

Owner's Manual

LBX



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For your information

WARNING

■ General precautions while driving

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

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

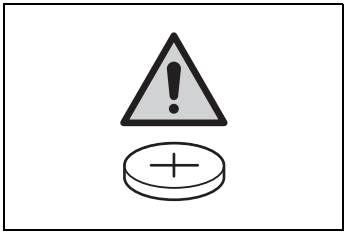
Driver distraction: Always give your full attention to driving. Anything that distracts the driver, such as adjusting controls, talking on a cellular phone or reading can result in a collision with resulting death or serious injury to you, your occupants or others.

■ General precaution regarding children's safety

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

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

■ General precaution regarding a coin battery and button battery



This product contains a coin battery or button battery.

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

- Keep away new and removed batteries from children.
- Do not swallow the battery. Doing so may cause chemical burns.
- If a battery is swallowed, it may cause severe chemical burns in as little as 2 hours and may result in death or serious injury.
- If you accidentally swallow a battery or put a battery into a part of your body, get emergency medical attention immediately.

Main Owner's Manual

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

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

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

Accessories, spare parts and modification of your Lexus

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

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

Also, remodeling like this will have an effect on advanced safety equipment such as Lexus Safety System + and there is a danger that it will not work properly or the danger that it may work in situations where it should not be working.

Cyber Attack Risk

Installing electronic devices and radios increases the risk of cyber attacks through the installed parts, which may lead to unexpected accidents and leakage of personal information. Lexus does not make any guarantees for problems caused by installing non-genuine Lexus products.

Installation of an RF-transmitter system

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

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

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

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

High voltage parts and cables on the Hybrid Electric 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 radio frequency transmitter (RF-transmitter).

Vehicle data recording

This vehicle is equipped with sophisticated computers that record certain data regarding vehicle controls and operations.

■ Data recorded by the computers

Certain data, such as the following, is recorded depending on the operation timing and status of each function.

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

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

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

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

■ Data usage

Lexus may use the data recorded in this computer to diagnose malfunctions, conduct research and development, and improve quality.
Lexus will not disclose the recorded data to a third party except:

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

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Image information recorded by the vehicle can be erased by your Lexus dealer.

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

If you wish to stop the collection of Lexus Safety System + data by the Toyota servers for the purpose of research and development and provision to individual services, contact your Lexus dealer.

Usage of data collected through Lexus Connected Services

If your Lexus has Lexus Connected Services and if you have subscribed to those services, please refer to the Lexus Connected Services usage contract for information on data collected and its usage.

For more information, visit https://www.lexus.com.au/privacy

Event data recorder

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

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

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

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

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

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

- Disclosure of the EDR data

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

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

However, if necessary, Lexus may:

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

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.

Caution symbols attached to the high voltage components

High voltage components, such as the power control unit, may have labels attached indicating care required.

Each caution symbol indicates the following:

Symbols	Meanings
	Indicates danger
	Indicates high voltage part
	Indicates not to touch
	Indicates high temperature part

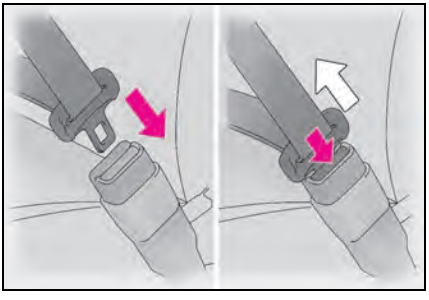
Reading this manual

Explains symbols used in this manual

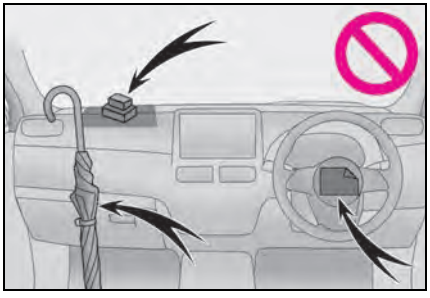
Symbols in this manual

Symbols	Meanings
	WARNING: Explains something that, if not obeyed, could cause death or serious injury to people.
	NOTICE: Explains something that, if not obeyed, could cause damage to or a malfunction in the vehicle or its equipment.
1 2 3...	Indicates operating or working procedures. Follow the steps in numerical order.

Symbols in illustrations



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

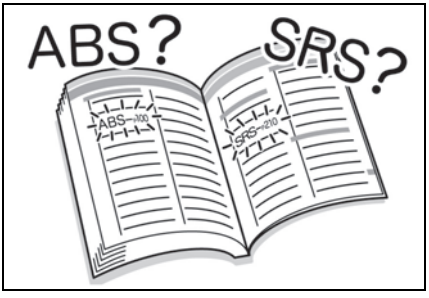


Symbols	Meanings
	Indicates the component or position being explained.
	Means **Do not**, **Do not do this**, or **Do not let this happen**.

How to search

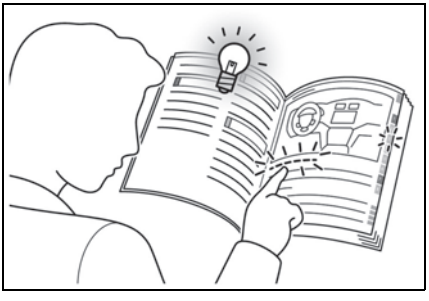
Searching by name

- Alphabetical index: →P.496



Searching by installation position

- Pictorial index: →P.14



Searching by symptom or sound

- What to do if... (Troubleshooting): →P.494



Searching by title

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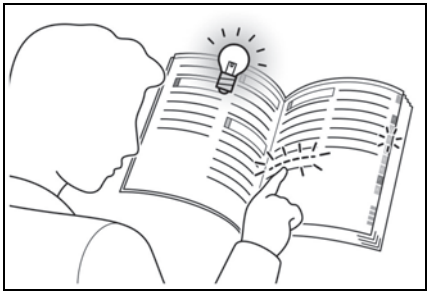
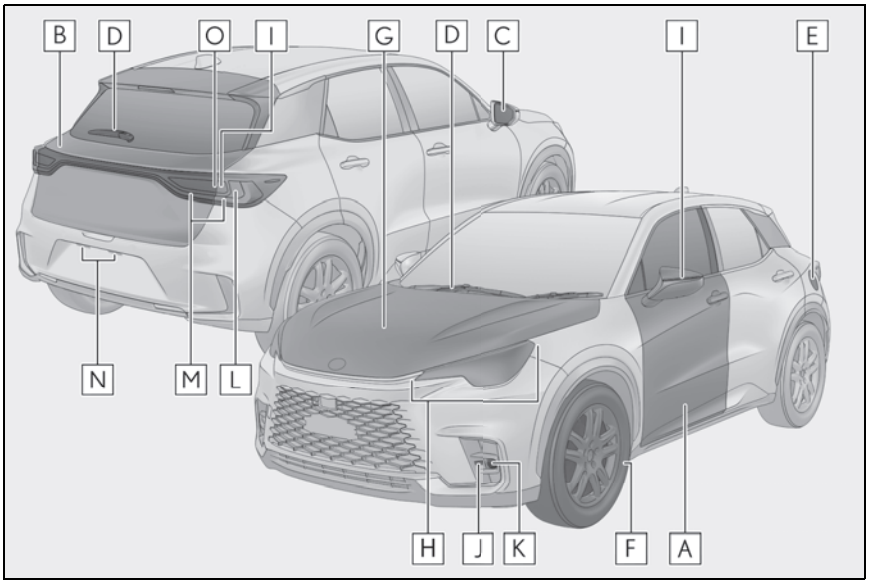


Pictorial index

■Exterior



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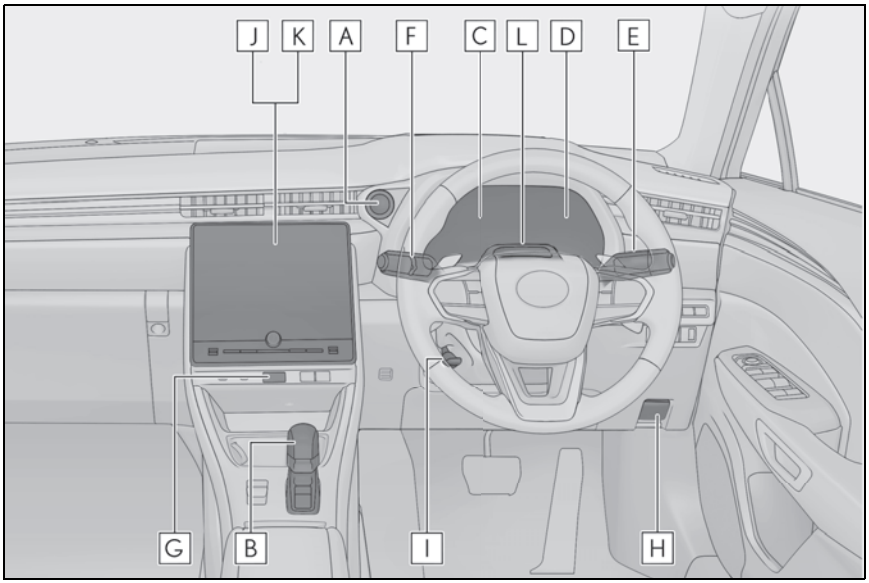

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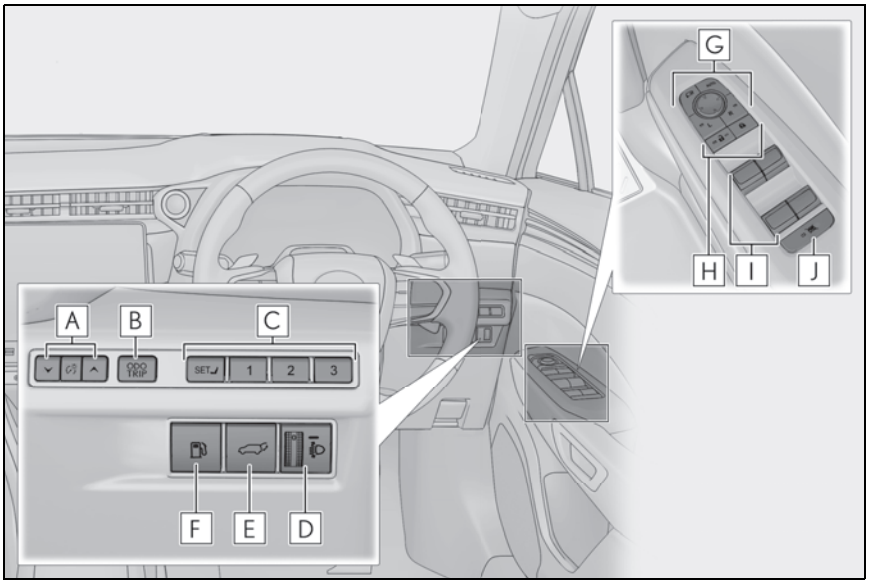
L **Driver monitor camera** **P.213**

*1: If equipped

*2: Refer to “Multimedia Owner’s Manual”.

■Switches



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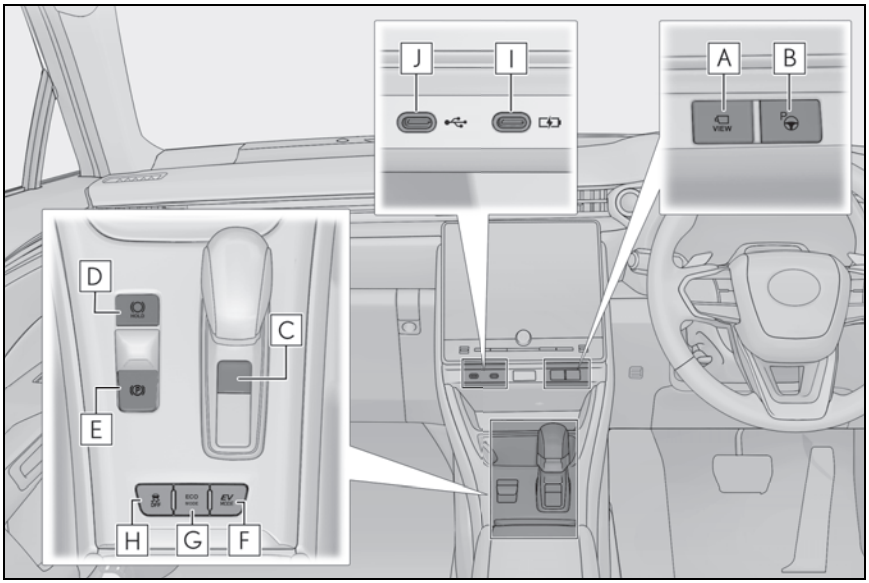
*: If equipped



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*1: If equipped

*2: Refer to "Multimedia Owner's Manual".

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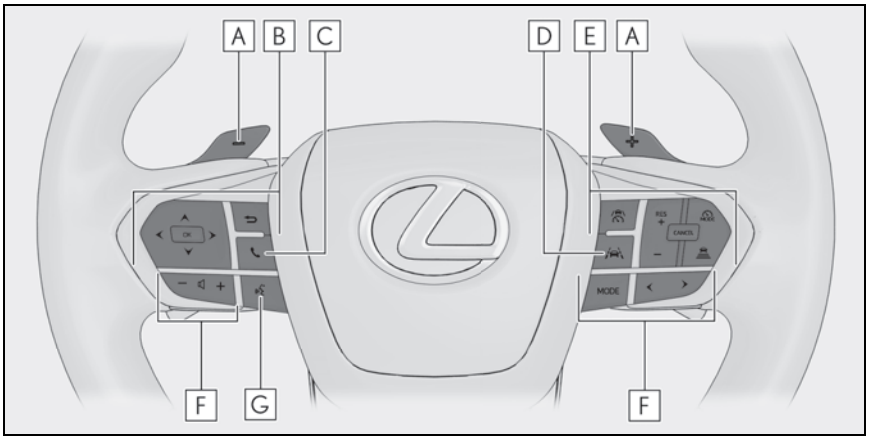

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Dynamic radar cruise control P.236

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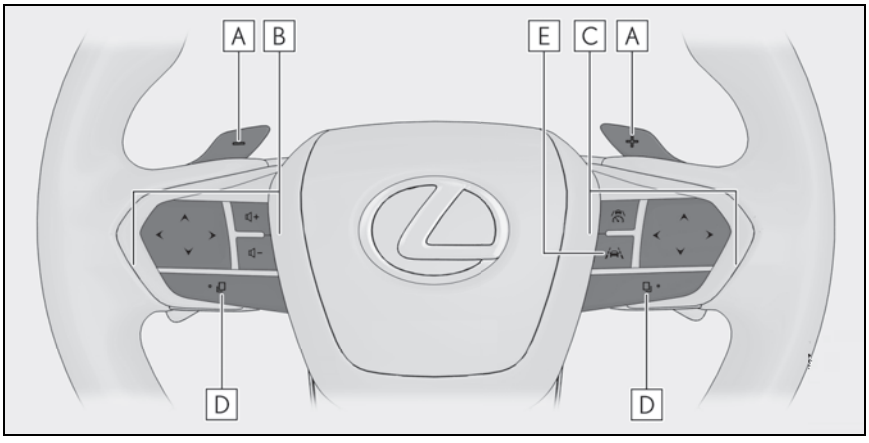
F **Audio remote control switches**[*2]

G **Talk switch**[*2]

*1: If equipped

*2: Refer to "Multimedia Owner's Manual".

▶ Vehicles with a head-up display



A **Paddle shift switches**[*1] P.179

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Dynamic radar cruise control P.236

Cruise control P.248

D **Switch function change switches** P.95

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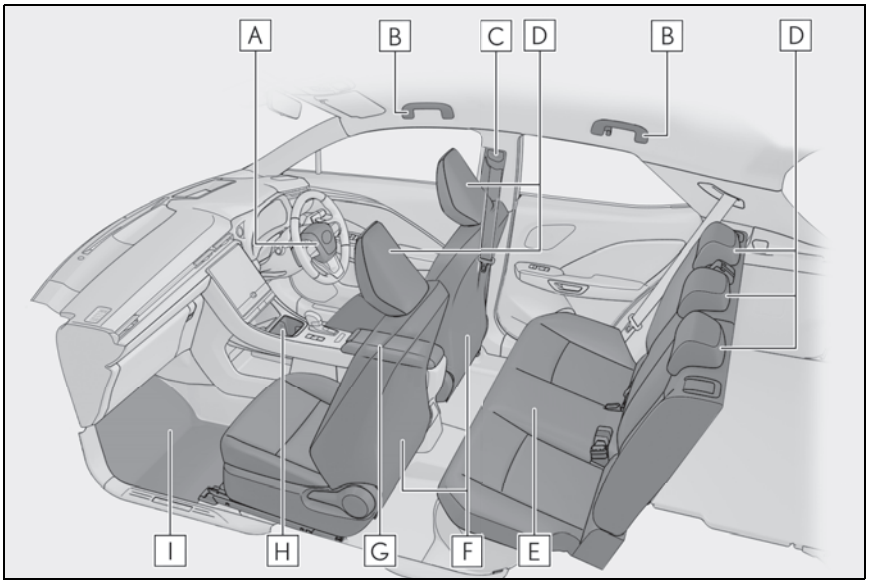
*1: If equipped

*2: Refer to "Multimedia Owner's Manual".

Interior



A SRS airbags P.32

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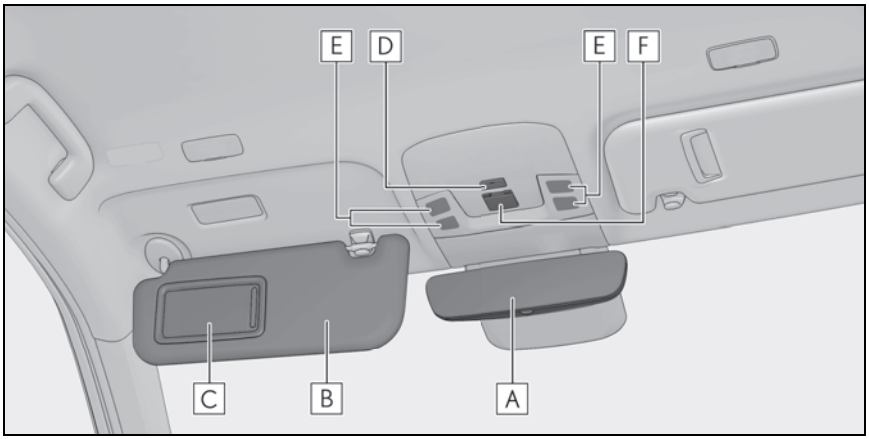
■Ceiling



A Inside rear view mirror P.139

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*1: NEVER use a rearward facing child restraint on a seat protected by an ACTIVE AIR-BAG in front of it, DEATH or SERIOUS INJURY to the CHILD can occur. (→P.43)



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

*3: If equipped

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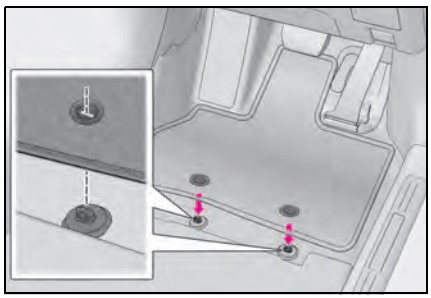
Before driving

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

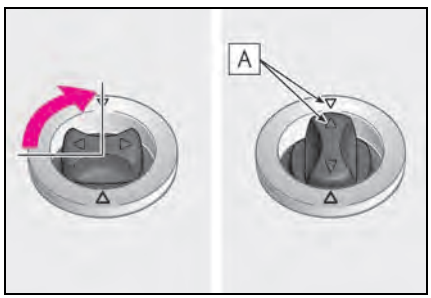
Installing floor mats

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

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



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



Always align the △ marks A .

