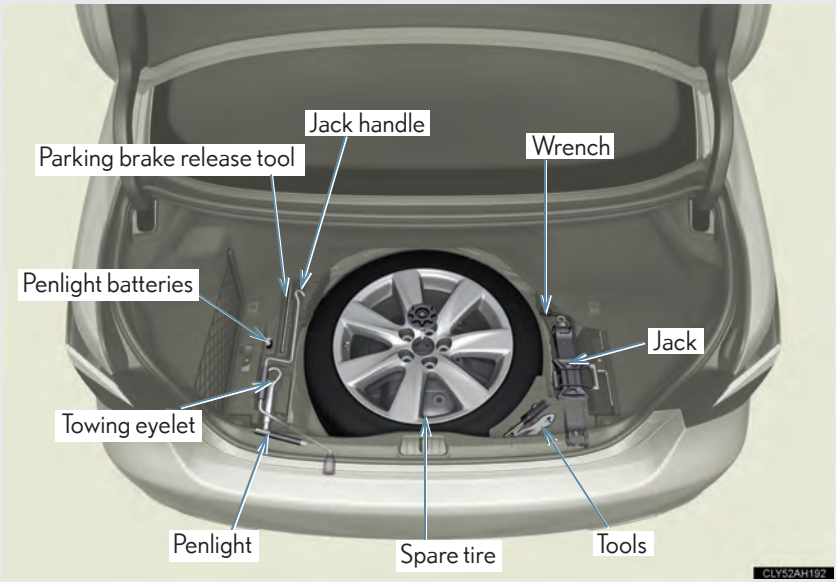
If you have a flat tire

Remove the flat tire and replace it with the spare tire 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 hybrid system.
- Turn on the emergency flashers.

Location of the spare tire, jack and tools



Penlight

The vehicle is equipped with a penlight, located inside the trunk. The penlight is provided in case it is necessary to perform an unexpected service operation at night, such as installation of the spare tire.



1 Turn the top portion to remove it.
2 Insert batteries.
3 Install the top portion.
4 On/off

Taking out the jack and spare tire



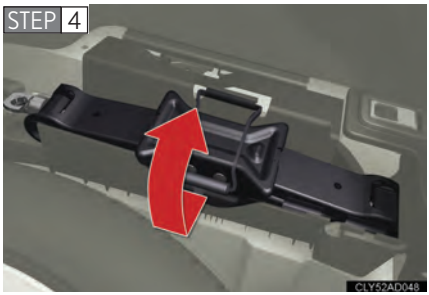
Lift up the hook of the panel on the trunk floor.



Secure the panel using the hook provided.



Remove the tool tray.



Remove the jack after removing the hook.

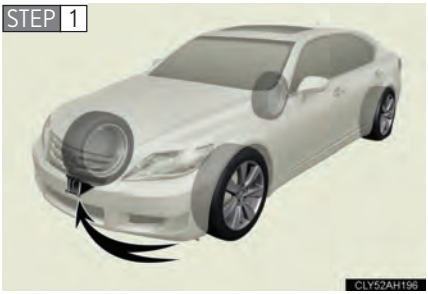


Loosen the center fastener that secures the spare tire.

If the center fastener cannot be turned by hand, use the wrench that is stored in the trunk. (To secure the tire, tighten the center fastener by hand. Do not use the wrench or other tools.)

Replacing a flat tire

STEP 1



Chock the tires.

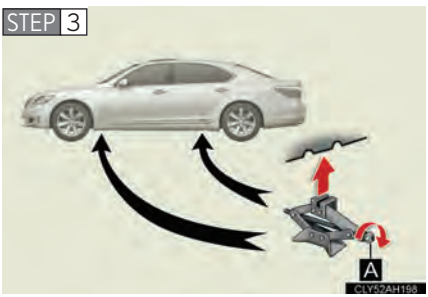
Flat tire		Wheel chock positions
Front	Left-hand side	Behind the rear right-hand side tire
	Right-hand side	Behind the rear left-hand side tire
Rear	Left-hand side	In front of the front right-hand side tire
	Right-hand side	In front of the front left-hand side tire

STEP 2



Slightly loosen the wheel nuts (one turn).

STEP 3



Turn the tire jack portion “A” by hand until the notch of the jack is in contact with the jack point.



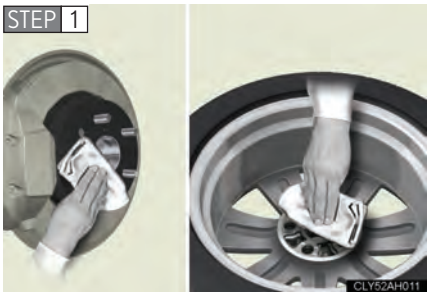
Raise the vehicle until the tire is slightly raised off the ground.



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.

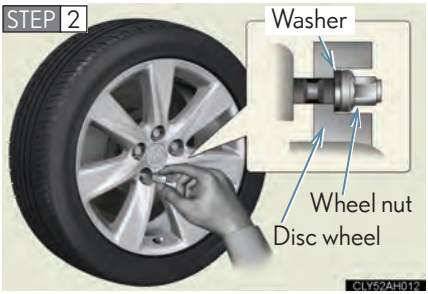
Installing the spare tire



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.

STEP 2



Install the spare tire and loosely tighten each wheel nut by hand by approximately the same amount.

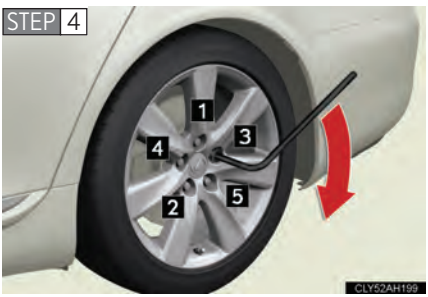
Turn the lug nuts until the washers come into contact with the wheel.

STEP 3



Lower the vehicle.

STEP 4



Firmly tighten each nut two or three times in the order shown in the illustration.

Tightening torque:
103.3 ft•lbf (140 N•m, 14.3 kgf•m)

STEP 5 Stow the flat tire, tire jack and all tools.

After completing the tire change

The tire pressure warning system must be reset. (→P. 447)

⚠ 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 while it is supported by the jack.
- Do not start or run the hybrid system 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.
- Be sure to turn off the height control and stop the hybrid system.