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

⚠ WARNING

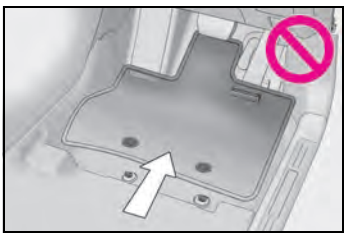
Observe the following precautions. Failure to do so may cause the driver's floor mat to slip, possibly interfering with the pedals while driving. An unexpectedly high speed may result or it may become difficult to stop the vehicle. This could lead to an accident, resulting in death or serious injury.

■ When installing the driver's floor mat

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

■ Before driving

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

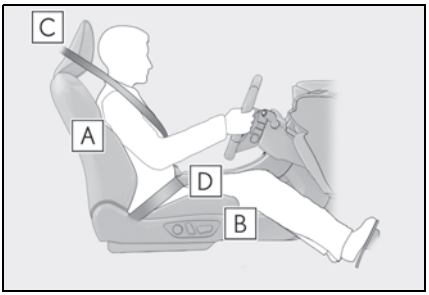


- With the hybrid system stopped and the shift position in P, fully depress each pedal to the floor to make sure it does not interfere with the floor mat.

For safe driving

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

Correct driving posture



A Adjust the angle of the seatback so that you are sitting straight up and so that you do not have to lean forward to steer. (→P.132)

B Adjust the seat so that you can depress the pedals fully and so that your arms bend slightly at the elbow when gripping the steering wheel. (→P.132)

C Lock the head restraint in place with the center of the head restraint closest to the top of your ears. (→P.135)

D Wear the seat belt correctly. (→P.29)

⚠ WARNING

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

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

Correct use of the seat belts

Make sure that all occupants are wearing their seat belts before driving the vehicle. (→P.29)

Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belt. (→P.41)

Adjusting the mirrors

Make sure that you can see the rear of the vehicle clearly, by adjusting the inside and outside rear view mirrors

properly. (→P.139, 140)

Seat belts

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

WARNING

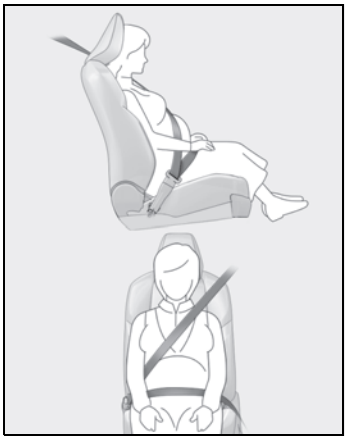
Observe the following precautions to reduce the risk of injury in the event of sudden braking, sudden swerving or an accident.
Failure to do so may cause death or serious injury.

■ Wearing a seat belt

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

WARNING

■ **Pregnant women**



Obtain medical advice and wear the seat belt in the proper way. (→P.29)

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

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

■ **People suffering illness**

Obtain medical advice and wear the seat belt in the proper way. (→P.29)

■ **When children are in the vehicle**

→P.51

■ **Seat belt damage and wear**

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

Correct use of the seat belts

- Extend the shoulder belt so that it comes fully over the shoulder, but does not come into contact with the neck or slide off the shoulder.
- Position the lap belt as low as possible over the hips.
- Adjust the position of the seatback. Sit up straight and well back in the seat.



● Do not twist the seat belt.

■ Child seat belt usage

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

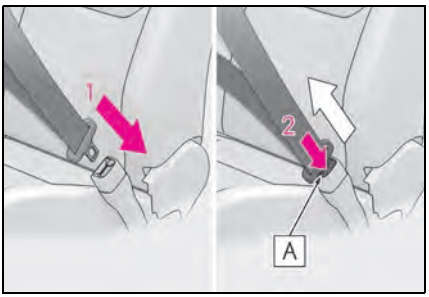
● Use a child restraint system appropriate for the child, until the child becomes large enough to properly wear the vehicle's seat belt. (→P.41)

● When the child becomes large enough to properly wear the vehicle's seat belt, follow the instructions regarding seat belt usage. (→P.28)

■ Seat belt regulations

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

Fastening and releasing the seat belt



1 To fasten the seat belt, push the plate into the buckle until a click sound is heard.

2 To release the seat belt, press the release button A .

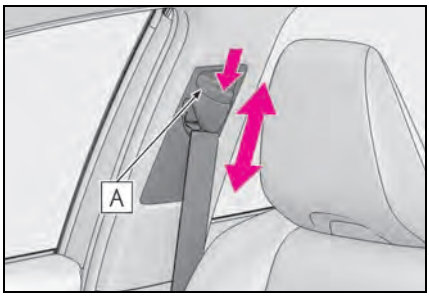
■ Emergency locking retractor (ELR)

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.

Adjusting the seat belt shoulder anchor height (front seats)

Push the seat belt shoulder anchor up and down while pressing the release button A .

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

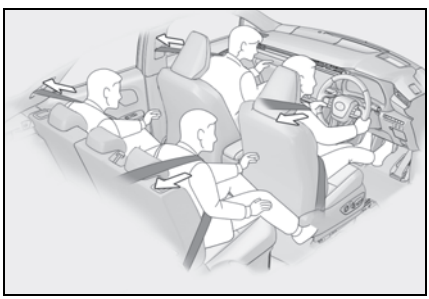


WARNING

■ Adjustable shoulder anchor

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

Seat belt pretensioners



When the vehicle is subjected to a

severe frontal impact or rollover, the pretensioners retract the seat belts of the front seats and rear outer seats to securely restrain the occupants.

The pretensioners will not operate in minor frontal impacts, or side or rear impacts.

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.

PCS-linked control

If the PCS (Pre-Collision System) determines that the possibility of a collision with a vehicle is high, the seat belt pretensioners will be prepared to operate.

WARNING

Seat belt pretensioners

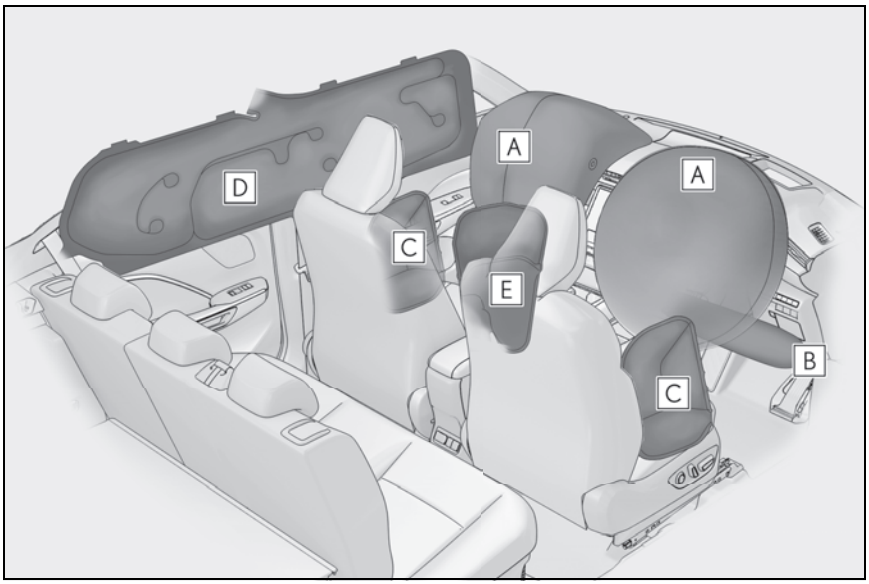
If the pretensioner has activated, the SRS warning light will come on. In that case, the seat belt cannot be used again and must be replaced at your Lexus dealer. Failure to do so may cause death or serious injury.

SRS airbags

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

SRS airbag system

Location of the SRS airbags



A SRS driver airbag/front passenger airbag
Help reduce impact to the head and chest of the driver and front passenger

B SRS knee airbag
Help reduce impact to the driver

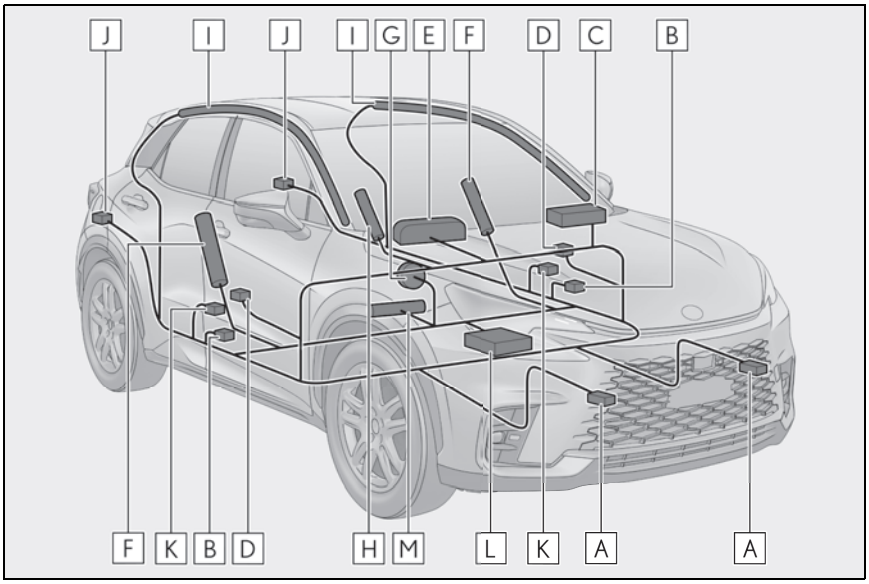
C SRS side airbags
Help reduce impact to the chest of the occupants of the front seats

D SRS curtain shield airbags
Help reduce impact to the heads of the occupants of the front and rear outer seats

E SRS front center airbag

Help reduce impact to the head and neck of the occupants of the front seats

■ SRS airbag system components



A Front impact sensors

B Side impact sensors

C Front passenger airbag

D Side impact sensors

E SRS warning light

F Side airbags

G Driver airbag

H Front center airbag

I Curtain shield airbags

J Seat belt pretensioners and force limiters (rear seat)

K Seat belt pretensioners and force limiters (front seat)

L Airbag sensor assembly

M Knee airbag

The main SRS airbag system components are shown above. The SRS airbag system is controlled by the airbag sensor assembly. As the airbags deploy, a chemical

reaction in the inflators quickly fills the airbags with non-toxic gas to help restrain the motion of the occupants.

■ If the SRS airbags deploy (inflate)

- Slight abrasions, burns, bruising, etc., may be sustained from SRS airbags, due to the extremely high speed of deployment (inflation) by hot gases.
- A loud noise and white powder will be emitted.
- Parts of the airbag module (steering wheel hub, airbag cover and inflator) as well as the parts around the airbags may be hot for several minutes. The airbag itself may also be hot.
- The windshield may crack.
- The hybrid system will be stopped and fuel supply to the engine will be stopped. (→P.65)
- All of the doors will be unlocked. (→P.112)
- The brakes and stop lights will be controlled automatically. (→P.319)
- The interior lights will turn on automatically. (→P.344)
- The emergency flashers will turn on automatically. (→P.416)
- Vehicles with Lexus Connected Services: If any of the following situations occur, the system is designed to send an emergency call to the Lexus Connected Services control 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.55)
  - When an SRS airbag has been deployed
  - When a seat belt pretensioner has operated
  - When the vehicle has been involved in a severe rear-end collision

■ The SRS airbags deploy in a frontal impact when

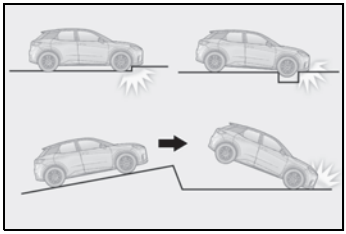
- The following SRS airbags will deploy in the event of an impact that exceeds a threshold level (level of force corresponding to an approximately 20 - 30 km/h [12 - 18 mph] frontal collision with a fixed wall that does not move or deform):
  - SRS front airbags
  - SRS knee airbags
- The threshold level at which the SRS airbags will deploy will be higher than normal in the in the following situations:
  - When the vehicle collides with an object, such as a parked vehicle or sign pole, which moves or deforms on impact
  - If the vehicle is involved in an underride collision, such as a collision in which the front of the vehicle underrides, or goes under, the bed of a truck
- Depending on the type of collision, only the following may deploy:
  - Seat belt pretensioners
- In the event of an especially severe frontal collision, the left and right SRS curtain shield airbags may also deploy.

■ The SRS airbags deploy in a side impact when

- The following SRS airbags will deploy in the event of an impact that exceeds the set threshold level (level of force corresponding to the impact force produced by an approximately 1500 kg [3300 lb.] vehicle colliding with the passenger compartment at a perpendicular angle at an approximate speed of 20 - 30 km/h [12 - 18 mph]):
  - SRS side airbags
  - SRS curtain shield airbags
  - SRS front center airbag
- In the event of a side collision, regardless of the impacted side, both the left and right SRS curtain shield airbags will deploy.

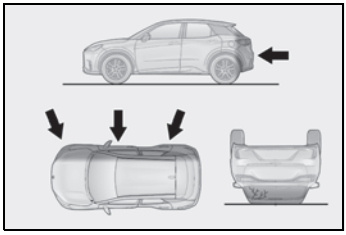
The SRS airbags deploy in an underside impact when

● The following airbags may deploy if the underside of the vehicle collides with a hard object:
- SRS front airbags
- SRS knee airbags
- SRS side airbags
- SRS curtain shield airbags

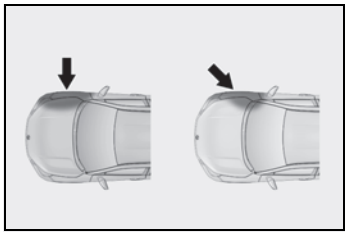


The SRS airbags will not deploy when

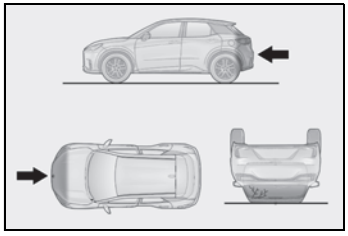
● The following SRS airbags will not normally deploy in side or rear collisions, vehicle rollovers, or low speed frontal collisions. However, if such a collision causes sufficient sudden deceleration, the SRS airbags may deploy.
- SRS front airbags
- SRS knee airbags



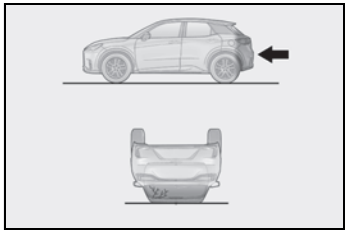
● The following SRS airbags may not deploy if the vehicle is collided with at a certain angle or in a side collision where an area of the vehicle other than the passenger compartment is collided with:
- SRS side airbags
- SRS curtain shield airbags
- SRS front center airbag



● The following SRS airbags will not normally deploy in front or rear collisions, vehicle rollovers, or low speed side collisions:
- SRS side airbags
- SRS front center airbag



● The following SRS airbags will not normally deploy in rear collisions, vehicle rollovers, or low speed front or side collisions:
- SRS curtain shield airbags



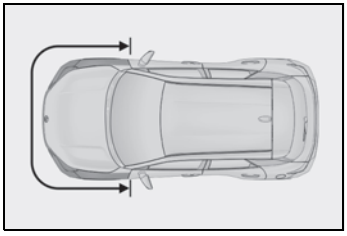
When to contact your Lexus dealer

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

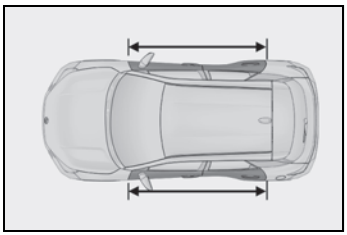
● When any of the SRS airbags have been deployed

● When the front of the vehicle is damaged or deformed, or was involved in a collision that was not severe enough to cause any of the following SRS airbags to deploy:
- SRS front airbags

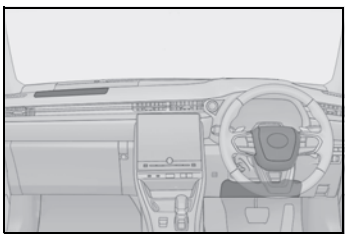
- SRS knee airbags



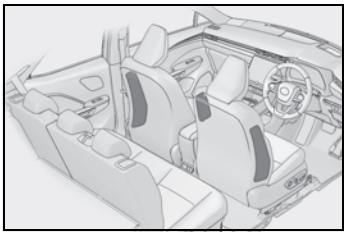
- When a door or its surrounding area is damaged, deformed or has had a hole made in it, or was involved in a collision that was not severe enough to cause any of the following SRS airbags to deploy:
- SRS side airbags
- SRS curtain shield airbags
- SRS front center airbag



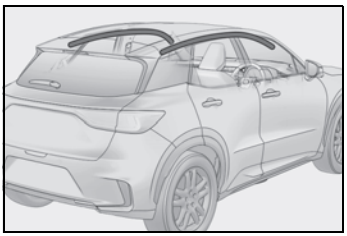
- When the pad section of the steering wheel, the dashboard near the front passenger SRS airbag or the lower side of the instrument panel is scratched, cracked, or otherwise damaged.



- When the surface of a seat with an SRS side airbag or SRS front center airbag is scratched, cracked, or otherwise damaged.



- When the part of a front pillar, rear pillar or roof side rail garnish (padding) which covers a SRS curtain shield airbag is scratched, cracked, or otherwise damaged.



WARNING

■ SRS airbag precautions

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

- The driver and all passengers must wear their seat belts correctly. The SRS airbags are supplemental devices to be used with the seat belts.
- The SRS driver airbag deploys with considerable force, and can cause death or serious injury, especially if the driver is very close to the airbag. Since the risk zone for the driver's airbag is the first 50 - 75 mm (2 - 3 in.) of inflation, placing yourself 250 mm (10 in.) from your driver airbag provides you with a clear margin of safety. This distance is measured from the center of the steering wheel to your breastbone. If your current driving position places you less than 250 mm (10 in.) away from the driver airbag, you can change your driving position in several ways:

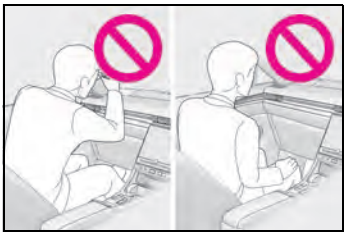
WARNING

- Move your seat to the rear as far as possible while still being able to reach the pedals comfortably.
- Slightly recline the seatback. Although vehicle designs vary, many drivers can achieve the 250 mm (10 in.) distance, even with the driver seat all the way forward, simply by reclining the seatback somewhat. If reclining the seatback makes it hard to see the road, raise yourself by using a firm, non-slippery cushion, or raise the seat if your vehicle has that feature.
- If your steering wheel is adjustable, tilt it downward. This points the airbag toward your chest instead of your head and neck.
  The seat should be adjusted as recommended above, while still being able to control the vehicle with the pedals and steering wheel, and maintaining your view of the instrument panel controls.

● The SRS front passenger airbag 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 positioned as far possible from the airbag with the seatback adjusted so that the passenger is sat upright.

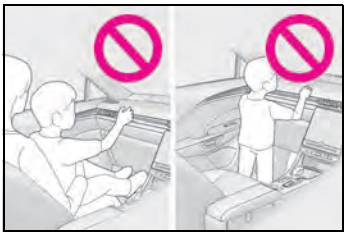
● Improperly seated and/or restrained infants and children can be killed or seriously injured by a deploying airbag. An infant or child who is too small to use a seat belt should be properly secured using a child restraint system. Lexus strongly recommends that all infants and children be placed in the rear seats of the vehicle and properly restrained. The rear seats are safer for infants and children than the front passenger seat. (→P.41)

● 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 or sit on the lap of a front passenger.

● Front seat occupants should never hold items on their lap.



● Do not lean against the door, roof side rail, or front, side, or rear pillar.



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



WARNING

- Do not attach anything to or lean anything against areas such as the dashboard, steering wheel pad and lower portion of the instrument panel.



- Do not attach anything to areas such as the doors, windshield, side windows, front or rear pillars, roof side rails and assist grips. (With the exception of the speed limit label →P.443)



- Do not hang coat hangers or other hard objects on the coat hooks. These items could become projectiles if the SRS curtain shield airbags deploy, possibly leading to death or serious injury.
- If a vinyl cover is attached to the area where the SRS knee airbag deploys, be sure to remove it.
- Do not use seat accessories which cover the parts from which the SRS airbags deploy, as they may interfere with inflation of the SRS airbags. Such accessories may prevent the SRS airbags from deploying correctly, may disable the system or cause the SRS airbags to inflate unintentionally, possibly resulting in death or serious injury.
- Do not strike or apply significant force to the SRS airbag system components, front doors or their surrounding area. Doing so may cause the SRS airbags to malfunction.
- Do not touch any components of the SRS airbags 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 a part where an SRS airbag is stored is damaged or cracked, have it replaced by your Lexus dealer.

Modification and disposal of SRS airbag system components

Do not dispose of your vehicle or perform any of the following modifications without consulting your Lexus dealer. The SRS airbags may malfunction or deploy unintentionally, possibly leading to death or serious injury.

- Removal, installation, disassembly or repair of the SRS airbags
- Repair, removal or modification of the following parts or their surrounding
  - Steering wheel
  - Instrument panel
  - Dashboard
  - Seats
  - Seat upholstery
  - Front pillars
  - Side pillars
  - Rear pillars
  - Roof side rails

WARNING

- Front door panels
- Front door trim
- Front door speakers

● Modifications to the front door panels (such as making holes in them)

● Repair or modification of the following parts or their surrounding

- Front fender
- Front bumper
- Sides of the vehicle interior

● Installation of the following parts or accessories

- Bull bars or kangaroo bars
- Snow plows
- Winches

● Modifications to the vehicle's suspension

● Installation of electronic devices such as mobile two-way radios (RF-transmitter) and CD players

Exhaust gas precautions

Harmful substances to the human body are contained in exhaust gases if inhaled.

WARNING

Exhaust gases contain harmful carbon monoxide (CO), which is colorless and odorless.
Observe the following precautions. Failure to do so may cause exhaust gases to enter the vehicle and may lead to an accident caused by light-headedness, or may lead to death or a serious health hazard.

■ Important points while driving

● Keep the back door closed.

● If you smell exhaust gases in the vehicle even when the back door is closed, open the windows and have the vehicle inspected at your Lexus dealer as soon as possible.

■ When parking

● If the vehicle is in a poorly ventilated area or a closed area, such as a garage, stop the hybrid system.

● 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 ensure that exhaust fumes do not enter the vehicle interior.

● 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.

WARNING

■ Exhaust pipe

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

Riding with children

Observe the following precautions when children are in the vehicle. Use a child restraint system appropriate for the child, until the child becomes large enough to properly wear the vehicle's seat belt.

- It is recommended that children sit in the rear seats to avoid accidental contact with the shift lever, wiper switch, etc.
- Use the rear door child-protector lock or the window lock switch to avoid children opening the door while driving or operating the power window accidentally. (→P.115, 145)
- Do not let small children operate equipment which may catch or pinch body parts, such as the power window, hood, back door, seats, etc.

WARNING

■ When children are in the vehicle

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

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

Child restraint systems

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

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

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Child restraint system installation method: P.49

- Fixed with a seat belt: P.49
- Fixed with an ISOFIX rigid anchor: P.51
- Using a child restraint anchor fitting: P.52

Points to remember

- Prioritize and observe the warnings, as well as the laws and regulations for child restraint systems.

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

WARNING

■ When a child is riding

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

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

■ Handling the child restraint system

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

- If the vehicle were to receive a strong impact from an accident, etc., it is possible that the child restraint system has damage that is not readily visible. In such cases, do not reuse the restraint system.
- Depending on the child restraint system, installation may be difficult or impossible. In those cases, check whether the child restraint system is suitable for installment in the vehicle. (→P.44) Be sure to install and observe the usage rules after carefully reading the child restraint system fixing method in this manual, as well as the operation manual enclosed with the child restraint system.
- Keep the child restraint system properly secured on the seat even if it is not in use. Do not store the child restraint system unsecured in the passenger compartment.
- If it is necessary to detach the child restraint system, remove it from the vehicle or store it securely in the luggage compartment.

When using a child restraint system

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

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

- Adjust the seatback angle to the most upright position.

When installing a forward-facing child seat, if there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved.

- Move the front seat fully rearward.
- Adjust the seat height to the uppermost position.
- If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint. Otherwise, put the head restraint in the upper most position.

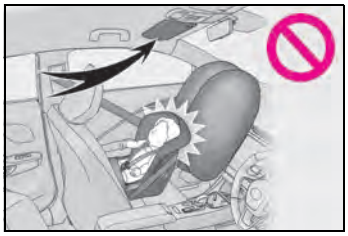


WARNING

■ When using a child restraint system

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

- Extreme Hazard! Do not use a rearward facing child restraint on a seat protected by an airbag in front of it! This is because the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child.
  There is a label(s) on the passenger side sun visor, indicating it is forbidden to attach a rear-facing child restraint system to the front passenger seat. Details of the label(s) are shown in the illustration below.



WARNING



WARNING

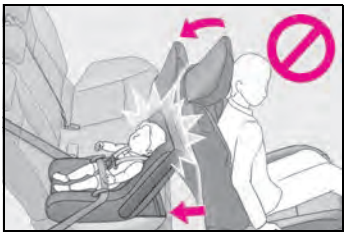
- Only put a forward-facing child restraint system on the front seat when unavoidable. When installing a forward-facing child restraint on the front passenger seat, move the seat as far back as possible. Failing to do so may result in death or serious injury if the airbags deploy (inflate).



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



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



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

Child restraint system compatibility for each seating position

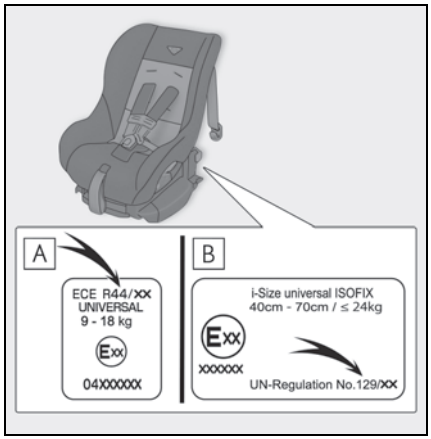
■ Child restraint system compatibility for each seating position

Compatibility of each seating position with child restraint systems (→P.45) displays the type of child restraint systems that can be used and possible seating positions for installation using symbols.
Check the selected child restraint system together with the following "Before confirming the compatibility of each seating position with child restraint systems".

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

1 Check the child restraint system standards.
Use a child restraint system that conforms to UN(ECE) R44*1 or

UN(ECE) R129[*1, 2].
The following approval mark is displayed on child restraint systems which are conformed.
Check for an approval mark attached to the child restraint system.



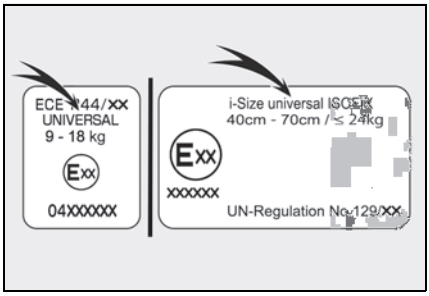
Example of the displayed regulation Number

A UN(ECE) R44 approval mark[*3]
The weight range of the child who is applicable for an UN(ECE) R44 approval mark is indicated.

B UN(ECE) R129 approval mark[*3]
The height range of the child who is applicable as well as available weights for an UN(ECE) R129 approval mark is indicated.

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

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

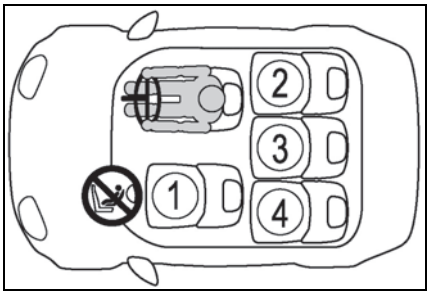


[*1]: UN(ECE) R44 and UN(ECE) R129 are U.N. regulations for child restraint systems.

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

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

Compatibility of each seating position with child restraint systems



1 *1, 2, 3	UF *4
2 *3	U  
3 *3	U *5 
4 *3	U  

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

UF Suitable for fixed installing a forward-facing child seat with vehicle seat belt "universal" category child restraint system.

 Suitable for i-Size and ISOFIX child restraint system.

 Includes a top tether anchorage point.

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

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

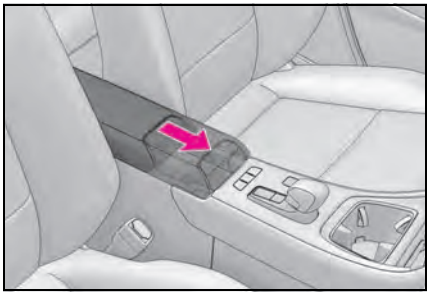
*2: Adjust the seatback angle to the most upright position. When installing a forward-facing child seat, if there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved.



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

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

*5: Move the armrest fully forward.

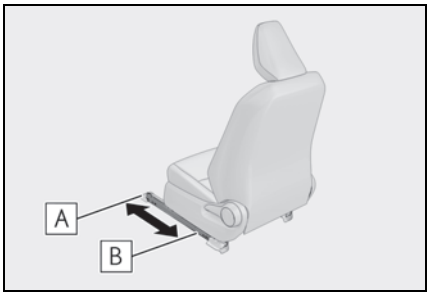


■ Detail information for child restraint systems installation

Seating position				
Seat position number	①	②	③	④
Seating position suitable for universal belted (Yes/No)	Yes Forward-facing only	Yes	Yes	Yes
i-Size seating position (Yes/No)	No	Yes	No	Yes
Seating position suitable for lateral fixture (L1/L2/No)	No	No	No	No
Suitable rearward facing fixture (R1/R2X/R2/R3/No)	No	R1, R2X, R2, R3*1	No	R1, R2X, R2, R3*2
Suitable forward facing fixture (F2X/F2/F3/No)	No	F2X, F2, F3	No	F2X, F2, F3
Suitable junior seat fixture (B2/B3/No)	B2, B3 Belt fixation only	B2, B3	No	B2, B3

*1: Adjust the driver's seat to the highest position. (→P.132)

*2: Before installing a child restraint system to this seat, adjust the position of the front passenger's seat to between the 1st lock position and 12th lock position (16th lock position from the rear).



A 1st lock position

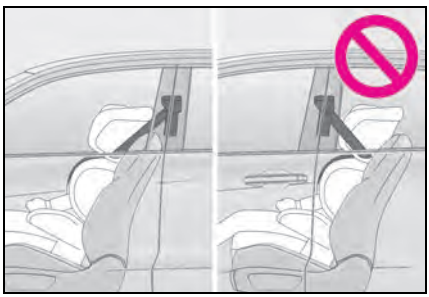
B 12th lock position

ISOFIX child restraint systems are divided into different "fixture". The child restraint system can be used in the seating positions for "fixture" mentioned in the table above. For kind of "fixture" relation, confirm the following table.
If your child restraint system has no kind of "fixture" (or if you cannot find information in the table below), please refer to the child restraint system "vehicle list" for compatibility information or ask the retailer of your child seat.

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

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

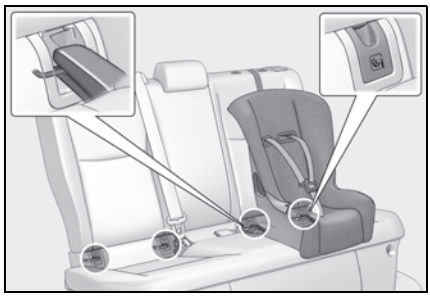
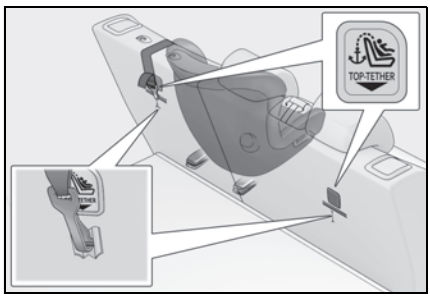
- When installing a child restraint in the rear seats, adjust the front seat so that it does not interfere with the child or child restraint system.
- When installing a child seat with support base, if the child seat interferes with the seatback when latching it into the support base, adjust the seatback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



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

Child restraint system installation method

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

Installation method		Page
Seat belt attachment		P.49
ISOFIX rigid anchor attachment		P.51
Child restraint anchor fitting attachment		P.52

Child restraint system fixed with a seat belt

■ Installing child restraint system using a seat belt

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

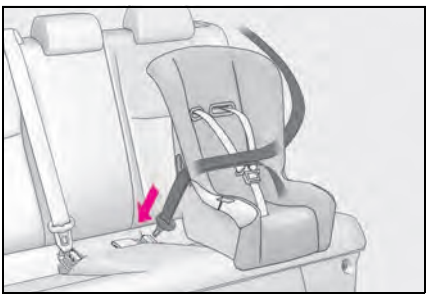
If the child restraint system on hand is not within the "universal" category (or the necessary information is not in the

table), refer to the "Vehicle List" provided by the child restraint system maker for various possible installation positions, or check the compatibility after asking the retailer of the child seat. (→P.44, 45)

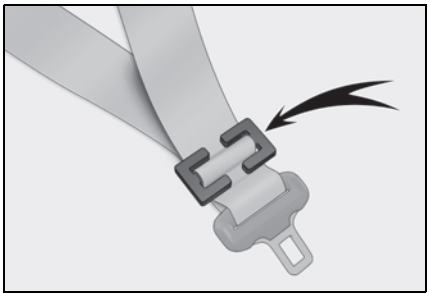
1 If installing the child restraint system to the front passenger seat is unavoidable, refer to P.42 for front passenger seat adjustment.

2 If the head restraint interferes with the child restraint system and the head restraint can be removed, remove the head restraint. Otherwise, put the head restraint in the upper most position. (→P.135)

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



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



5 After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.51)

■ Removing a child restraint system installed with a seat belt

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

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

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

■ When installing a child restraint system

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

WARNING

■ When installing a child restraint system

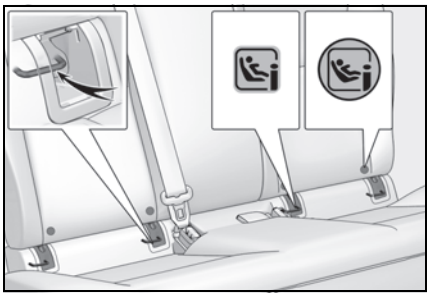
Observe the following precautions. Failure to do so may result in death or serious injury.

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

Child restraint system fixed with an ISOFIX rigid anchor

■ ISOFIX rigid anchors (ISOFIX child restraint system)

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



■ Installation with ISOFIX rigid anchor (ISOFIX child restraint system)

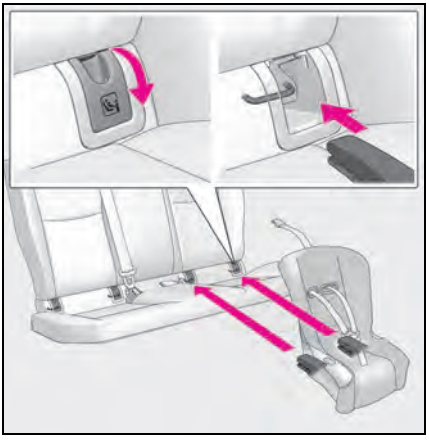
Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

If the child restraint system on hand is not within the "universal" category (or the necessary information is not in the table), refer to the "Vehicle List" provided by the child restraint system maker for various possible installation positions, or check the compatibility after asking the retailer of the child seat. (→P.44, 45)

1. If the head restraint interferes with the child restraint system and the head restraint can be removed, remove the head restraint. Otherwise, put the head restraint in the upper most position. (→P.135)
2. Remove the anchorage covers, and install the child restraint system to the seat.

The bars are installed behind the anchor-

age covers.



3 After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.51)

WARNING

■ When installing a child restraint system

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

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

■ Using child restraint anchorages

WARNING: child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seatbelts, harnesses, or for attaching other items or equipment to the vehicle.