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 103.3 ft•lbf (140 N•m, 14.3 kgf•m) as soon as possible after changing wheels. Failure to follow these precautions could cause the nuts to loosen and the wheel may fall off, which could lead to an accident causing death or serious injury.

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 closing the trunk

Do not leave the luggage mat hook hooked on the edge of the trunk.
The luggage mat may get damaged.

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.

If the hybrid system will not start

Reasons for the hybrid system not starting vary depending on the situation. Check the following and perform the appropriate procedure:

The hybrid system will not start, even though the correct starting procedure is being followed. (→P. 183)

One of the following may be the cause of the problem:

- The electronic key may not be functioning properly. (→P. 523)
- There may be a malfunction in the immobilizer system. (→P. 131)
- There may be a malfunction in the steering lock system.
- The hybrid system may be malfunctioning due to an electrical problem such as an open circuit or a blown fuse. However, depending on the type of malfunction, an interim measure is available to start the hybrid system. (→P. 519)

The interior lights and headlights are dim, or the horn does not sound or sounds at a low volume.

One of the following may be the cause of the problem:

- The 12-volt battery may be discharged. (→P. 526)
- The 12-volt battery terminal connections may be loose or corroded.

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 12-volt battery terminals may be disconnected.
- The 12-volt battery may be discharged. (→P. 526)

Contact your Lexus dealer if the problem cannot be repaired, or if repair procedures are unknown.

Emergency start function

When the hybrid system does not start, the following steps can be used as an interim measure to start the hybrid system if the "POWER" switch is functioning normally:

STEP 1 Set the parking brake.

STEP 2 Shift the shift lever to "P".

STEP 3 Turn the "POWER" switch to ACCESSORY mode.

STEP 4 Press and hold the "POWER" switch about 15 seconds while depressing the brake pedal firmly.

Even if the hybrid system can be started using the above steps, the system may be malfunctioning. Have the vehicle inspected 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 pedal, 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.

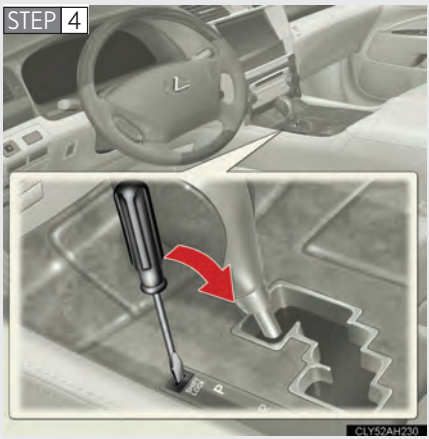
The following steps may be used as an emergency measure to ensure that the shift lever can be shifted:

STEP 1 Set the parking brake.

STEP 2 Turn the "POWER" switch to ACCESSORY mode.

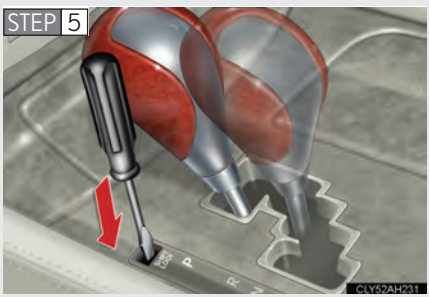
STEP 3 Depress the brake pedal.

STEP 4



Pry the cover up with a flathead screwdriver or equivalent.

STEP 5



Press the shift lock override button.

The shift lever can be shifted while the button is pressed.

If the parking brake cannot be released

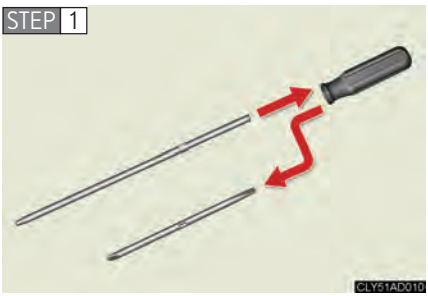
In the event that the 12-volt battery is discharged or switch operation does not release the parking brake, the parking brake can be released manually using the procedure below. This procedure should be performed only if necessary, such as in an emergency.
If the switch cannot be operated even when the 12-volt battery is normal, the parking brake system may be malfunctioning. Have the vehicle inspected by your Lexus dealer immediately.

Before releasing the parking brake manually

- Shift the shift lever to "P".
- Turn the "POWER" switch OFF.
- Check that the parking brake indicator is off.
- Chock the tires.

Releasing the parking brake manually

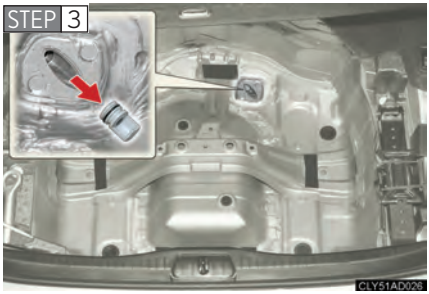
STEP 1



Take out the parking brake release tool and the screwdriver from the trunk. (→P. 510)

Install the parking brake release tool into the screwdriver handle.

STEP 2 Take out the spare tire. (→P. 511)



Remove the plug.



Insert the tool and press it down firmly while turning it counter-clockwise until it stops.

Manual operation of the parking brake

The parking brake cannot be set manually.

CAUTION

When releasing the parking brake manually

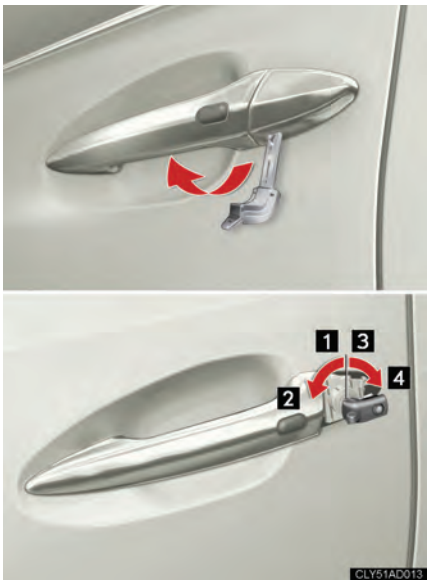
- Shift the shift lever to "P", turn the "POWER" switch OFF and chock the tires. Failure to do so may cause the vehicle to move, resulting in an accident.
- Turn the "POWER" switch OFF and check that the parking brake indicator is off. Failure to do so may cause the system to operate and turn the parking brake release tool that is inserted, resulting in an injury.

If the electronic key does not operate properly

If communication between the electronic key and vehicle is interrupted (→P. 57) or the electronic key cannot be used because the battery is depleted, the smart access system with push-button start and wireless remote control cannot be used. In such cases, the doors and trunk can be opened or the hybrid system can be started by following the procedure below.

Locking and unlocking the doors, unlocking the trunk and key linked functions

▶ Doors



Remove the cover on the driver's door handle using the mechanical key (→P. 48) in order to perform the following operations:

1 Locks all doors

2 Closes the windows and 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 and moon roof (turn and hold)

Return the cover to the original position after use.

▶ Trunk



Turn the mechanical key clockwise to open.

Changing "POWER" switch modes and starting the hybrid system

STEP 1 Ensure that the shift lever is in "P" and apply the brakes.

STEP 2





Touch the Lexus emblem side of the electronic key to the "POWER" switch.

If any of the doors is opened or closed after the key was touched to the switch to start the vehicle, an alarm will sound to indicate that the start function cannot detect the key.

STEP 3 To change "POWER" switch modes: Within 10 seconds of the buzzer sounding, release the brake pedal and press the "POWER" switch. Modes can be changed each time the switch is pressed. (→P. 184)

To start the hybrid system: Press the "POWER" switch within 10 seconds after the buzzer sounds, keeping the brake pedal depressed.

In the event that the hybrid system still cannot be operated, contact your Lexus dealer.

■ **Stopping the hybrid system**

Shift the shift lever to "P" and press the "POWER" switch as you normally do when stopping the hybrid system.

■ **Replacing the key battery**

As the above procedure is a temporary measure, it is recommended that the electronic key battery be replaced immediately when the battery is depleted.
(→P. 464)

If the 12-volt battery is discharged

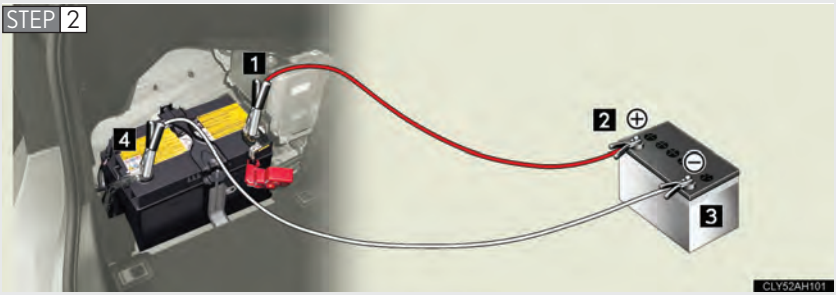
The following procedures may be used to start the hybrid system if the vehicle's 12-volt battery is discharged.
You can call your Lexus dealer or qualified repair shop.

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.

STEP 1 Open the trunk lid and remove the 12-volt battery cover. (→P. 442)

In the event that the trunk opener cannot be used, use the mechanical key to open the trunk. (→P. 523)

STEP 2



Connect the jumper cables.

1 Positive (+) battery terminal on your vehicle
2 Positive (+) battery terminal on the second vehicle
3 Negative (-) battery terminal on the second vehicle
4 Negative (-) battery terminal on your vehicle

STEP 3 Start the engine of the second vehicle. Increase the engine speed slightly and maintain that level for approximately 5 minutes to recharge the 12-volt battery of your vehicle.

STEP 4 Open and close any of the doors with the "POWER" switch OFF.

STEP 5 Maintain the engine speed of the second vehicle and turn the "POWER" switch to ON mode, then start the hybrid system.

STEP 6 Make sure the "READY" indicator comes on. If the indicator does not comes on, contact your Lexus dealer.

STEP 7 Once the hybrid system has started, remove the jumper cables in the exact reverse order in which they were connected.

Once the hybrid system starts, have the vehicle inspected at your Lexus dealer as soon as possible.

■ **Starting the hybrid system when the 12-volt battery is discharged**

The hybrid system cannot be started by push-starting.

■ **Avoiding a discharged 12-volt battery**

- Turn off the headlights and the audio system while the hybrid system is off.
- Turn off any unnecessary electrical components when the vehicle is running at a low speed for an extended period, such as in heavy traffic.

■ **When the 12-volt battery is removed or discharged**

The hybrid system may not start. (→P. 443)

⚠ CAUTION

■ Avoiding 12-volt battery fires or explosions

Observe the following precautions to prevent accidentally igniting the flammable gas that may be emitted from the 12-volt battery:

- Make sure each jumper cable is connected to the correct terminal.
- Do not allow the ends of the jumper cable used for the "+" terminals to come into contact with any other parts or metal surface in the area, such as brackets or unpainted metal.
- Do not allow the "+" and "-" terminals of the jumper cables to come into contact with each other.
- Do not smoke, use matches, cigarette lighters or allow open flame near the 12-volt battery.

■ 12-volt battery precautions

The 12-volt battery contains poisonous and corrosive acidic electrolyte, while related parts contain lead and lead compounds. Observe the following precautions when handling the 12-volt battery:

- When working with the 12-volt 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 12-volt 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 12-volt battery.

⚠ NOTICE

■ When handling jumper cables

Be careful that the jumper cables do not become tangled in the cooling fans or belt when connecting or disconnecting the cables.

If your vehicle overheats

The following may indicate that your vehicle is overheating:

- The high coolant temperature warning light comes on or flashes:
  The engine may be overheating.
- "Hybrid System Overheat" is shown on the multi-information display:
  The power control unit may be overheating.

Follow the correction procedure as described below.

Correction procedures

If the high coolant temperature warning light comes on or flashes

STEP 1 Stop the vehicle in a safe place and turn off the air conditioning system.

STEP 2 Check to see if steam is coming out from the engine area.

If you see steam:
Stop the hybrid system. Carefully lift the hood after the steam subsides and then restart the hybrid system.

If you do not see steam:
Leave the hybrid system operating and carefully lift the hood.