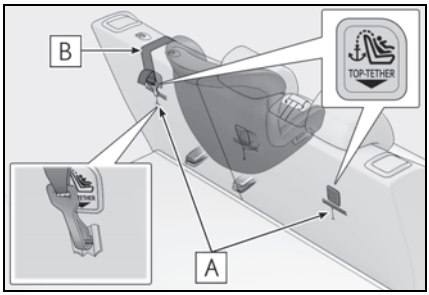
Using a child restraint anchor fitting

■ Child restraint anchor fitting

Anchor fittings are provided for each rear seat.

Use anchor fitting when fixing the strap.

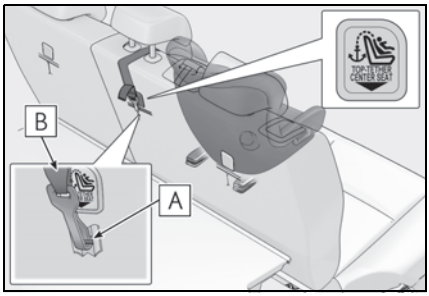
▶ Outboard rear seats



A Anchor fittings

B Upper anchorage strap

▶ Center rear seats



A Anchor fitting

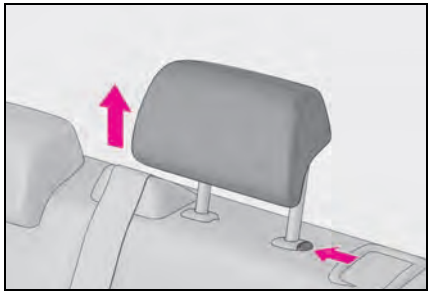
B Upper anchorage strap

■ **Fixing the strap to the anchor fitting**

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

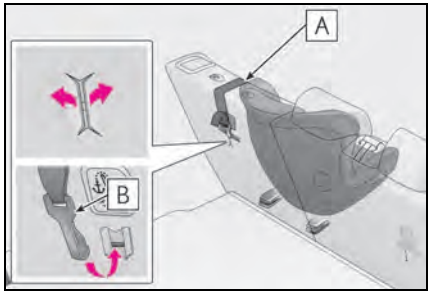
▶ Outboard rear seats

1 If the head restraint interferes with the child restraint system and the head restraint can be removed, remove the head restraint. Otherwise, put the head restraint in the upper most position. (→P.135)



2 Latch the attaching clip onto the anchor fitting and tighten the upper anchorage strap.

Make sure the upper anchorage strap is securely latched. (→P.51)



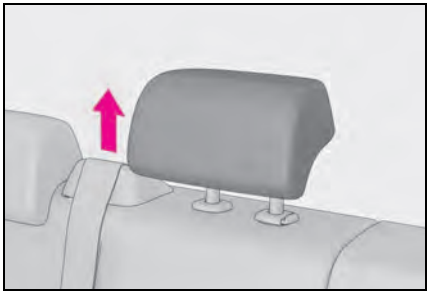
A Upper anchorage strap

B Attaching clip

▶ Center rear seats

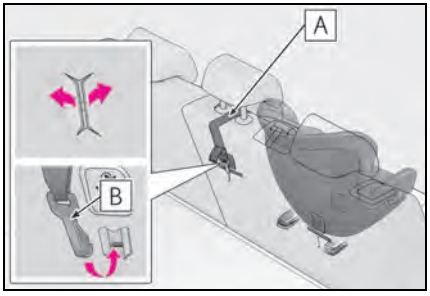
1 Adjust the head restraint to the upmost position.

If the head restraint interferes with the child restraint system or top strap installation and the head restraint can be removed, remove the head restraint. (→P.135)



2 Latch the attaching clip onto the anchor fitting and tighten the upper anchorage strap.

Make sure the upper anchorage strap is securely latched. (→P.51)



A Upper anchorage strap

B Attaching clip

WARNING

■ When installing a child restraint system

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

- Firmly attach the upper anchorage strap and make sure that the belt is not twisted.
- Do not attach the upper anchorage strap to anything other than the anchor fitting.
- After securing a child restraint system, never adjust the seat.
- Follow all installation instructions provided by the child restraint system manufacturer.
- When installing the child restraint system with the head restraint being raised, after the head restraint has been raised and then the top tether anchorage has been fixed, do not lower the head restraint.

■ Using child restraint anchorages

WARNING: child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seatbelts, harnesses, or for attaching other items or equipment to the vehicle.

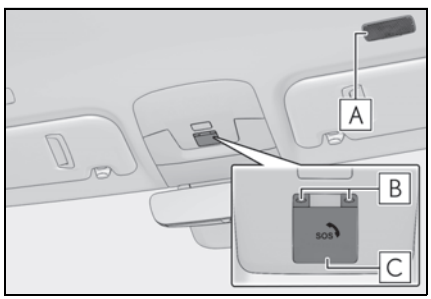
Lexus Connected Services*1, 2

*1: If equipped

*2: Operates within the Lexus Connected Services coverage.

Lexus Connected Services are telematics services that use Global Positioning System (GPS) data and embedded cellular technology to enable the following emergency calls to be made: ACN (Automatic Collision Notification) and SOS Emergency Call (Manual emergency service notification) (by pressing the "SOS" button). For more information about Lexus Connected Services, please visit: https://www.lexus.com.au/connectivity

System components



A Microphone

B Indicator lights

C "SOS" button*

*: This button is intended for communication with the Emergency Call Centre. Other SOS buttons available in other systems of a motor vehicle do not relate to the device and are not intended for communication with the Emergency Call Centre.

Lexus Connected Services

■ ACN (Automatic Collision Notification)

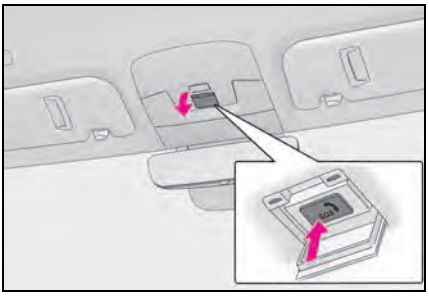
If any airbag deploys, the system is designed to automatically call the Emergency Call Centre.* The Call Centre Agent will determine your vehicle's location, the time of the incident and the vehicle VIN, and attempt to speak with the vehicle occupants to assess the situation. If the occupants are unable to communicate, the Call Centre Agent automatically treats the call as an emergency and contacts emergency services to describe the situation and request that assistance be sent to the location.

*: In some cases, the call cannot be made. (→P.56)

■ SOS Emergency Call (Manual emergency service notification)

In the event of an emergency, press the "SOS" button to call the Emergency Call Centre.* The Call Centre Agent will determine your vehicle's location, assess the situation, and dispatch the necessary assistance required.

Make sure to open the cover before pressing the "SOS" button.



If you accidentally press the "SOS" button, tell the Call Centre Agent that you are not experiencing an emergency.

*: In some cases, the call cannot be made. (→P.56)

Indicator lights

When the power switch is turned to ON, the red/green indicator lights will blink intermittently, then the green indicator light will remain ON, indicating that the system is enabled. The indicator lights indicate the following:

- If the green indicator light illuminates and stays on, the system is enabled.
- If the green indicator light flashes twice per second, the ACN/SOS service is being made.
- If the red indicator light illuminates at any time other than immediately after the power switch is turned to ON, the system may be malfunctioning or the backup battery may be depleted. Contact your Lexus dealer.

Free/Open Source Software Information

This product contains Free/Open Source Software (FOSS).

The license information and/or the source code of such FOSS can be found at the following URL.

http://www.opensourceautomotive.com/dcm/19MC/

WARNING

When the ACN/SOS may not be made

- It may not be possible to make ACN/SOS in any of the following situations. In such cases, report to emergency services provider (000 system etc.) by other means such as nearby public phones.
  - Even when the vehicle is in the cellular phone service area, it may be difficult to connect to the Emergency Call Centre if the reception is poor or the line is busy. In such cases, you may not be able to connect to the Emergency Call Centre.
  - When the vehicle is out of the cellular phone service area, the ACN/SOS cannot be made.
  - When any related equipment (such as the "SOS" button panel, indicator lights, microphone, DCM, antenna, or any wires connecting the equipment) is malfunctioning, damaged or broken, the ACN/SOS cannot be made.
  - Enabled Lexus vehicles collect and transmit vehicle data to provide connected services. SOS and Automatic Collision Notification may be disabled if green LED under SOS button is not illuminated. For more info including reactivation, visit https://www.lexus.com.au/privacy

WARNING

- During an ACN/SOS service the system makes repeated attempts to connect to the Emergency Call Centre. However, if it cannot connect to the Emergency Call Centre due to poor radio wave reception, the system may not be able to connect to the cellular network and the call may finish without connecting. A voice prompt notification will play from the vehicle speaker to indicate call disconnection.

- If the 12-volt battery's voltage decreases or there is a disconnection, the system may not be able to connect to the Emergency Call Centre.

- The ACN/SOS system might not work outside of Australia region, depending on the available infrastructure in the country.

■ When the ACN/SOS system is replaced with a new one

The ACN/SOS system should be registered. Contact your Lexus dealer.

■ For your safety

- Please drive safely.
  The function of this system is to assist you in contacting the appropriate emergency services in case of accidents such as traffic accidents or sudden medical emergencies, and it does not protect the driver or passengers in any way. Please drive safely and fasten your seatbelts at all times for your safety.

- In case of an emergency, ensure preservation of life is prioritised first.

- If you smell anything burning or other unusual smells, leave the vehicle and evacuate to a safe area immediately.

- If the airbags deploy when the system is operating normally, the system makes emergency call. The system also makes emergency call when the vehicle is struck from the rear or rolls over, even if the airbags do not deploy.

- For safety, do not press the "SOS" button while driving.
  Making calls during driving may cause mishandling of the steering wheel, which may lead to unexpected accidents.
  Stop the vehicle and confirm the safety of your surroundings before pressing the "SOS" button.

- When changing fuses, please use the specified fuses. Using other fuses may cause ignition or smoke in the circuit and lead to a fire.

- Using the system while there is smoke or an unusual smell may cause a fire. Stop using the system immediately and consult your Lexus dealer.

NOTICE

■ To prevent damage

Do not pour any liquids onto the "SOS" button panel, etc. and do not impact it.

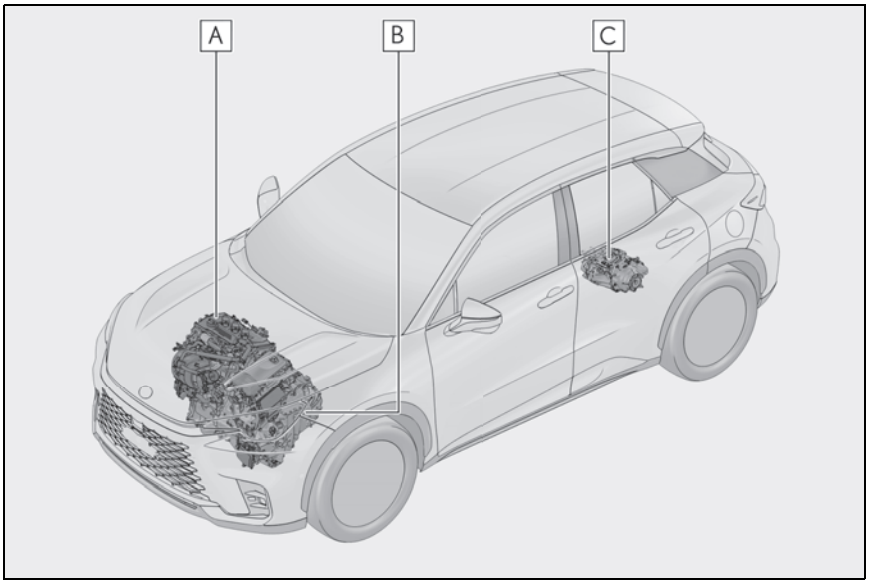
■ If the "SOS" button panel, speaker or microphone malfunctions during an ACN/SOS service

It may not be possible to make ACN/SOS, confirm the system status, or communicate with the Call Centre Agent. If any of the above equipment is damaged, please consult your Lexus dealer.

Hybrid system features

Your vehicle is a Hybrid Electric Vehicle. It has characteristics different from conventional vehicles. Be sure you are closely familiar with the characteristics of your vehicle, and operate it with care.
The hybrid system combines the use of a gasoline engine and an electric motor (traction motor) according to driving conditions, improving fuel efficiency and reducing exhaust emissions.

System components



The illustration is an example for explanation and may differ from the actual item.

A Gasoline engine

B Front electric motor (traction motor)

C Rear electric motor (traction motor)*

*: AWD models only

■ **When stopped/during start off**

The gasoline engine stops* when the vehicle is stopped. During start 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 electric motor (traction motor) is used.

When the shift position is in N, the hybrid battery (traction battery) is not being charged.

*: When the hybrid battery (traction battery) requires charging or the engine is warming up, etc., the gasoline engine will not automatically stop. (→P.59)

■ During normal driving

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

■ When accelerating sharply

When the accelerator pedal is depressed heavily, the power of the hybrid battery (traction battery) is added to that of the gasoline engine via the electric motor (traction motor).

■ When braking (regenerative braking)

The wheels operate the electric motor (traction motor) as a power generator, and the hybrid battery (traction battery) is charged.

■ Regenerative braking

In the following situations, kinetic energy is converted to electric energy and deceleration force can be obtained in conjunction with the recharging of the hybrid battery (traction battery).

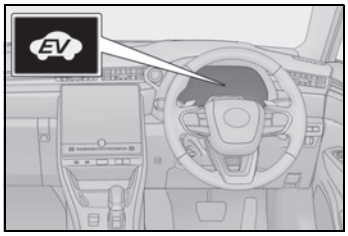
- The accelerator pedal is released while driving with the shift position in D, B*1 or S*2.
- The brake pedal is depressed while driving with the shift position in D, B*1 or S*2.

*1: Vehicles without paddle shift switches

*2: Vehicles with paddle shift switches

■ EV indicator

The EV indicator comes on when the vehicle is driven using only the electric motor (traction motor) or the gasoline engine is stopped.



■ Conditions in which the gasoline engine may not stop

The gasoline engine starts and stops automatically. However, in any of the following situations, it may not stop automatically, possibly reducing fuel economy*:

- During gasoline engine warm-up
- During hybrid battery (traction battery) charging
- When the temperature of the hybrid battery (traction battery) is high or low
- When the heater is switched on
- When repeatedly accelerating/decelerating rapidly
- When repeatedly operating the hybrid system for a long time
- When driving down a long slope

*: Depending on the circumstances, the gasoline engine may also not stop automatically in other situations.

■ Charging the hybrid battery (traction 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 (traction 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 16 km (10 miles). If the hybrid battery (traction battery) becomes fully dis-

charged and you are unable to start the hybrid system, contact your Lexus dealer.

■ **Charging the 12-volt battery**

→P.459

■ **After the 12-volt battery has discharged or when the terminal has been removed and installed during exchange, etc.**

The gasoline engine may not stop even if the vehicle is being driven by the hybrid battery (traction battery). If this continues for a few days, contact your Lexus dealer.

■ **Sounds and vibrations specific to a Hybrid Electric Vehicle**

Because there is no engine sound or vibration, it is easy to mistake the Hybrid Electric Vehicle for being off when it is actually still running, as indicated by the "READY" indicator being illuminated. For safety, make sure to always shift the shift position to P and apply the parking brake 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 the engine compartment.
- Sounds may be heard from the hybrid battery (traction battery) under the rear seats when the hybrid system starts or stops.
- Relay operating sounds such as a snap or soft clank will be emitted from the hybrid battery (traction battery), under the rear seats, when the hybrid system is started or stopped.
- Sounds from the hybrid system may be heard when the back door is open.
- Sounds may be heard from the hybrid transmission when the gasoline engine starts or stops, when driving at low speeds, or during idling.
- Engine sounds may be heard when accelerating sharply.
- Sounds may be heard due to regenerative braking when the brake pedal is depressed or as the accelerator pedal is released.
- Vibration may be felt when the gasoline engine starts or stops.
- Cooling fan sounds may be heard from the air intake vent under the left side of the rear seat.
- When charging by regenerative braking is limited, such as on a downhill slope, engine braking is used to decelerate the engine, resulting in high engine speeds and an engine noise that can be heard even when the accelerator pedal is released.

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

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

■ **Customization**

Settings (e.g. on/off operation of the EV indicator) can be changed. (Customizable features: →P.477)

Acoustic Vehicle Alerting System

When driving with the gasoline engine stopped, a sound, which changes in accordance with the driving speed, will be played in order to warn people nearby of the vehicle's approach. This sound may be heard inside the vehicle. The sound will stop when the vehicle speed exceeds approximately 25 km/h (15 mph).

■ **Acoustic Vehicle Alerting System**

In the following cases, the Acoustic Vehicle Alerting System may be difficult for surrounding people to hear.

- In very noisy areas
- In the wind or the rain

Also, as the Acoustic Vehicle Alerting System is installed on the front of the vehicle, it

may be more difficult to hear from the rear of the vehicle compared to the front.

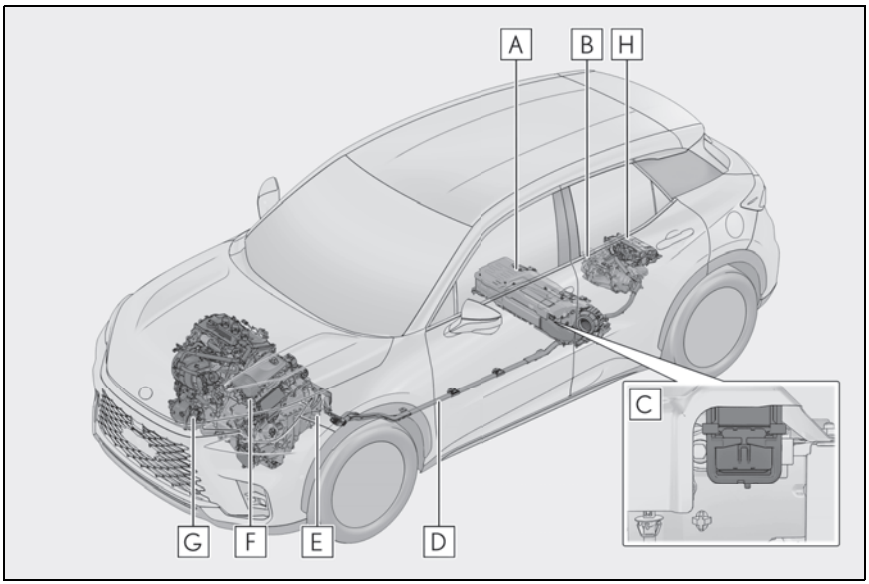
■ **If "Acoustic Vehicle Alerting System Malfunction Visit your Dealer" is displayed on the multi-information display**

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

Hybrid system precautions

Take care when handling the hybrid system, as it is a high voltage system (about 580 V at maximum) as well as contains parts that become extremely hot when the hybrid system is operating. Read the following descriptions carefully before using the hybrid system, and handle the hybrid system correctly. Note that warning labels with a ⚠ mark are attached to the high voltage components, to remind you of careful handling required.

System components



The illustration is an example for explanation and may differ from the actual item.

A Hybrid battery (traction battery)

B Rear electric motor (traction motor)*

C Service plug

D High voltage cables (orange)

E Front electric motor (traction motor)

F Power control unit

G Air conditioning compressor

H Rear inverter*

*: AWD models only

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.427) go off. If there is only a small amount of fuel, the hybrid system may not be able to start. (The standard amount of fuel is about 6.3 L [1.7 gal., 1.4 Imp.gal.], when the vehicle is on a level surface. This value may vary when the vehicle is on a slope. Add extra fuel when the vehicle is inclined.)

Electromagnetic waves

- High voltage parts and cables on Hybrid Electric Vehicles incorporate electromagnetic shielding, and therefore emit approximately the same amount of electromagnetic waves as conventional gasoline powered vehicles or home electronic appliances.
- Your vehicle may cause sound interference in some third party-produced radio parts.

Hybrid battery (traction battery)

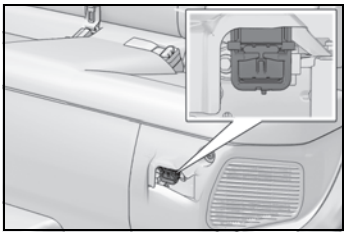
The hybrid battery (traction battery) has a limited service life. The lifespan of the hybrid battery (traction battery) can change in accordance with driving style and driving conditions.

WARNING

High voltage precautions

This 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 or their connectors.
- Do not touch the high voltage components. They are extremely hot, especially after driving.
- Never try to open the service plug access hole located underneath the rear seats. The service plug is used only when the vehicle is serviced and is subject to high voltage.



Road accident cautions

Observe the following precautions to reduce the risk of death or serious injury:

- Stop the vehicle in a safe place to prevent subsequent accidents. While depressing the brake pedal, apply the parking brake and shift the shift position to P to stop the hybrid system. Then, slowly release the brake pedal.
- 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 the fluid 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.

WARNING

- If a fire occurs in the Hybrid Electric 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 front wheels (2WD models) or four wheels (AWD models) raised. If the wheels connected to the electric motor (traction motor) are on the ground when towing, the motor may continue to generate electricity. This may cause a fire. (→P.419)
- 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.

■ Hybrid battery (traction battery)

- Never resell, hand over or modify the hybrid battery. To prevent accidents, hybrid batteries that have been removed from a disposed vehicle are collected through Lexus dealers. Do not dispose of the battery yourself. Unless the battery is properly collected, the following may occur, resulting in death or serious injury:

• The hybrid battery may be illegally disposed of or dumped, and it is hazardous to the environment or someone may touch a high voltage part, resulting in an electric shock.

• The hybrid battery is intended to be used exclusively with your Hybrid Electric Vehicle. If the hybrid battery is used outside of your vehicle or modified in any way, accidents such as electric shock, heat generation, smoke generation, an explosion and electrolyte leakage may occur.

When reselling or handing over your vehicle, the possibility of an accident is extremely high because the person receiving the vehicle may not be aware of these dangers.

- 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 that your vehicle must be disposed of, the hybrid battery must be disposed of by your Lexus dealer or a qualified service shop. If the hybrid battery is not disposed of properly, it may cause electric shock that can result in death or serious injury.

NOTICE

■ Hybrid battery (traction battery)

Do not carry large amounts of water such as water cooler bottles in the vehicle. If water spills onto the hybrid battery (traction battery), the battery may be damaged. Have the vehicle inspected by your Lexus dealer.

Hybrid battery (traction battery) air intake vent

There is an air intake vent under the left side of the rear seat with the purpose of cooling the hybrid battery (traction battery).

If the vent is blocked, it may interfere with the cooling of the hybrid battery

(traction battery).

If input/output of the hybrid battery (traction battery) becomes limited and the distance that the vehicle can be driven using the electric motor (traction motor) is reduced, the fuel economy may be reduced.



NOTICE

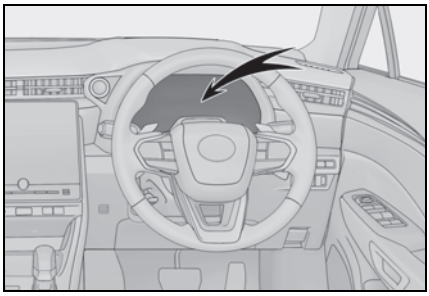
■ **Hybrid battery (traction battery) air intake vent**

- Make sure not to block the air intake vent with anything, such as a seat cover, luggage, or carpet. The input/output of the hybrid battery (traction battery) may be restricted, leading to a reduction in hybrid battery (traction battery) output and a malfunction.
- Periodically clean the air intake vent to prevent it from clogging. (→P.406)
- Do not get water or foreign materials in the air intake vent as this may cause a short circuit and damage the hybrid battery (traction battery).

Emergency shut off system

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

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, a warning message is displayed, or the 12-volt battery is disconnected**

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

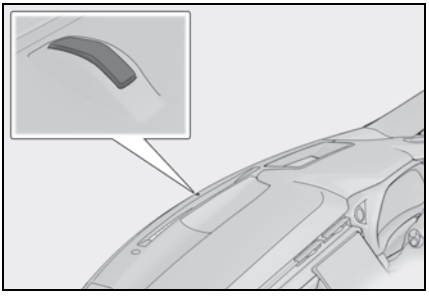
Immobilizer system

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.

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

Operating the system



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

The indicator stops flashing after the power switch has been turned to ACC or ON to indicate that the system has been canceled.

■ System maintenance

The vehicle has a maintenance-free type immobilizer system.

■ Conditions that may cause the system to malfunction

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

NOTICE

■ To ensure the system operates correctly

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

Alarm

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

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

- A locked door or back door is unlocked or opened in any way other than using the entry function (if equipped), wireless remote control or mechanical key. (The doors will lock again automatically.)
- The hood is opened.
- The intrusion sensor detects something moving inside the vehicle. (Example: an intruder breaks a window and gets into the vehicle.)

Setting/deactivating/stopping the alarm system

Items to check before locking the vehicle

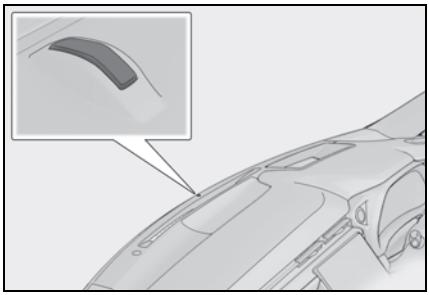
To prevent unexpected triggering of the alarm and vehicle theft, make sure of the following.

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

Setting

Close the doors, back door and hood, and lock all the 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

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

- Unlock the doors.
- Turn the power switch to ACC or ON, or start the hybrid system. (The alarm will be deactivated or stopped after a few seconds.)

Setting the alarm

The alarm can be set if all the doors are closed even with the hood open.

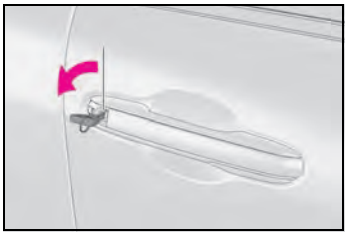
System maintenance

The vehicle has a maintenance-free type alarm system.

Triggering of the alarm

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

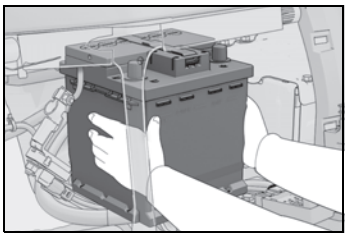
- The doors are unlocked using the mechanical key.



● A person inside the vehicle opens a door, the back door or hood, or unlocks the vehicle.



● The 12-volt battery is recharged or replaced when the vehicle is locked. (→P.456)



■ Alarm-operated door lock

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

- When a person remaining in the vehicle unlocks the door and the alarm is activated.
- While the alarm is activated, a person remaining in the vehicle unlocks the door.
- When recharging or replacing the 12-volt battery.

NOTICE

■ To ensure the system operates correctly

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

Pre-alarm

If a door is unlocked with the mechanical key while the alarm is being set, the pre-alarm will sound for 10 seconds.

If either the door is locked again or the pre-alarm is stopped within those 10 seconds, an alarm will sound.

Do any of the following in order to deactivate or stop the pre-alarm:

- Close the doors, and lock all doors by entry function (if equipped) or wireless remote control.
- Turn the power switch to ACC or ON, or start the hybrid system. (The alarm will be deactivated or stopped after a few seconds.)

Intrusion sensor

■ The intrusion sensor detection

The intrusion sensor detects intruders or movement in the vehicle.

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

■ Setting the intrusion sensor

The intrusion sensor will be set automatically when the alarm is set.

(→P.67)

■ Canceling the intrusion sensor

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

1 Touch the Shortcut screen switch .

2 Touch the .

Operation of the intrusion sensor will be canceled, and a symbol turns into white on the Center Display.

Select the switch again to set the intrusion sensor again.

Each time the intrusion sensor is turned OFF/ON, the symbol on the Center Display changes.

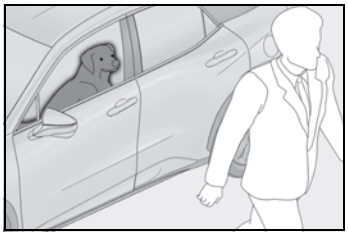
■ Canceling and automatic re-enabling of the intrusion sensor

- The alarm will still be set even when the intrusion sensor is canceled.
- After the intrusion sensor is canceled, pressing the power switch or unlocking the doors using the entry function (if equipped) or wireless remote control will re-enable the intrusion sensor.
- The intrusion sensor will automatically be re-enabled when the alarm system is deactivated.

■ Intrusion sensor detection considerations

The sensor may trigger the alarm in the following situations:

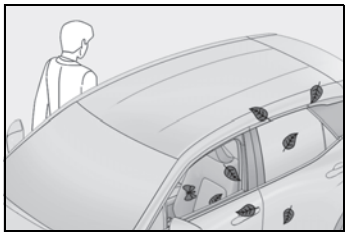
- People or pets are in the vehicle.



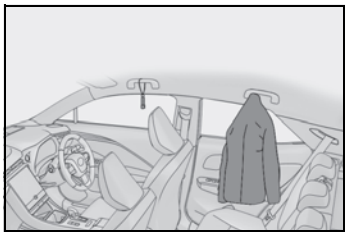
- A window is open.

In this case, the sensor may detect the following:

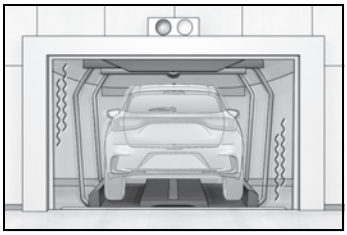
- Wind or the movement of objects such as leaves and insects inside the vehicle
- Ultrasonic waves emitted from devices such as the intrusion sensors of other vehicles
- The movement of people outside the vehicle



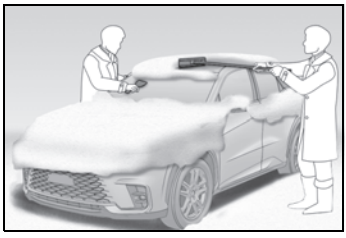
- Small insects such as moths or flies are in the vehicle.
- Unstable items, such as dangling accessories or clothes hanging on the coat hooks, are in the vehicle.



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



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

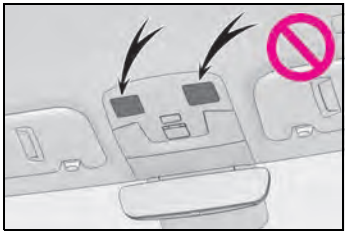


- The vehicle is inside an automatic or high-pressure car wash.
- The vehicle experiences impacts, such as hail, lightning strikes, and other kinds of repeated impacts or vibrations.

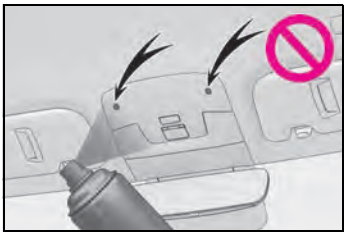
NOTICE

■ To ensure the intrusion sensor functions correctly

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



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



- Installing accessories other than genuine Lexus parts or leaving objects between the driver's seat and front passenger's seat may reduce the detection performance.
- Vehicles with entry function: The intrusion sensor may be canceled when the electronic key is near the vehicle.

Vehicle status information and indicators

2

2-1. Instrument cluster

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Head-up display 91

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Warning lights and indicators

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

Instrument cluster

▶ Vehicles with 7-inch display

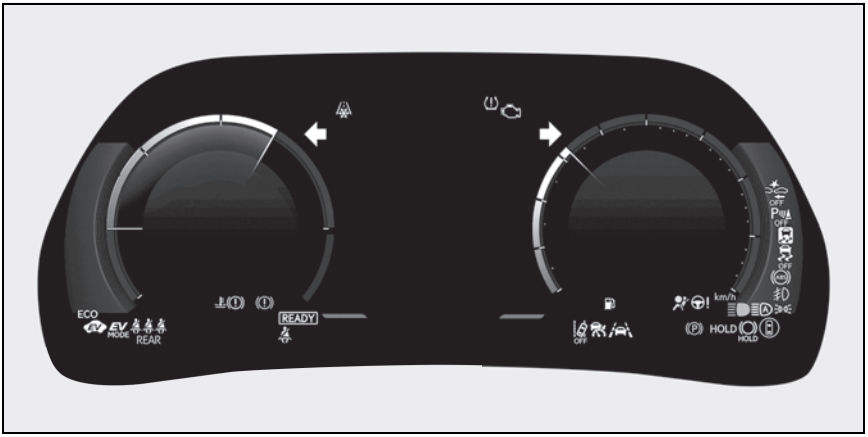


The units used on the meters and some indicators may differ depending on the target region.

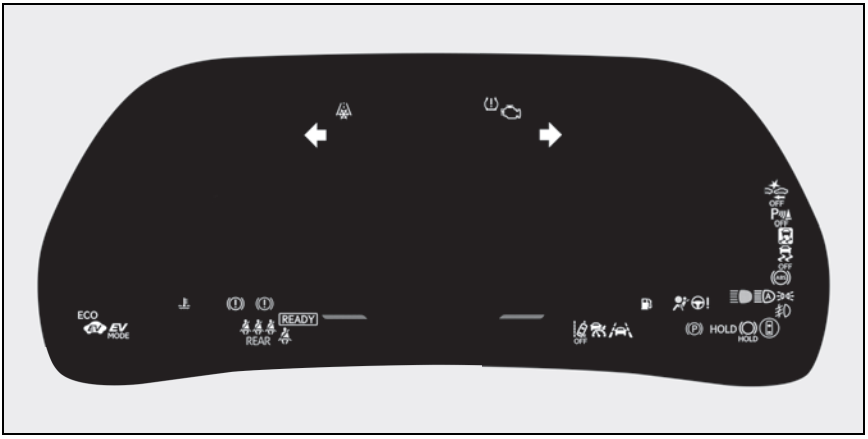
▶ Type 1 (vehicles with 12.3-inch display)



▶ Type 2 (vehicles with 12.3-inch display)



▶ Type 3 (vehicles with 12.3-inch display)



Warning lights

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


(Red) Brake system warning light*1 (→P.424)


(Yellow) Brake system warning light*1 (→P.424)


High coolant temperature warning light*2 (→P.424)


Charging system warning light*2 (→P.425)


Low engine oil pressure warning light*2 (→P.425)


Hybrid system overheat warning light*2 (→P.425)


Malfunction indicator lamp*1 (→P.425)


SRS warning light*1 (→P.426)


ABS warning light*1 (→P.426)


Inappropriate pedal operation warning light*2 (→P.426)


(Red)
Electric power steering system warning light*1 (→P.426)


(Yellow)
Electric power steering system warning light*1 (→P.426)


Low fuel level warning light (→P.427)


Driver's and front passenger's seat belt reminder light (→P.427)



Rear passengers' seat belt reminder lights*3 (→P.427)



Rear passengers' seat belt reminder lights*4 (→P.427)


Tire pressure warning light*1 (→P.428)



PCS warning light*1 (→P.428)


(Yellow)
LTA indicator (→P.428)


(Yellow)
LDA indicator (→P.428)


(Yellow)
Cruise control indicator (→P.429)


(Yellow)
Dynamic radar cruise control indicator (→P.429)


Driving assist information indicator*1 (→P.429)



Lexus parking assist-sensor OFF indicator*1 (→P.429)


Slip indicator*1 (→P.430)


(Flashes)
Parking brake indicator (→P.430)



(Flashes)
Brake hold operated indicator*1 (→P.430)

*1: These lights come on when the power switch is turned to ON 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 the lights do not come on, or turn off. Have the vehicle inspected by your Lexus dealer.

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

*3: Vehicles with 7-inch display

*4: Vehicles with 12.3-inch display

WARNING

■ If a safety system warning light does not come on

Should a safety system light such as the ABS and SRS warning light not come on when you start the 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.

Indicators

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


Turn signal indicator (→P.181)


Tail light indicator (→P.187)


Headlight high beam indicator (→P.188)


AHS indicator (if equipped) (→P.190)

AHB indicator (→P.193)


Fog light indicator (if equipped) (→P.196)


PCS warning light*1, 2 (→P.213)


(White)
LTA indicator (→P.228)


(Green)
LTA indicator (→P.228)


(Yellow) (Flashes)
LTA indicator (→P.228)


(Green)
LDA indicator (→P.232)


(Yellow) (Flashes)
LDA indicator (→P.232)


LDA OFF indicator*2 (→P.232)


(Green)
Cruise control indicator (→P.251)


(White)
Cruise control indicator (→P.251)


(Green)
Dynamic radar cruise control indicator (→P.246)


(White)
Dynamic radar cruise control indicator (→P.246)


Driving assist information indicator*1, 2 (→P.257, 262, 274, 279, 283)


Outside rear view mirror indicators*4 (→P.255, 261, 273)


Lexus parking assist-sensor OFF indicator*1, 2 (→P.265)


Lexus parking assist-sensor detection indicator*1, 6 (if equipped) (→P.265)


(flashes)
Slip indicator*1 (→P.319)


VSC OFF indicator*1, 2 (→P.319)


Smart entry & start system indicator*3 (→P.168)


"READY" indicator (→P.168)


EV drive mode indicator (→P.171)


Parking brake indicator (→P.182)


Brake hold standby indicator*1 (→P.185)


Brake hold operated indicator*1 (→P.185)


EV indicator (→P.59)


Low outside temperature indicator*5 (→P.86)


Stop light indicator*7 (→P.76)


Stop light indicator*8 (→P.76)


Eco drive mode indicator (→P.178)

*1: These lights come on when the power switch is turned to ON 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 the lights do not come on, or turn off. Have the vehicle inspected by your Lexus dealer.