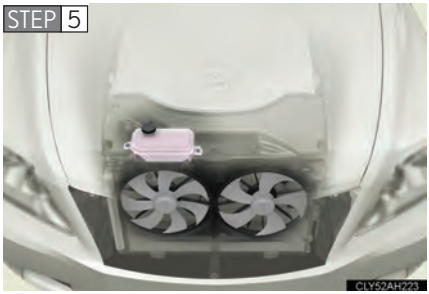
STEP 3 Remove the engine compartment cover. (→P. 431)

STEP 4 Check if the cooling fans are operating.

If the fans are operating:
Wait until the high coolant temperature warning light goes off and then stop the hybrid system.

If the fans are not operating:
Stop the hybrid system immediately and call your local Lexus dealer.

STEP 5



After the hybrid system has cooled down, check the engine coolant level and inspect the cooling system for leaks.

STEP 6



Add engine coolant if necessary.

Water can be used in an emergency if engine coolant is unavailable. (→P. 541)

If "Hybrid System Overheat" is shown on the multi-information display

STEP 1 Stop the vehicle in a safe place and turn off the air conditioning system.

STEP 2 Leave the hybrid system operating and carefully lift the hood.

STEP 3 Remove the engine compartment cover. (→P. 431)

STEP 4 Check if the cooling fans are operating.

If the fans are operating:

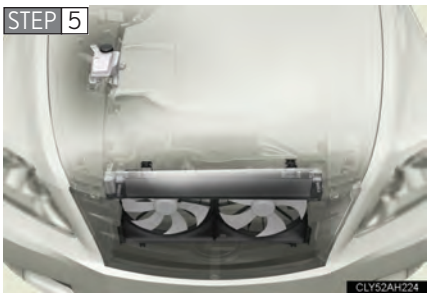
Wait until "Hybrid System Overheat" disappears and then stop the hybrid system.

If the message does not disappear, call your Lexus dealer.

If the fans are not operating:

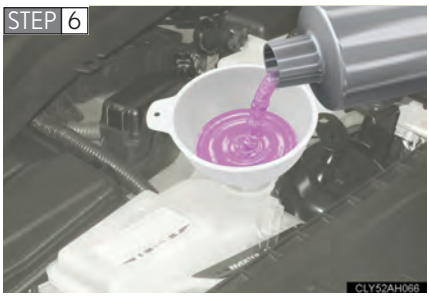
Stop the hybrid system immediately and call your local Lexus dealer.

STEP 5



After the hybrid system has cooled down, check the power control unit coolant level and inspect the cooling system for leaks.

STEP 6



Add power control unit coolant if necessary.

Water can be used in an emergency if power control unit coolant is unavailable. (→P. 541)

Have the vehicle inspected at your nearest Lexus dealer as soon as possible.

■ **Overheating**

The following symptoms may occur when your vehicle is overheating:

- Hybrid system output decreases.
- Steam is coming from the engine area.

⚠ 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.
- With a hybrid vehicle, there are times when the gasoline engine automatically starts to run or the cooling fans suddenly start to operate. Do not touch or approach the rotating parts of the belt or fans. Doing so may lead to fingers, clothes or tools getting caught, resulting in an accidental injury.
- Do not loosen the coolant reservoir cap while the hybrid system and radiator are hot.
  Serious injury, such as burns, may result from hot coolant and steam released under pressure.

⚠ NOTICE

■ When adding engine/power control unit coolant

Wait until the hybrid system has cooled down before adding engine/power control unit coolant.
When adding coolant, do so slowly. Adding cool coolant to a hot hybrid system too quickly can cause damage to the hybrid system.

Carry out the following procedures if the tires spin or the vehicle becomes stuck in mud, dirt, or snow:

STEP 1 Stop the hybrid system. Set the parking brake and shift the shift lever to "P".

STEP 2 Remove the mud, snow, or sand from around the stuck tire.

STEP 3 Place wood, stones or some other material to help provide traction under the tires.

STEP 4 Restart the hybrid system.

STEP 5 Shift the shift lever to the "D" or "R" position and carefully apply the accelerator to free the vehicle.

Turn off TRAC/VSC if these functions are hampering your attempts to free the vehicle. (→ P. 300)

⚠ 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.
- If the vehicle remains stuck after trying these procedures, the vehicle may require towing to be freed.

Only in an emergency, such as if it becomes impossible to stop the vehicle in the normal way, stop the vehicle using the following procedure:

STEP 1 Steadily step on the brake pedal with both feet and firmly depress it.

Do not pump the brake pedal repeatedly as this will increase the effort required to slow the vehicle.

STEP 2 Shift the shift lever to N.

▶ If the shift lever is shifted to N

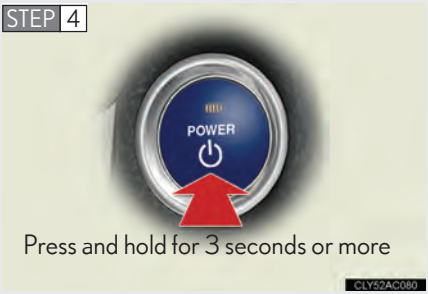
STEP 3 After slowing down, stop the vehicle in a safe place by the road.

STEP 4 Stop the hybrid system.

▶ If the shift lever cannot be shifted to N

STEP 3 Keep depressing the brake pedal with both feet to reduce vehicle speed as much as possible.

STEP 4



Stop the hybrid system by pressing and holding the "POWER" switch for 3 consecutive seconds or more.

STEP 5 Stop the vehicle in a safe place by the road.

⚠ CAUTION

■ If the hybrid system has to be turned off while driving

Power assist for the brakes and steering wheel will be lost, making the brake pedal harder to depress and the steering wheel heavier to turn. Decelerate as much as possible before turning off the hybrid system.

Vehicle specifications 6

6-1. Specifications

Maintenance data (fuel, oil level, etc.) 536

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Tire information 552

6-2. Customization

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Dimensions and weights

Overall length		203.9 in. (5180 mm)
Overall width		73.8 in. (1875 mm)
Overall height *1		58.3 in. (1480 mm)
Wheelbase		121.7 in. (3090 mm)
Tread	Front	63.6 in. (1615 mm)*2 63.4 in. (1610 mm)*3
	Rear	63.6 in. (1615 mm)*2 63.4 in. (1610 mm)*3
Vehicle capacity weight (Occupants + luggage)		825 lb. (375 kg)*4 660 lb. (300 kg)*5

*1: Unladen vehicles
*2: Vehicles with 18-inch tires
*3: Vehicles with 19-inch tires
*4: 5-seat models
*5: 4-seat models

Vehicle identification

Vehicle identification number

The vehicle identification number (VIN) is the legal identifier for your vehicle. This is the primary identification number for your Lexus. It is used in registering the ownership of your vehicle.