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

*3: This light illuminates on the multi-information display with a message.

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

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

*6: Vehicles without Center Display or rear camera

*7: Vehicles with 7-inch display

*8: Vehicles with 12.3-inch display

■ Lexus parking assist-sensor OFF indicator

Vehicles without Center Display: The indicators turn off when the shift position is changed to R regardless of whether the Lexus parking assist-sensor function is turned on or off.

■ Stop light indicator

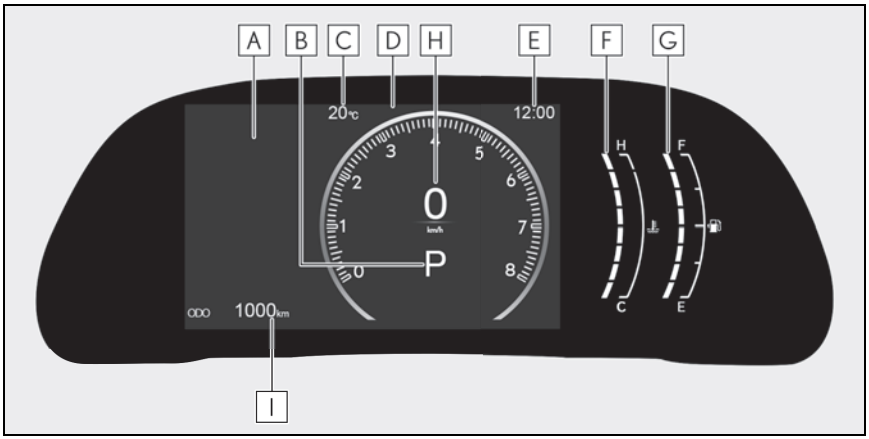
This light comes on when the stop lights are illuminated by the operation of the brake pedal or the driving assist system.

Gauges and meters (with 7-inch display)

Meter display

■ Locations of gauges and meters

▶ Type 1



A Multi-information display

Presents the driver with a variety of vehicle data and displays warning messages if a malfunction occurs. (→P.88, 432)

B Shift position/shift range

C Outside temperature

Displays the ambient temperature within the range of -40°C (-40°F) to 60°C (140°F).

D Tachometer/Hybrid System Indicator

Depending on the selected drive mode or certain settings, the display will change. (→P.476)

Tachometer: Displays the engine speed in revolutions per minute.

Hybrid System Indicator: Displays hybrid system output or regeneration level. (→P.80)

E Clock

Automatically adjusts the time by using the GPS time information (GPS clock). For details, refer to the "Multimedia Owner's Manual".

F Engine coolant temperature gauge

Displays the engine coolant temperature.

G Fuel gauge

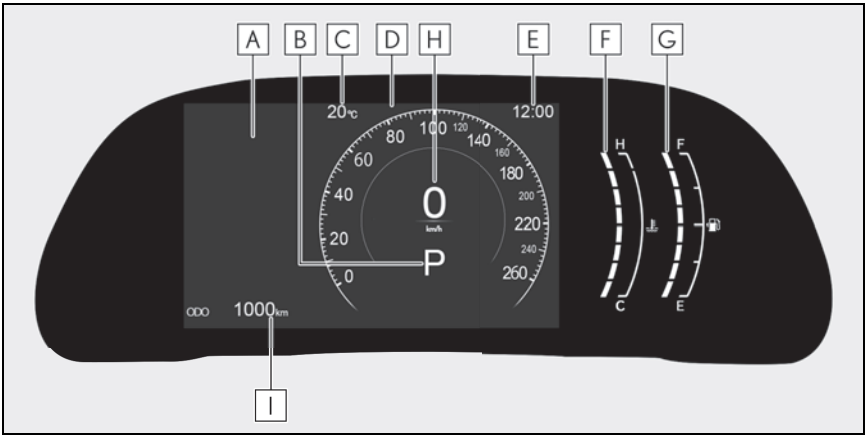
Displays the quantity of fuel remaining in the tank.

H Digital speedometer

Displays the vehicle speed.

I Odometer and trip meter display (→P.82)

▶ Type 2



A Multi-information display

Presents the driver with a variety of vehicle data and displays warning messages if a malfunction occurs. (→P.88, 432)

B Shift position/shift range

C Outside temperature

Displays the ambient temperature within the range of -40°C (-40°F) to 60°C (140°F).

D Analog speedometer

Displays the vehicle speed.

E Clock

Automatically adjusts the time by using the GPS time information (GPS clock). For details, refer to the “Multimedia Owner’s Manual”.

F Engine coolant temperature gauge

Displays the engine coolant temperature.

G Fuel gauge

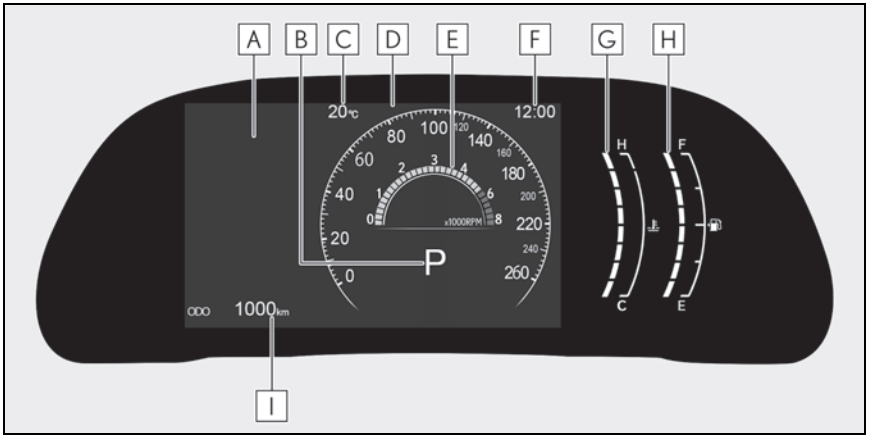
Displays the quantity of fuel remaining in the tank.

H Digital speedometer

Displays the vehicle speed.

I Odometer and trip meter display (→P.82)

▶ Type 3



A Multi-information display

Presents the driver with a variety of vehicle data and displays warning messages if a malfunction occurs. (→P.88, 432)

B Shift position/shift range

C Outside temperature

Displays the ambient temperature within the range of -40°C (-40°F) to 60°C (140°F).

D Analog speedometer

Displays the vehicle speed.

E Tachometer/Hybrid System Indicator

Depending on the selected drive mode or certain settings, the display will change. (→P.476)

Tachometer: Displays the engine speed in revolutions per minute.

Hybrid System Indicator: Displays hybrid system output or regeneration level. (→P.80)

F Clock

Automatically adjusts the time by using the GPS time information (GPS clock). For details, refer to the "Multimedia Owner's Manual".

G Engine coolant temperature gauge

Displays the engine coolant temperature.

H Fuel gauge

Displays the quantity of fuel remaining in the tank.

I Odometer and trip meter display (→P.82)

■ **The meters and display illuminate when**

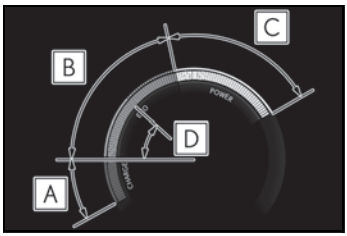
The power switch is in ON.

■ **Engine speed**

On Hybrid Electric 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.

■ **Hybrid System Indicator**

▶ Type 1



This illustration is for explanation only and may differ depending on the specifications of the vehicle.

A Charge area

Shows regeneration* status.

B Eco area

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

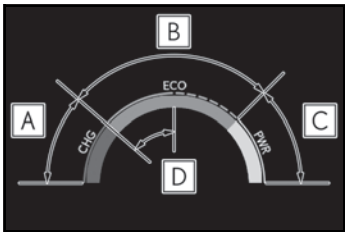
C Power area

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

D Hybrid Eco area

Shows that gasoline engine power is not being used very often.

▶ Type 3



This illustration is for explanation only and may differ depending on the specifications of the vehicle.

A Charge area

Shows regeneration* status.

B Eco area

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

C Power area

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

D 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.

- 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 hybrid battery (traction battery).

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

In the following situation, the Hybrid System

Indicator does not operate.

- "READY" indicator is not illuminated.
- The shift position is in other than D or S.

Changing between the tachometer or hybrid system indicator

Depending on the current drive mode or settings, the displays will change as follows. Settings can be changed on the Center Display. (→P.476)

- The tachometer will be displayed in the following situations.
  - When the meter display type setting is set to display type 1 or display type 3
  - When the tachometer setting is set to always display the tachometer
  - When the tachometer setting is set to change according to the driving mode and a driving mode other than Eco drive mode is selected
- The hybrid system indicator will be displayed in the following situations.
  - When the meter display type setting is set to display type 1 or display type 3
  - When the tachometer setting is set to always display the hybrid system indicator
  - When the tachometer setting is set to change according to the driving mode and Eco drive mode is selected

Outside temperature display

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

Liquid crystal display

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.

Free/Open Source Software Information

This product contains Free/Open Source Software (FOSS). The license information and/or the source code of such FOSS can be found at the following URL.

https://www.denso.com/global/en/opensource/meter/toyota/

WARNING

The information display at low temperatures

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

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

NOTICE

To prevent damage to the engine and its components

- Do not let the indicator needle of the tachometer enter the red zone, which indicates the maximum engine speed.
- The engine may be overheating if the engine coolant temperature gauge is in the red zone (H); or "Engine Coolant Temp High Stop in a Safe Place See Owner's Manual" is shown on the multi-information display. In this case, immediately stop the vehicle in a safe place, and check the engine after it has cooled completely. (→P.462)

Odometer and trip meter display

Display items

- Odometer

Displays the total distance the vehicle has been driven.

- Trip meter A/trip meter B

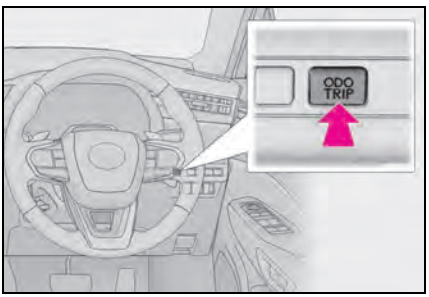
Displays the distance the vehicle has been driven since the meter was last reset. Trip meters A and B can be used to record and display different distances independently.

- Distance until next engine oil change

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

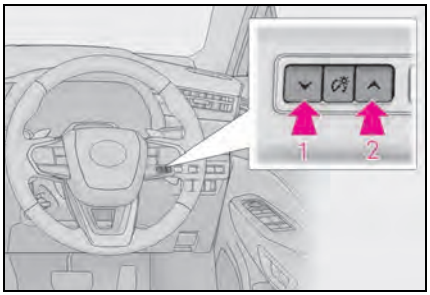
Changing the display

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



Adjusting the meter brightness

The meter brightness can be adjusted.



1 Darker

2 Brighter

Brightness of the meters (day mode and night mode)

The brightness of the meters is changed between day mode and night mode.

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

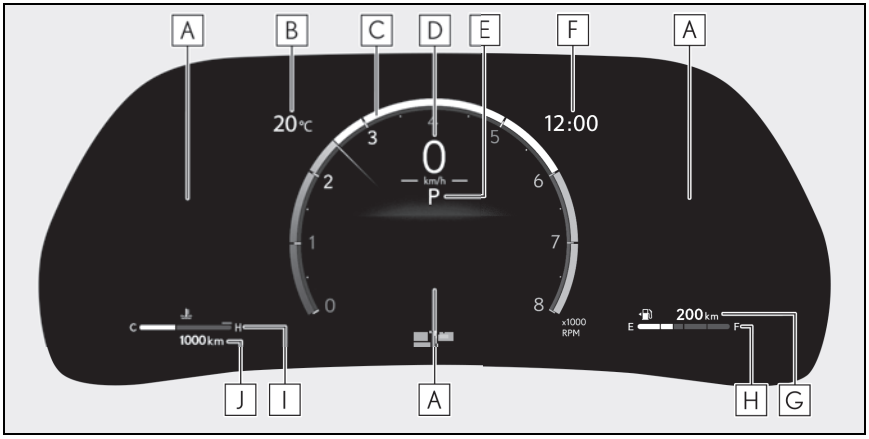
Gauges and meters (with 12.3-inch display)

Meter display

■ Locations of gauges and meters

The meter display type setting can be changed. (→P.476)

▶ Type 1/Type 3



A Multi-information display

Presents the driver with a variety of vehicle data (→P.90)
Displays warning messages if a malfunction occurs (→P.432)

B Outside temperature (→P.86)

C Analog meter (Type 1 only)

Depending on the selected drive mode or certain settings, the display will change. (→P.476)

Tachometer:

Displays the engine speed in revolutions per minute

Hybrid System Indicator:

Displays hybrid system output or regeneration level (→P.85)

D Digital speedometer

Displays the vehicle speed

E Shift position/shift range (→P.173)

F Clock

The GPS clock's time is automatically adjusted by utilizing GPS time information.

For details, refer to the “Multimedia Owner’s Manual”.

G Distance to empty

Displays the driving range with remaining fuel (→P.86)

H Fuel gauge

Displays the quantity of fuel remaining in the tank.

In the following situations, the actual quantity of fuel remaining in the tank may not be displayed correctly. Refer to P.86 if the actual quantity of fuel remaining in the tank is not displayed correctly.

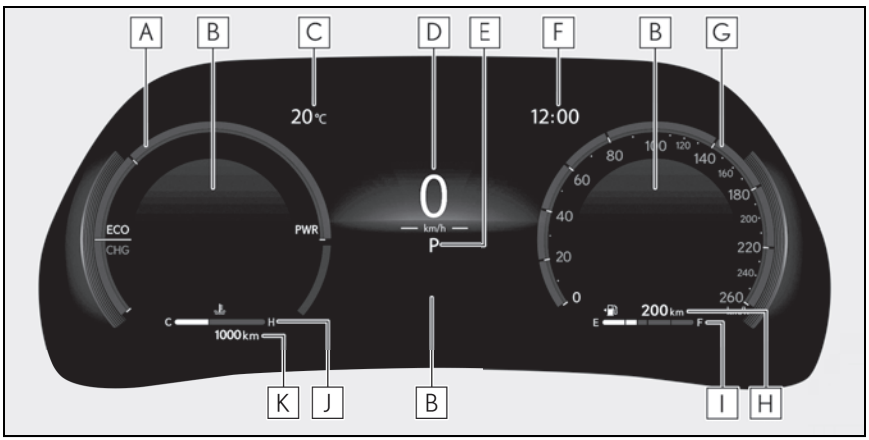
- A small amount of fuel is added.
- Fuel is added with the fuel gauge near or at “F”.
- The vehicle is stopped on an uneven surface, such as a slope.
- The vehicle is driven on a slope or around a curve.

I Engine coolant temperature gauge

Displays the engine coolant temperature

J Odometer and trip meter display (→P.82)

▶ Type 2



A Analog meter

Analog meter can be changed on the settings. (→P.476)

Tachometer:

Displays the engine speed in revolutions per minute

Hybrid System Indicator:

Displays hybrid system output or regeneration level (→P.85)

B Multi-information display

Presents the driver with a variety of vehicle data (→P.88)

Displays warning messages if a malfunction occurs (→P.432)

C Outside temperature (→P.86)

D Digital speedometer

Displays the vehicle speed

E Shift position/shift range (→P.173)

F Clock

The GPS clock's time is automatically adjusted by utilizing GPS time information.

For details, refer to the "Multimedia Owner's Manual".

G Analog speedometer

Displays the vehicle speed

H Distance to empty

Displays the driving range with remaining fuel (→P.86)

I Fuel gauge

Displays the quantity of fuel remaining in the tank.

In the following situations, the actual quantity of fuel remaining in the tank may not be displayed correctly. Refer to P.86 if the actual quantity of fuel remaining in the tank is not displayed correctly.

- A small amount of fuel is added.
- Fuel is added with the fuel gauge near or at "F".
- The vehicle is stopped on an uneven surface, such as a slope.
- The vehicle is driven on a slope or around a curve.

J Engine coolant temperature gauge

Displays the engine coolant temperature

K Odometer and trip meter display (→P.82)

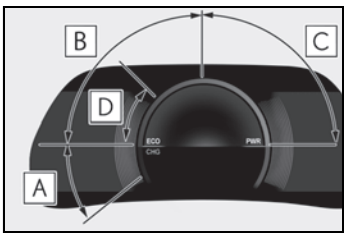
■ **The meters and display illuminate when**

The power switch is in ON.

■ **Engine speed**

On Hybrid Electric 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.

■ **Hybrid System Indicator**



A Charge area

Shows regeneration* status.

Regenerated energy will be used to charge

the hybrid battery (traction battery).

B Eco area

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

By keeping the bar display within Eco area, more Eco-friendly driving can be achieved.

C Power area

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

D 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.

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

In the following situation, the Hybrid System Indicator does not operate.

- "READY" indicator is not illuminated.
- The shift position is in other than D or S.

■ **Distance to empty**

- This distance is computed based on your average fuel consumption. As a result, the actual distance that can be driven may differ from that displayed.
- When only a small amount of fuel is added to the tank, the display may not be updated. When refueling, turn the power switch off. If the vehicle is refueled without turning the power switch off, the display may not be updated.
- When "Refuel" is displayed, the remaining fuel amount is low and the distance that can be driven with the remaining fuel cannot be calculated. Refuel immediately.

■ **Manually updating the fuel gauge and possible driving range**

The fuel gauge and the possible driving range are linked. If the displays of the fuel gauge and possible driving range do not update after adding a small amount of fuel, the displays can be updated by performing the following procedure.

1. Stop the vehicle on a level surface.
2. Press the "ODO TRIP" switch to change the odometer and trip meter display to odometer.
3. Turn the power switch off.
4. While pressing and holding the "ODO TRIP" switch, turn the power switch to ON.
5. Continue to hold the "ODO TRIP" switch for approximately 5 seconds, and then release it once the odometer begins flashing.

Updating is complete once the odometer flashes for approximately 5 seconds and then the display returns to normal.

■ **Outside temperature display**

- Displays the outside temperature within the range of -40°C (-40°F) to 60°C (140°F)
- When the outside temperature is approximately 3°C (37°F). or lower, the indicator will flash for approximately 10 seconds, then stay on.
- In the following situations, the correct outside temperature may not be displayed, or the display may take longer than normal to change:
  - When stopped, or driving at low speeds (less than 20 km/h [12 mph])
  - When the outside temperature has changed suddenly (at the entrance/exit of a garage, tunnel, etc.)
- When "--" or "E" is displayed, the system may be malfunctioning. Take your vehicle to your Lexus dealer.

■ **Liquid crystal display**

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.

Free/Open Source Software Information

This product contains Free/Open Source Software (FOSS). The license information and/or the source code of such FOSS can be found at the following URL.

https://www.denso.com/global/en/opensource/meter/toyota/

Customization

Some functions can be customized. (→P.476)

WARNING

The information display at low temperatures

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

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

NOTICE

To prevent damage to the engine and its components

- Do not let the indicator needle of the tachometer enter the red zone, which indicates the maximum engine speed.
- The engine may be overheating if the engine coolant temperature gauge is in the red zone (H); or "Engine Coolant Temp High Stop in a Safe Place See Owner's Manual" is shown on the multi-information display. In this case, immediately stop the vehicle in a safe place, and check the engine after it has cooled completely. (→P.462)

Odometer and trip meter display

Display items

- Odometer

Displays the total distance the vehicle has been driven.

- Trip meter A/trip meter B

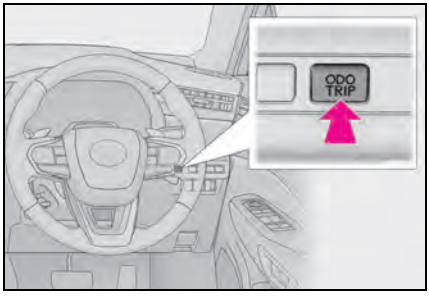
Displays the distance the vehicle has been driven since the meter was last reset. Trip meters A and B can be used to record and display different distances independently.

- Distance until next engine oil change

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

Changing the display

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

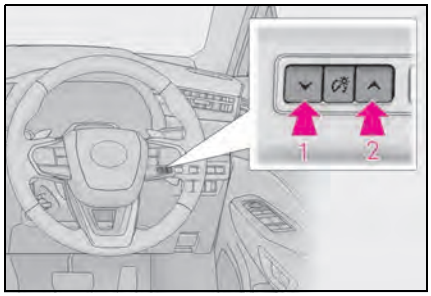


■ Pop-up display

Distance until the next engine oil change will be displayed when a warning message indicating that oil maintenance should be performed soon or is required is displayed.

Adjusting the meter brightness

The meter brightness can be adjusted.



1 Darker

2 Brighter

■ Brightness of the meter lights (day mode and night mode)

The brightness of the meter lights can be adjusted individually.

In the following situations, the meters changes between day mode and night mode.

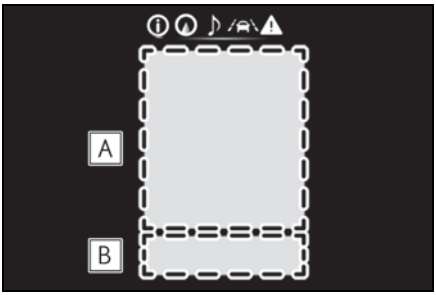
- Day mode: When the tail lights are off or when the tail lights are on but the surrounding area is bright
- Night mode: When the tail lights are on and the surrounding area is dark

Multi-information display (with 7-inch multi-information display)

Displayed contents summary

■ Display area

A variety of driving-related information can be displayed. Depending on the situation, warning or advice pop-up displays will also be displayed.



A Content display area

B Driving support system information display area

When a menu icon other than  is selected, if the driving support system operates, the system operating state will be displayed.

■ Menu icons

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

 Driving information display

 Navigation system-linked display


Audio system-linked display


Driving support system information display


Warning message

■ Items displayed in the content display area

By selecting menu icons on the multi-information display, the following items can be displayed.

- Driving information display (→P.99)
- Energy monitor (→P.100)
- G-force (→P.101)
- Blank (→P.102)
- Navigation system-linked display (→P.98)
- Audio system-linked display (→P.98)
- Driving support system information display (→P.98)

■ The multi-information display is displayed when

The power switch is in ON.

■ Liquid crystal display

→P.81

■ When changing driving mode

Background color of the multi-information display is changed following the selected driving mode. (→P.178)

WARNING

■ Caution for use while driving

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

■ The information display at low temperatures

→P.81

■ Cautions during setting up the display

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

NOTICE

■ While setting up the display

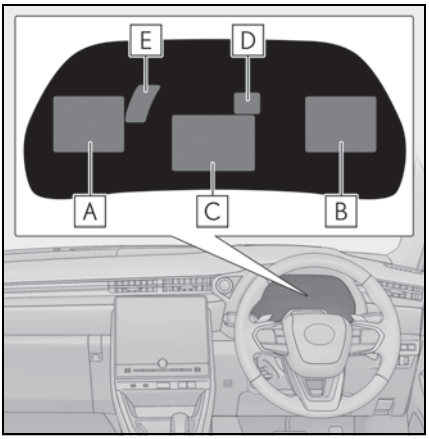
To prevent 12-volt battery discharge, ensure that the hybrid system is operating while setting up the display features.

Multi-information display (with 12.3-inch multi-information display)

The multi-information display is used to display fuel efficiency related information and various types of driving-related information. The multi-information display can also be used to change the display settings and other settings.

Display contents

Following information is displayed in each area on the multi-information display.



A Content display area (left)

B Content display area (right)

C Content display area (center)

D Driving support system information display area

When driving support system information is displayed on the content display area, the system operating state will not be displayed in this area.

E RSA (Road Sign Assist) display area (→P.234)

■ **Content display area (center)**

- Blank (→P.102)
- Driving support system information display (→P.98)
- Map display (if equipped) (→P.98)

■ **Content display area (left/right)**

- Blank (→P.102)
- Fuel Economy (→P.98)
- EV Driving Ratio (→P.98)
- Driving support system information display (→P.98)
- Navigation system-linked information display (→P.98)
- Audio system-linked display (→P.98)
- Drive information display (→P.99)
- Energy monitor (→P.100)
- G-force (→P.101)

■ **The multi-information display is displayed when**

The power switch is in ON.

■ **Liquid crystal display**

→P.86

■ **When changing driving mode**

Background color of the multi-information display is changed following the selected driving mode. (→P.178)

WARNING

■ Caution for use while driving

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

■ The information display at low temperatures

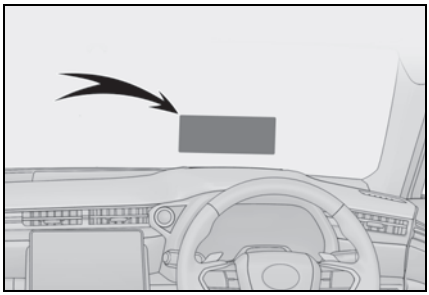
→P.87

Head-up display*

*: If equipped

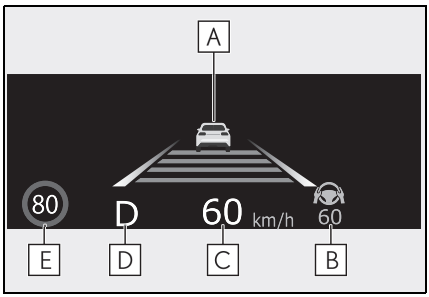
The head-up display projects a variety of driving-related information and the operating state of the driving support systems on the windshield.

Head-up display



The meter display type setting of head-up display can be changed. (→P.93)
The content displayed will differ according to the driving conditions and display mode of the head-up display. Depending on the situation, pop-up displays will also be displayed.

■ Full



Illustrations used in this text are intended as examples, and may differ from the

image that is actually displayed by the head-up display.

A Driving support system information display area (→P.98)/Navigation system-linked display area/Hybrid system Indicator or Tachometer display area (→P.94)

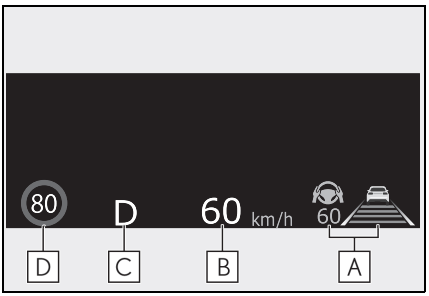
B Driving support system information display area (→P.98)

C Speedometer

D Shift position/shift range (→P.173)

E RSA (Road Sign Assist) display (→P.234)

■ Standard



Illustrations used in this text are intended as examples, and may differ from the image that is actually displayed by the head-up display.

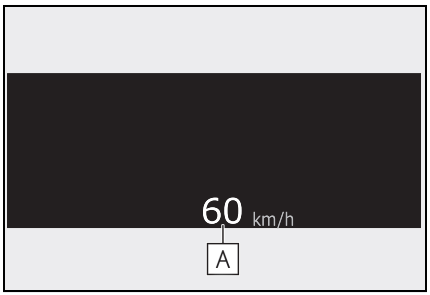
A Driving support system information display area (→P.98)

B Speedometer

C Shift position/shift range (→P.173)

D RSA (Road Sign Assist) display (→P.234)

■ Minimum



A Speedometer

■ Head-up display will operate when

The power switch is in ON.

■ When using the head-up display

The head-up display may seem dark or hard to see when viewed through sunglasses, especially polarized sunglasses. Adjust the brightness of the head-up display or remove your sunglasses.

■ Street name display

Only street names which are included in the map data will be displayed.

WARNING

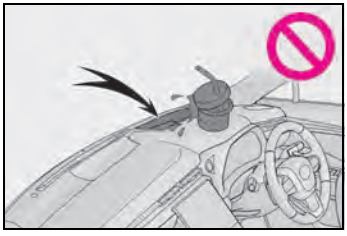
■ When using the head-up display

- Check that the position and brightness of the head-up display image does not interfere with safe driving. Incorrect adjustment of the image's position or brightness may obstruct the driver's view and lead to an accident, resulting in death or serious injury.
- Do not continuously look at the head-up display while driving as you may fail to see pedestrians, objects on the road, etc. ahead of the vehicle.

NOTICE

■ Head-up display projector

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



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

Using the head-up display

■ Changing settings of the head-up display

1 Select ⚙ on the Center Display.

2 Select "Vehicle customise".

3 Select "Head up display".

The following settings can be changed.

- Enabling/disabling the head-up display

Select to enabling/disabling the head-up display.

- Head-up display type

Select to change head-up display type. (→P.91)

- Brightness and vertical position of the head-up display

Select to adjust the brightness or vertical position of the head-up display.

- Display angle

Select to adjust the angle of the head-up display.

■ Changing settings with the steering wheel switches (vehicles with a head-up display)

If any of the following items have been set as a favorite steering wheel switch function, settings of the head-up display can be changed using the steering wheel switches.

- ON/OFF: Display on/off
- MODE: Display mode
- / : Height
- / : Brightness

■ Enabling/disabling of the head-up display

If the head-up display is disabled, it will remain disabled when the power switch is turned off then back to ON.

■ Display brightness

In addition to the brightness setting, the brightness of the display will change automatically according to the ambient brightness.

■ Head-up display automatic position adjustment (if equipped)

If the display position is recorded into memory, the head-up display will be automatically adjusted to the desired position. (→P.146)

■ When the 12-volt battery is disconnected

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

WARNING

■ Caution for changing settings of the head-up display

As the hybrid system needs to be operating while changing the settings of the head-up display, ensure that the vehicle is parked in a place with adequate ventilation. In a closed area such as a garage, exhaust gases including harmful carbon monoxide (CO) may collect and enter the vehicle. This may lead to death or a serious health hazard.

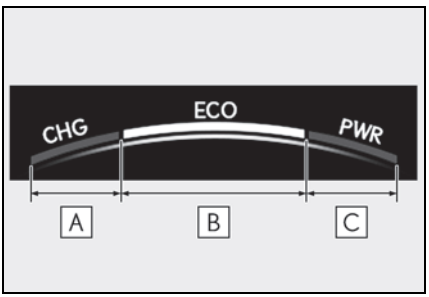
NOTICE

■ When changing the settings of the head-up display

To prevent 12-volt battery discharge, ensure that the hybrid system is operating while changing the settings of the head-up display.

Hybrid System Indicator/tachometer display area

■ Hybrid System Indicator



A Charge area

B Eco area

C Power area

Displays hybrid system output or regeneration level. For details, refer to P.85

■ Tachometer

Displays the engine speed in revolutions per minute.

■ Hybrid System Indicator or tachometer is displayed when

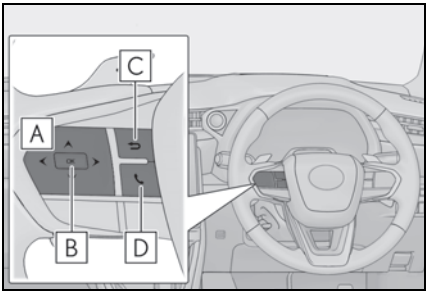
● Hybrid System Indicator is displayed when all of the following conditions are met:
- When LTA (Lane Tracing Assist), LDA (Lane Departure Alert) and dynamic radar cruise control is turned off. (→P.98) are off.
- Full mode (→P.91) is selected as head-up display type.
- When Eco driving mode is selected.

● Tachometer is displayed when all of the following conditions are met:
- When LTA (Lane Tracing Assist), LDA (Lane Departure Alert) and dynamic radar cruise control is turned off.
- Full mode (→P.91) is selected as head-up display type.
- When other than Eco driving mode is selected.

Displayed content

Components/Operations

▶ Vehicles without a head-up display



A ＜ / ＞ : Change the screen and move the cursor

∧ / ∨ : Change the displayed content and scroll up/down the screen

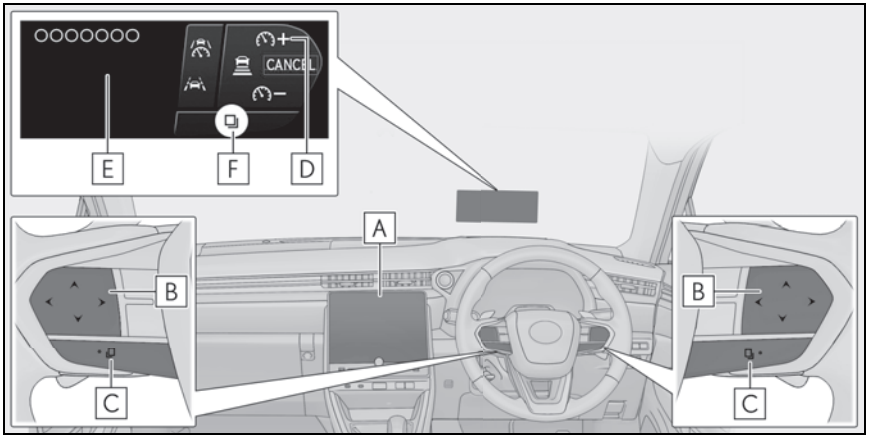
B Press: Enter/Set
Press and hold: Reset/Display customizable items, display the cursor

C Return to the previous screen

D Call sending/receiving and history display

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

▶ Vehicles with a head-up display



A Center Display

B Steering switch

The function of each switch differs depending on the conditions and settings.

When a switch is touched, the function of each switch is displayed on the head-up display. If

the head-up display is off, or when it is not possible to display content on the head-up display, the functions will be displayed on the multi-information display.

Also, preferred functions for each switch can be set on the Center Display.

C Switch function change switch

Each time this switch is pressed, the functions will change.

Press and hold this switch to disappear displayed warning messages.

D Switch icon display

The icon of each switch will be displayed. The touched switch will be highlighted. (F)

E Switch function guide display

The function guide for the touched switch will be displayed.

■ **If the steering wheel switches do not respond when touched (vehicles with a head-up display)**

- It is easier to make the steering wheel switches respond by moving your thumb while touching them.
- If the surface of a steering wheel switch is dirty, turn the power switch off and then clean the switches.
- By turning winter glove mode on, the sensitivity of the switch sensors can be increased. (→P.478)

■ **Switching with the steering wheel switches (vehicles with a head-up display)**

If 〈DISP/DISP〉 is set as a favorite steering wheel switch function, the display can be switched by pushing 〈DISP or DISP〉.

Display of drive information

Driving related information is displayed on the following displays.

- Multi-information display
- Head-up display (If equipped)
- Center Display

The items displayed will differ depending on the display.

Switching the display of the multi-information display (with 12.3-inch display)

■ **Changing the meter display type setting**

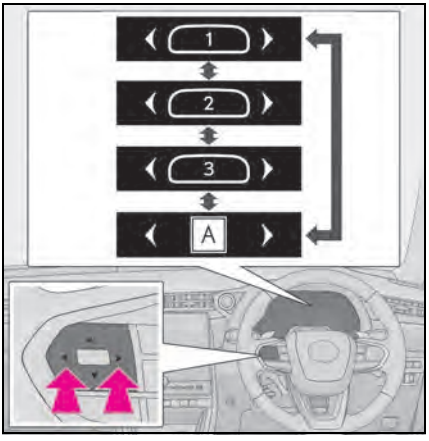
The meter display type setting can be changed on the ⚙ screen of the Center Display. (→P.476)

■ **Changing the screen**

Select items from the combination of 3 screens to display on each 3 content display areas.

▶ Vehicles without head-up display

Press < or > of the meter control switches to change the screen.



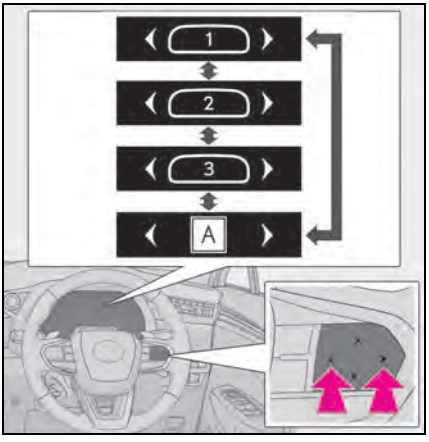
A Warning message

Select to display a warning message.

If there is no warning messages, this page will not be displayed. (→P.104)

▶ Vehicles with head-up display

Press and hold ❮DISP or DISP❯ of the steering switches to change the screen.



A Warning message

Select to display a warning message.

If there is no warning messages, this page will not be displayed. (→P.104)

■ Changing the display contents

Switches items displayed on each contents display area (left/center/right).

▶ Vehicles without a head-up display

1 Press < or > to select the screen.

2 Press and hold OK to display the cursor on the content display area (center).

3 Press < or > to move the cursor and select the content display area.

4 Press ∧ or ∨ to select the items.

▶ Vehicles with a head-up display

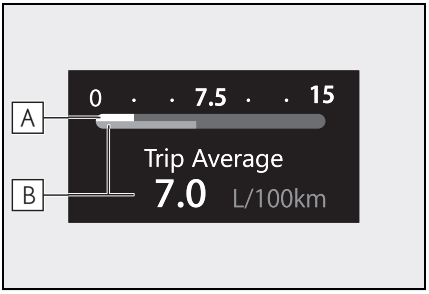
1 Press ❮DISP or DISP❯ to select the screen.