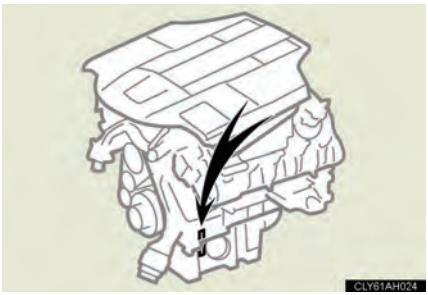


This number is stamped on the top left of the instrument panel and in the engine compartment.



This number is also on the Certification Label.

Engine number



The engine number is stamped on the engine block as shown.

Engine

Model	2UR-FSE
Type	8-cylinder V type, 4-cycle, gasoline
Bore and stroke	3.70 × 3.52 in. (94.0 × 89.5 mm)
Displacement	303.2 cu.in. (4969 cm^3)
Drive belt tension	Automatic adjustment

Fuel

Fuel type	Premium unleaded gasoline only
Octane rating	91 (Research octane number 96) or higher
Fuel tank capacity	22.1 gal. (84 L, 18.4 Imp. gal.)

Electric motor (Traction motor)

Type	Permanent magnet synchronous motor
Maximum output	165 kW
Maximum torque	221.3 ft•lbf (300 N•m, 30.6 kgf•m)

Hybrid battery (Traction battery)

Type	Nickel-Metal hydride battery
Voltage	14.4 V/module
Capacity	6.5 Ah (3HR)
Quantity	20 modules
Overall voltage	288 V

Lubrication system

Oil capacity drain and refill (reference)	
with filter	9.5 qt. (9.0 L, 7.9 Imp. qt.)
without filter	8.9 qt. (8.4 L, 7.4 Imp. qt.)

Engine oil selection

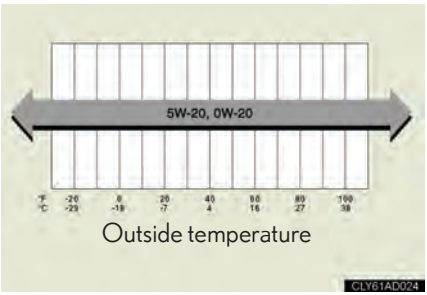
"Toyota Genuine Motor Oil" is used in your Lexus vehicle. Use Lexus approved "Toyota Genuine Motor Oil" or equivalent to satisfy the following grade and viscosity.

Oil grade:

ILSAC multigrade engine oil

Recommended viscosity:

SAE 5W-20 or 0W-20



SAE 5W-20 or 0W-20 engine oil may be used. However, SAE 0W-20 is the best choice for good fuel economy, and good starting in cold weather.

The 0W portion of the oil viscosity rating indicates the characteristic of the oil which allows cold startability. Oils with a lower value before the W allow for easier starting of the engine in cold weather.

The 20 in 0W-20 indicates the 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 Gasoline engine Power control unit	 11.7 qt. (11.1 L, 9.8 Imp. qt.) 2.7 qt. (2.6L, 2.3 Imp. qt.)
Coolant type	Use either of the following: • "Toyota Super Long Life Coolant" • Similar high-quality ethylene glycol-based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology Do not use plain water alone.

Ignition system

Spark plug	
Make	DENSO FK20HBR11
Gap	0.043 in. (1.1 mm)

NOTICE

Iridium-tipped spark plugs

Use only iridium-tipped spark plugs. Do not adjust spark plug gap.

Electrical system

12-volt 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 checked 20 minutes after the hybrid system and all the lights are turned off)
Charging rates	5 A max.

Transmission

Fluid capacity	6.0 qt. (5.7 L, 5.0 Imp. qt.) The fluid capacity is a reference quantity. If replacement is necessary, contact your Lexus dealer.
Fluid type	Toyota Genuine ATF WS

NOTICE

Transmission fluid type

Using transmission fluid other than "Toyota Genuine ATF WS" may cause deterioration in shift quality and ultimately damage the transmission of your vehicle.

Transfer

Oil capacity	0.74 qt. (0.7 L, 0.62 Imp. qt.)
Oil type and viscosity*	Toyota Genuine Transfer gear oil LL 80 (preferred), Toyota Genuine Differential gear oil LX 75W-85 GL-5 or equivalent

*: Toyota genuine gear oil is filled in your Lexus vehicle at factory fill. Use Lexus approved Toyota genuine gear oil or an equivalent of matching quality to satisfy the above specification. Please contact your Lexus dealer for further details.

Front differential

Oil capacity	0.79 qt. (0.75 L, 0.66 Imp. qt.)
Oil type and viscosity*	Toyota Genuine Differential gear oil LT 75W-85 GL-5 or equivalent

*: "Toyota Genuine Differential Gear Oil" is filled in your Lexus vehicle at factory fill. Use Lexus approved "Toyota Genuine Differential Gear Oil" or an equivalent of matching quality to satisfy the above specification. Please contact your Lexus dealer for further details.

Rear differential

Oil capacity	1.42 qt. (1.35 L, 1.19 Imp. qt.)
Oil type and viscosity*	Toyota Genuine Differential gear oil LX 75W-85 GL-5 or equivalent

*: "Toyota Genuine Differential Gear Oil" is filled in your Lexus vehicle at factory fill. Use Lexus approved "Toyota Genuine Differential Gear Oil" or an equivalent of matching quality to satisfy the above specification. Please contact your Lexus dealer for further details.

Brakes

Pedal clearance *	3.7 in. (95.0 mm) Min.
Pedal free play	0.04 — 0.08 in. (1.0 — 2.0 mm)
Brake pad wear limit	0.04 in. (1.0 mm)
Parking brake lining wear limit	0.04 in. (1.0 mm)
Fluid type	SAE J1703 or FMVSS No. 116 DOT 3

*: Minimum pedal clearance when depressed with a force of 50 lbf (200 N, 20 kgf)

Steering

Free play	Less than 1.2 in. (30 mm)

Tires and wheels

▶ 18-inch tires (type A)

Tire size	235/50R18 97W
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Rear: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Spare: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Driving at high speeds (above 100 mph [160 km/h]) (in countries where such speeds are permitted by law) Add 9 psi (60 kPa, 0.6 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	18 × 7 1/2J
Wheel nut torque	103.3 ft•lbf (140 N•m, 14.3 kgf•m)

▶ 18-inch tires (type B)

Tire size	P235/50R18 97V
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 33 psi (230 kPa, 2.3 kgf/cm^2 or bar) Rear: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Spare: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Driving at high speeds (above 100 mph [160 km/h]) (in countries where such speeds are permitted by law) Add 6 psi (40 kPa, 0.4 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	18 × 7 1/2J
Wheel nut torque	103.3 ft•lbf (140 N•m, 14.3 kgf•m)

▶ 19-inch tires (type A)

Tire size	245/45R19 98Y
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 33 psi (230 kPa, 2.3 kgf/cm^2 or bar) Rear: 36 psi (250 kPa, 2.5 kgf/cm^2 or bar) Spare: 36 psi (250 kPa, 2.5 kgf/cm^2 or bar) Driving at high speeds (above 100 mph [160 km/h]) (in countries where such speeds are permitted by law) Add 11 psi (70 kPa, 0.7 kgf/cm^2 or bar) to the front tires, 9 psi (60 kPa, 0.6 kgf/cm^2 or bar) to the rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	19 × 8J
Wheel nut torque	103.3 ft•lbf (140 N•m, 14.3 kgf•m)

▶ 19-inch tires (type B)

Tire size	P245/45R19 98V
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 33 psi (230 kPa, 2.3 kgf/cm^2 or bar) Rear: 36 psi (250 kPa, 2.5 kgf/cm^2 or bar) Spare: 36 psi (250 kPa, 2.5 kgf/cm^2 or bar) Driving at high speeds (above 100 mph [160 km/h]) (in countries where such speeds are permitted by law) Add 6 psi (40 kPa, 0.4 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	19 × 8J
Wheel nut torque	103.3 ft•lbf (140 N•m, 14.3 kgf•m)

Light bulbs

	Light Bulbs	Bulb No.	W	Type
Exterior	Headlights (high beam)	9005	60	A
	Headlights (low beam - discharge bulbs)	—	35	B
	Front turn signal lights	—	21	C
	Front fog lights	9006	51	D
	Trunk lid light	194	3.8	E
	Trunk light	—	3.8	E
	Rear turn signal lights	7440	21	E
	Back-up lights	921	16	E
	Outer foot lights	—	5	E
Interior	Vanity lights			
	Front	—	8	E
	Rear	—	3	F
	Interior lights			
	Front	—	8	E
	Rear	—	8	F
	Rear personal lights (with rear seat entertainment system)	—	10	G
	Door courtesy lights	—	5	E

A: HB3 halogen bulbs
B: D4S discharge bulbs
C: Wedge base bulbs (amber)
D: HB4 halogen bulbs
E: Wedge base bulbs (clear)
F: Double end bulbs
G: Single end bulbs

You must only use unleaded gasoline in your vehicle.

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 and significantly reduced performance. 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.
- Using unleaded gasoline with an octane number or rating lower than that stated here will cause persistent heavy knocking.
  At worst, this will lead to engine damage.

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.

Typical tire symbols



1 Tire size (→P. 554)

2 DOT and Tire Identification Number (TIN) (→P. 553)

3 Location of treadwear indicators (→P. 446)

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.

7 Load limit at maximum cold tire inflation pressure (→P. 450)

8 Maximum cold tire inflation pressure (→P. 546)

This means the pressure to which a tire may be inflated.

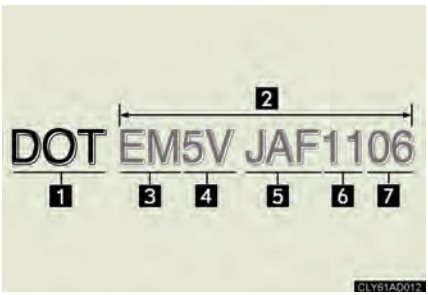
9 Uniform tire quality grading

For details, see "Uniform Tire Quality Grading" that follows.

10 Summer tires or all season tires (→P. 450)

An all season tire has “M+S” on the sidewall. A tire not marked “M+S” is a summer tire.

Typical DOT and Tire Identification Number (TIN)

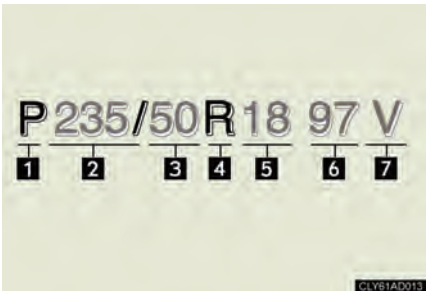


1 DOT symbol*
2 Tire Identification Number (TIN)
3 Tire manufacturer's identification mark
4 Tire size code
5 Manufacturer's optional tire type code (3 or 4 letters)
6 Manufacturing week
7 Manufacturing year

*: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.

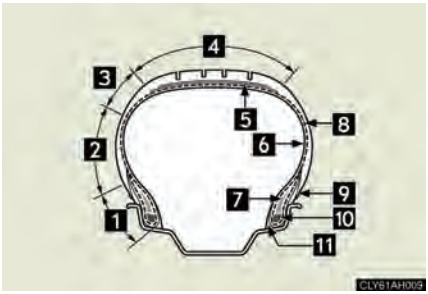
1 Tire use
(P = Passenger car,
T = Temporary use)
2 Section width (millimeters)
3 Aspect ratio
(tire height to section width)
4 Tire construction code
(R = Radial, D = Diagonal)
5 Wheel diameter (inches)
6 Load index (2 digits or 3 digits)
7 Speed symbol
(alphabet with one letter)

Tire dimensions



1 Section width
2 Tire height
3 Wheel diameter

Tire section names



1 Bead
2 Sidewall
3 Shoulder
4 Tread
5 Belt
6 Inner liner
7 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 (1.5) times as well on the government course as a tire graded 100.
The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction AA, A, B, C

The traction grades, from highest to lowest, are AA, A, B and C, and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete.

A tire marked C may have poor traction performance.

Warning: The traction grade assigned to this tire is based on braking (straight ahead) traction tests and does not include cornering (turning) traction.

Temperature A, B, C

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure.

Grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109.

Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Warning: The temperature grades of a tire assume that it 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)
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* that follows

Tire related term	Meaning
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
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 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

Tire related term	Meaning
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
CT	A pneumatic tire with an inverted flange tire and rim system in which the rim is designed with rim flanges pointed radially inward and the tire is designed to fit on the underside of the rim in a manner that encloses the rim flanges inside the air cavity of the tire
Extra load tire	A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire
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

Tire related term	Meaning
Intended outboard sidewall	(a) The sidewall that contains a whitewall, bears white lettering, or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire, or (b) The outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle
Light truck (LT) tire	A tire designated by its manufacturer as primarily intended for use on 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
Measuring rim	The rim on which a tire is fitted for physical dimension requirements
Open splice	Any parting at any junction of tread, sidewall, or innerliner that extends to cord material
Outer diameter	The overall diameter of an inflated new tire
Overall width	The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to labeling, decorations, or protective bands or ribs
Passenger car tire	A tire intended for use on passenger cars, multipurpose passenger vehicles, and trucks, that have a gross vehicle weight rating (GVWR) of 10,000 lb. or less.
Ply	A layer of rubber-coated parallel cords

Tire related term	Meaning
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 sidewalls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands
Sidewall	That portion of a tire between the tread and bead
Sidewall separation	The parting of the rubber compound from the cord material in the sidewall
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

Tire related term	Meaning
Tread	That portion of a tire that comes into contact with the road
Tread rib	A tread section running circumferentially around a tire
Tread separation	Pulling away of the tread from the tire carcass
Treadwear indicators (TWI)	The projections within the principal grooves designed to give a visual indication of the degrees of wear of the tread
Wheel-holding fixture	The fixture used to hold the wheel and tire assembly securely during testing

*: Table 1 — Occupant loading and distribution for vehicle normal load for 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

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.

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. (→P. 569)

Item	Function	Default setting	Customized setting
Smart access system with push-button start (→P. 52)	Smart access system with push-button start	On	Off
	Door unlock function	Driver's door	All the doors
			Each door
			Same side doors
Wireless remote control (→P. 65)	Wireless remote control	On	Off
	Unlocking operation	Driver's door unlocked in one step, all doors unlocked in two steps	All doors unlocked in one step

Item	Function	Default setting	Customized setting
Wireless remote control (→P. 65)	Time elapsed before automatic lock function is activated if door is not opened after being unlocked	60 seconds	Off
			30 seconds
			120 seconds
	Operational signal (Emergency flashers)	On	Off
	Trunk unlocking operation	Push and hold	Push twice
			One short push
	Alarm (panic mode)	On	Off
Smart access system with push-button start and wireless remote control (→P. 52, 65)	Operation signal (Emergency flashers)	On	Off
	Open door warning buzzer	On	Off
Door lock (→P. 68, 523)	Speed-detecting automatic door lock function	Off	On
	Opening driver's door unlocks all doors.	Off	On
	Shifting the shift lever to “P” unlocks all doors.	On	Off

Item	Function	Default setting	Customized setting
Door lock (→P. 68, 523)	Shifting the shift lever to position other than "P" locks all doors.	On	Off
	Unlocking using a mechanical key	Driver's door unlocked in one step, all doors unlocked in two steps	All doors unlocked in one step
Trunk (→P. 73)	Power trunk opener and closer function	On	Off
Power easy access system (→P. 96)	Driver's seat movement when exiting the vehicle	Full	Off
			Partial
	Steering wheel auto away and return function	On	Off
Power windows (→P. 119)	One-touch close operation using the power window switches on the front passenger door and each rear door	On	Off

Item	Function	Default setting	Customized setting
Power windows (→P. 119)	One-touch front passenger window or rear window close operation using the power window switch on the driver's door	On	Off
	Mechanical key linked operation	Open and close	Off
			Open only
			Close only
	Wireless remote control linked operation	Off	On
	Linked entry function	On	Off
Moon roof (→P. 122)	Mechanical key linked operation	Open and close	Off
			Open only
			Close only
	Linked operation of components when mechanical key is used	Slide only	Tilt only
	Wireless remote control linked operation	Off	On
	Linked operation of components when wireless remote control used	Slide only	Tilt only
	Linked entry function	On	Off

Item	Function	Default setting	Customized setting
Turn signal lever (→P. 193)	Times of flashing of the lane change signal flashers	3	Off
			5
			7
			9
			11
Automatic light control system (→P. 212)	Light sensor sensitivity	Standard	-2 to 2
	Time elapsed before headlights automatically turn off after doors are closed	30 seconds	0 second
			60 seconds
			90 seconds
	Automatic high beam system	On	Off
Air conditioning system (→P. 331)	Switching between outside air and recirculated air mode linked to "AUTO" switch operation	Auto	Manual
	A/C auto switch operation	Auto	Manual
	Exhaust gas sensor sensitivity	Standard	-3 to 3
Lights (→P. 212)	Daytime running light system (U.S.A. only)	On	Off

Item	Function	Default setting	Customized setting
Illumination (→P. 354)	Time elapsed before the interior lights turn off	15 seconds	Off
			7.5 seconds
			30 seconds
	Time elapsed before the exterior lights turn off	15 seconds	Off
			7.5 seconds
			30 seconds
	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
	Operation when the doors are unlocked	On	Off
	Operation after the "POWER" switch is turned OFF	On	Off
	Footwell lighting	On	Off
	Shift lever lighting	On	Off
Seat belt reminder (→P. 501)	Vehicle speed linked seat belt reminder buzzer	On	Off

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.)

Item	Function	Default setting	Customized setting
Smart access system with push-button start (→P. 52)	Smart access system with push-button start	On	Off
	Door unlock function	Driver's door	All the doors
			Each door
			Same side doors
Wireless remote control (→P. 65)	Unlocking operation	Driver's door unlocked in one step, all doors unlocked in two steps	All doors unlocked in one step
	Time elapsed before automatic lock function is activated if door is not opened after being unlocked	60 seconds	Off
			30 seconds
			120 seconds

Item	Function	Default setting	Customized setting
Smart access system with push-button start and wireless remote control (→P. 52, 65)	Operation signal (Emergency flashers)	On	Off
Door lock (→P. 68, 523)	Speed-detecting automatic door lock function	Off	On
	Opening driver's door unlocks all doors.	Off	On
	Shifting the shift lever to "P" unlocks all doors.	On	Off
	Shifting the shift lever to position other than "P" locks all doors.	On	Off
	Unlocking using a mechanical key	Driver's door unlocked in one step, all doors unlocked in two steps	All doors unlocked in one step
Power easy access system (→P. 96)	Driver's seat movement when exiting the vehicle	Full	Off
			Partial

Item	Function	Default setting	Customized setting
Turn signal lever (→P. 193)	Times of flashing of the lane change signal flashers	3	Off
			5
			7
			9
			11
Automatic light control system (→P. 212)	Light sensor sensitivity	Standard	-2 to 2
	Time elapsed before headlights automatically turn off after doors are closed	30 seconds	0 second
			60 seconds
			90 seconds
Air conditioning system (→P. 331)	Switching between outside air and recirculated air mode linked to "AUTO" switch operation	Auto	Manual
	A/C auto switch operation	Auto	Manual
	Exhaust gas sensor sensitivity	Standard	-3 to 3
Lights (→P. 212)	Daytime running light system (U.S.A. only)	On	Off

Item	Function	Default setting	Customized setting
Illumination (→P. 354)	Time elapsed before the interior lights turn off	15 seconds	Off
			7.5 seconds
			30 seconds
	Time elapsed before the exterior lights turn off	15 seconds	Off
			7.5 seconds
			30 seconds
	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

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Reporting safety defects for U.S. owners

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying the Lexus Division of Toyota Motor Sales, U.S.A., Inc. (Toll-free: 1-800-25-LEXUS).

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Lexus Division of Toyota Motor Sales, U.S.A., Inc.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to *http://www.safercar.gov*; or write to: Administrator, NHTSA, 1200 New Jersey Ave, S.E., Washington, DC 20590. You can also obtain other information about motor vehicle safety from *http://www.safercar.gov*.

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.

⚠ 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 clock, refer to the "Navigation System Owner's Manual".

Abbreviation/Acronym list

ABBREVIATIONS	MEANING
A/C	Air Conditioning
ABS	Anti-lock Brake System
AFS	Adaptive Front-lighting System
ALR	Automatic Locking Retractor
APGS	Advanced Parking Guidance System
AWD	All Wheel Drive
CRS	Child Restraint System
DISP	Display
ECO	Economy/Ecology
ECU	Electronic Control Unit
EDR	Event Data Recorder
ELR	Emergency Locking Retractor
EPS	Electric Power Steering
GAWR	Gross Axle Weight Ratings
GPS	Global Positioning System
I/M	Emission Inspection and Maintenance
INFO	Information
LATCH	Lower Anchors and Tethers for Children
LED	Light Emitting Diode
LKA	Lane-Keeping Assist
MMT	Methylcyclopentadienyl Manganese Tricarbonyl
M + S	Mud and Snow
MTBE	Methyl Tertiary Butyl Ether
OBD	On Board Diagnostics

ABBREVIATIONS	MEANING
PCS	Pre-Collision System
PWR	Power
RF	Radio Frequency
SRS	Supplemental Restraint System
TIN	Tire Identification Number
TPMS	Tire Pressure Warning System
TRAC	Traction Control
VDIM	Vehicle Dynamics Integrated Management
VGRS	Variable Gear Ratio Steering
VIN	Vehicle Identification Number
VSC	Vehicle Stability Control

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BRAKE or	Brake system warning light P. 498	CHECK or	Malfunction indicator lamp P. 499
ABS or	"ABS" warning light P. 499		Driver's seat belt reminder light P. 501
	Brake system warning light P. 499	PASSENGER	Front passenger's seat belt reminder light P. 501
	Low fuel level warning light P. 501		High coolant temperature warning light P. 501
	SRS warning light P. 499		Master warning light with warning message P. 501
	Open door warning light P. 501		Electric power steering system warning light P. 499
			Tire pressure warning light P. 501


Charging system warning light P. 498


Slip indicator P. 499



"AFS OFF" indicator* P. 499



Pre-collision system warning light* P. 499



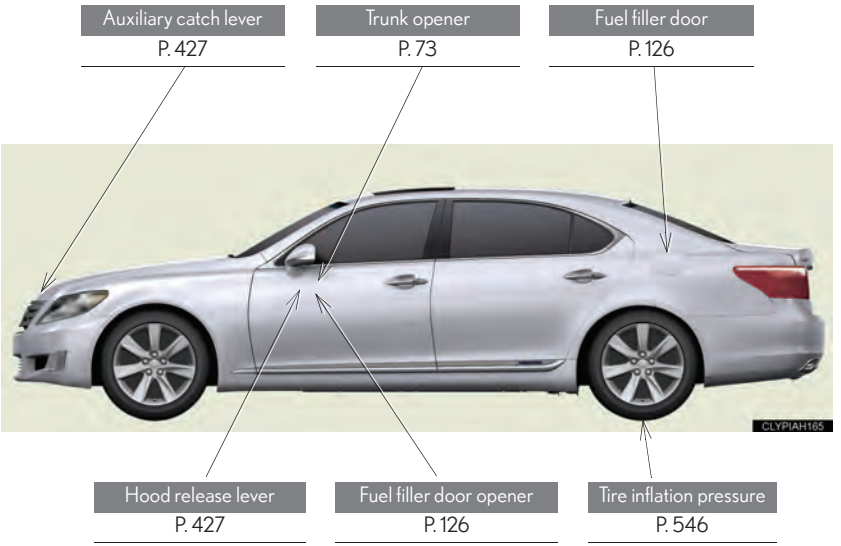
Cruise control indicator* P. 499



Automatic High Beam indicator light* P. 499

*: The light flashes to indicate a malfunction.

GAS STATION INFORMATION



Fuel tank capacity	22.1 gal. (84 L, 18.4 Imp. gal.)	
Fuel type	Premium unleaded gasoline only	P. 128, 538
Cold tire inflation pressure		P. 546
Engine oil capacity (Drain and refill)	qt. (L, Imp. qt.) With filter 9.5 (9.0, 7.9) Without filter 8.9 (8.4, 7.4)	
Engine oil type	Toyota Genuine Motor Oil or equivalent Oil grade: ILSAC multigrade engine oil Recommended oil viscosity: SAE 5W-20 or 0W-20	P. 540



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