2 Press and hold ❮DISP or DISP❯ to display the cursor on the content display area (center).

3 Press ❮DISP or DISP❯ to move the cursor and select the content display area.

4 Press steering switch (up/down) to select the items.

Fuel Economy (vehicles with 12.3-inch display)



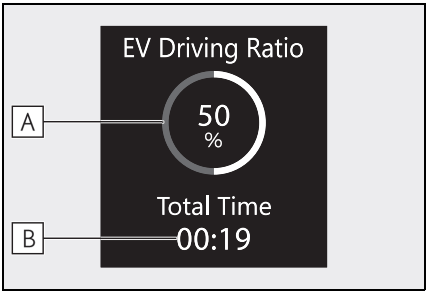
A Current fuel economy

Displays the driving range with remaining fuel.

B Average fuel economy after reset*

*: Use the displayed fuel consumption as a reference only.

EV Driving Ratio (vehicles with 12.3-inch display)



A EV driving ratio after starting

Displays the percentage of EV driving since the hybrid system was started.*

B Elapsed time after starting

Displays the elapsed time since hybrid system was started.*

*: It is reset each time the hybrid system stops.

Driving support system information display

The operating state of the following systems can be displayed on the multi-information display or head-up display (if equipped).

- LTA (Lane Tracing Assist) (→P.224)
- LDA (Lane Departure Alert) (→P.229)
- Dynamic radar cruise control (→P.236)
- Cruise control (→P.248)

Map display (if equipped)

Displays the map data according to the navigation system.

Navigation system-linked display

The following information is displayed on the multi-information display.

- Route guidance to destination
- Street name
- Compass

Audio system-linked display

The operating conditions of the audio system can be displayed on the multi-information display.

Driving information display

The following items can be displayed on the multi-information display.

Use the displayed information as a reference only.

▶ Vehicles with 7-inch display

● Drive information 1

• Current fuel consumption

Displays instantaneous current fuel consumption

• Average fuel consumption

● Drive information 2

• Average vehicle speed

• Total driving time

● Drive information 3

• Distance to empty

Displays the driving range with remaining fuel.

• Average fuel economy since starting

Displays the average fuel consumption since starting.

▶ Vehicles with 12.3-inch display

● "Average Speed": Displays the average vehicle speed since display was reset

● "Total Time": Displays elapsed time since display was reset

■ Distance to empty

● This distance is computed based on your average fuel consumption. As a result, the actual distance that can be driven may differ from that displayed.

● When only a small amount of fuel is added to the tank, the display may not be updated. When refueling, turn the power switch off. If the vehicle is refueled without turning the power switch off, the display may not be updated.

AWD operation status display (AWD models)

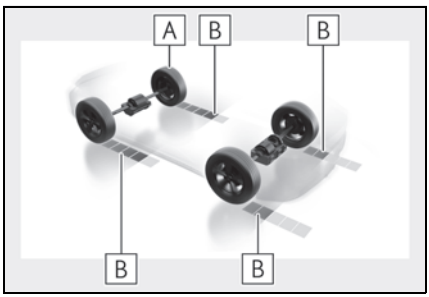
AWD operation status display can be displayed on the Center Display.

■ Displaying AWD operation status display on the Center Display

1 Select on the main menu.

2 Select "All wheel drive".

■ AWD operation status



A Front tire direction display

Displays the operation amount and direction of the steering wheel via changes to the front tires on the display.

B Torque distribution display

Displays the drive status of each wheel in 6 steps from 0 to 5.

The illustration used is intended as an example, and may differ from the image that is actually displayed on the Center Display.

Tire pressure

The tire pressure detected by the tire

pressure warning system can be displayed on the Center Display.

■ **Displaying the tire pressure on the Center Display**

1 Select on the main menu.

2 Select “Tire pressure”.

■ **Tire inflation pressure**

→P.388

Energy monitor

The energy monitor can be used to check the vehicle drive status, hybrid system operation status and energy regeneration status on the Center Display.

■ **Displaying Energy monitor screen on the Center Display**

Touch on the main menu, then touch “Energy flow” on the sub menu.

For detail regarding the Center Display refer to “Multimedia Owner’s Manual”.

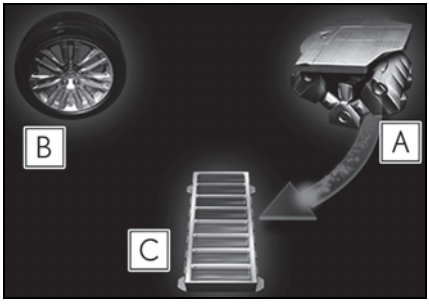
■ **Reading the display**

The arrows will appear in accordance with the energy flow. When there is no energy flow, arrows will not be displayed.

▶ Multi-information display (vehicles with 7-inch display)

The color of the arrows will change as follows

- Blue: When the hybrid battery (traction battery) is regenerated or charged.
- Orange: When the hybrid battery (traction battery) is in use.
- Red: When the gasoline engine is in use.



A Gasoline engine

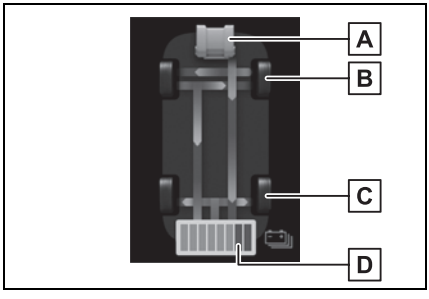
B Tires

C Hybrid battery (traction battery)

▶ Multi-information display (vehicles with 12.3-inch display)

The color of the arrows will change as follows

- Blue: When the hybrid battery (traction battery) is regenerated or charged.
- Orange: When the hybrid battery (traction battery) is in use.
- Red: When the gasoline engine is in use.



A Gasoline engine

B Front tires

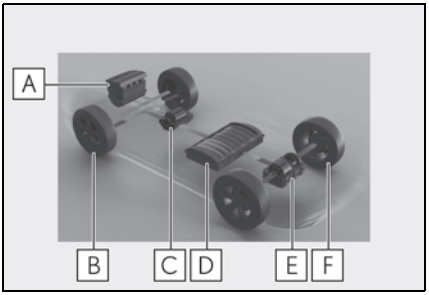
C Rear tires

D Hybrid battery (traction battery)

▶ Center Display

The color of the arrows will change as follows

- Blue: When the hybrid battery (traction battery) is regenerated or charged.
- Green: When the hybrid battery (traction battery) is in use.
- Purple: When the gasoline engine is in use.



The image shows all the arrows as an example. The actual display will vary depending on conditions.

A Gasoline engine

B Front tires

C Front electric motor (traction motor)

D Hybrid battery (traction battery)

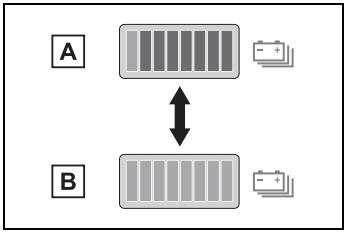
E Rear electric motor (traction motor) (if equipped)

F Rear tires

■ **Hybrid battery (traction battery) status**

The display changes in 8 levels according to the remaining charge amount of the hybrid battery (traction battery).

- The figure shows the multi-information display as an example for explanation.
- These images are examples only, and may vary slightly from actual conditions.



A Low

B High

■ **Remaining charge amount warning of hybrid battery (traction battery)**

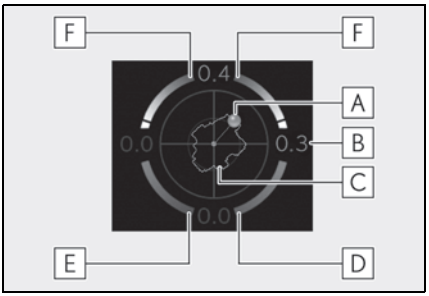
- The buzzer sounds intermittently when the hybrid battery (traction battery) remains without charging while the shift position is in N, or the remaining charge amount drops below a certain level. If the remaining charge amount drops further, the buzzer sounds continuously.
- When a warning message is shown on the multi-information display and the buzzer sounds, follow the instructions displayed on the screen to perform troubleshooting.

G-force

Displays lateral G-forces on the vehicle on the multi-information display.

Displays around the periphery of the G-force display, the left and right steering amount, accelerator pedal input, and brake fluid pressure.

▶ With 7-inch multi-information display



A Acceleration G-force on the vehicle

B Current G-force value (analyzed value of front/rear and left/right G-forces)

C Record of the maximum G-forces

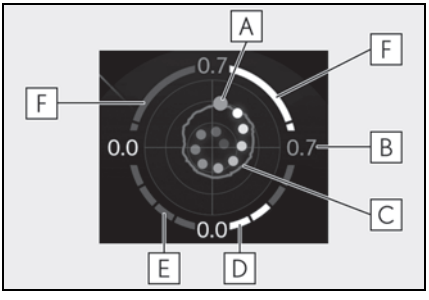
D Accelerator pedal input

E Brake fluid pressure

F Steering amount

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

▶ With 12.3-inch multi-information display



A Acceleration G-force on the vehicle

B Current G-force value (analyzed value of front/rear and left/right G-forces)

C Record of the maximum G-forces

D Accelerator pedal input

E Brake fluid pressure

F Steering amount

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

● Resetting the record of maximum G-forces

The display is reset each time the hybrid system is started.

● Peak hold function

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

■ G-force display

- The G-force values may not be zero even when the vehicle is parked, such as when it is parked on an incline.
- Depending on the vehicle usage conditions, the brake fluid pressure display may not reach its maximum reading even though the brake pedal is fully depressed.
- If a 12-volt battery terminal is disconnected and reconnected, the steering amount display may be disabled temporarily. After driving the vehicle for a while, the display will be enabled.

Blank (No items)

Displays no drive information contents

on the multi-information display.

Current fuel consumption/history screen

Fuel consumption information can be displayed on the Center Display.

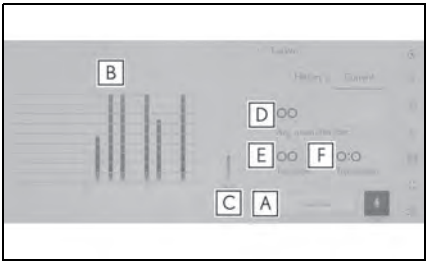
■ Displaying fuel consumption/history screen on the Center Display

1 Select on the main menu.

2 Select "Trip information".

3 Select "Current" or "History".

■ Current fuel consumption screen



A Resetting the history data

B Fuel consumption in the past 15 minutes

C Current fuel consumption

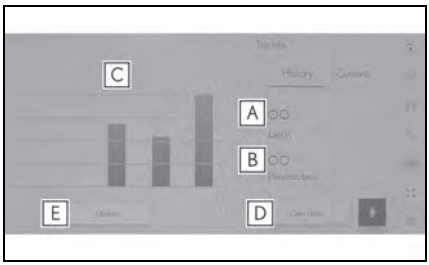
D Average vehicle speed since the hybrid system was started.

E Trip range

F Elapsed time since the hybrid system was started.

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

■ History fuel consumption screen



A Latest fuel consumption

B Best recorded fuel consumption

C Previous fuel consumption record

D Resetting the history data

E Updating the latest fuel consumption data

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

■ Updating the history data

Update the latest fuel consumption by selecting "Update" to measure the current fuel consumption again.

■ Resetting the data

The fuel consumption data can be deleted by selecting "Clear data".

■ Trip 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.

Pop-up display information

Pop-up displays will be displayed on

the multi-information display or the head-up display (if equipped) when necessary.

When a pop-up display is displayed, a current display may no longer be displayed. In this case, the display will return after the pop-up display disappears.

■ **Driving support systems**

Displays a warning/suggestion/advice message or the operating state of a relevant system.

- Dynamic radar cruise control
- Cruise control
- LTA (Lane Tracing Assist)
- LDA (Lane Departure Alert)
- PCS (Pre-Collision System)
- RSA (Road Sign Assist)
- Safe Exit Assist
- Emergency Driving Stop System

■ **Warning message**

Some warning messages are displayed when necessary, according to certain conditions.

Vehicles with 12.3-inch display: Warning messages are disappeared by pressing and holding switch function change switch. (→P.95)

■ **Hands-free system status**

Displayed when the hands-free system is operated.

■ **Suggestion function**

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

- Suggestion to enable the power back door

If the power back door system is disabled (setting on the Center Display set to off) and the power back door switch on the instrument panel is operated, a suggestion message will be displayed asking if you wish to enable the power back door system.

- Suggestion to turn off the headlights

If the headlights are left on for a certain amount of time after the power switch has been turned off, a suggestion message will be displayed.

- Suggestion to close the power windows (linked to windshield wiper operation)

If the windshield wipers are operated with a power window open, a suggestion message will be displayed asking if you wish to close the power windows.

To close all of the power windows, select "Yes".

- Suggestion to close the power windows (Driving at high speeds)

If the vehicle speed exceeds a certain speed with a power window open, a suggestion message will be displayed asking if you wish to close the power windows.

To close all of the power windows, select "Yes".

■ **Steering wheel switch operation display**

▶ Vehicles without a head-up display

Displayed when an audio remote control switch or a talk switch on the steering wheel is operated.

▶ Vehicles with a head-up display

When a steering wheel switch is touched, the icon of each switch and a function guide is displayed.

■ **Navigation system-linked information**

Depending on the situation, navigation system-linked route guidance to destination may be displayed.

Items displayed when the power switch is turned off

The following items will be displayed on the multi-information display when the power switch is turned off.

- Distance driven since starting*
- Driving time since starting*
- EV driving ratio since starting*
- Average fuel consumption since starting*

*: It is reset each time the hybrid system stops.

3-1. Key information

Keys 108

3-2. Opening, closing and locking the doors

Side doors 111

Back door 116

Smart entry & start system 127

3-3. Adjusting the seats

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3-4. Adjusting the steering wheel and mirrors

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Inside rear view mirror 139

Outside rear view mirrors 140

3-5. Opening, closing the windows

Power windows 143

3-6. Favorite settings

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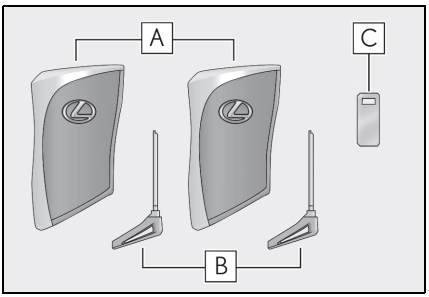
Keys

Key types

The following keys are provided with the vehicle.



A Electronic keys
- Operating the smart entry & start system (→P.127)
- Operating the wireless remote control function (→P.109)

B Mechanical keys

C 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.

■ Electronic key battery depletion

- The standard battery life is 1 to 2 years.
- If the battery becomes low, an alarm will sound in the cabin and a message will be displayed on the multi-information display when the hybrid system stops.
- To reduce key battery depletion when the electronic key is to not be used for long periods of time, set the electronic key to the battery-saving mode. (→P.128)
- As the electronic key always receives radio waves, the battery will become depleted even if the electronic key is not used. The following symptoms indicate that the electronic key battery may be depleted. Replace the battery when necessary.
  - The smart entry & start system or the wireless remote control does not operate.
  - The detection area becomes smaller.
  - The LED indicator on the key surface does not turn on.
- You can replace the battery by yourself (→P.409). However, as there is a danger that the electronic key may be damaged, it is recommended that replacement is carried out by your Lexus dealer.
- To avoid serious deterioration, do not leave the electronic key within 1 m (3 ft.) of the following electrical appliances that produce a magnetic field:
  - TVs
  - Personal computers
  - Cellular phones, cordless phones and battery chargers
  - Recharging cellular phones or cordless phones
  - Table lamps
  - Induction cookers
- If the electronic key is near the vehicle for longer than necessary, even if the smart entry & start system is not operated, the key battery may become depleted faster than normal. When not operating the smart entry & start system, it is recommended to not stay with the electronic key near the vehicle longer than necessary.

■ If a message regarding the state of the electronic key or power switch mode, etc. is shown

To prevent trapping the electronic key inside the vehicle, leaving the vehicle carrying the electronic key on your person without turning the power switch to OFF or

other passengers from unintentionally taking the key out of the vehicle, etc., a message that prompts the user to confirm the state of the electronic key or power switch mode may be shown on the multi-information display. In those cases, follow the instructions on the display immediately.

■ **If "Key Battery Low Replace Key Battery" is displayed on the multi-information display**

The electronic key has a low battery. Replace the electronic key battery. (→P.409)

■ **Replacing the battery**

→P.409

■ **Confirmation of the registered key number**

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

■ **If "A New Key has been Registered Contact Your Dealer for Details" is displayed on the multi-information display**

This message will be displayed each time the driver's door is opened when the doors are unlocked from the outside for approximately 10 days after a new electronic key has been registered. If this message is displayed but you have not had a new electronic key registered, ask your Lexus dealer to check if an unknown electronic key (other than those in your possession) has been registered.

NOTICE

■ **To prevent key damage**

- Do not drop the keys, subject them to strong shocks or bend them.
- Do not expose the keys to high temperatures for long periods of time.
- Do not get the keys wet or wash them in an ultrasonic washer, etc.
- Do not attach metallic or magnetic materials to the keys or place the keys close to such materials.
- Do not disassemble the keys.
- Do not attach a sticker or anything else to the surface of the electronic key.
- Do not place the keys near objects that produce magnetic fields, such as TVs, audio systems and induction cookers.
- Do not place the keys near medical electrical equipment such as low-frequency therapy equipment or microwave therapy equipment, and do not receive medical attention with the keys on your person.

■ **Carrying the electronic key on your person**

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

■ **In case of a smart entry & start system malfunction or other key-related problems**

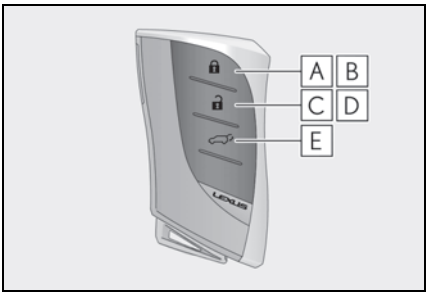
→P.452

■ **When an electronic key is lost**

→P.451

Wireless remote control

The electronic keys are equipped with the following wireless remote control:



A Locks all the doors (→P.111)

B Closes the windows *1 (→P.111)

C Unlocks all the doors (→P.111)

D Opens the windows *1 (→P.111)

E Opens and closes the power back door *2 (→P.119)

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

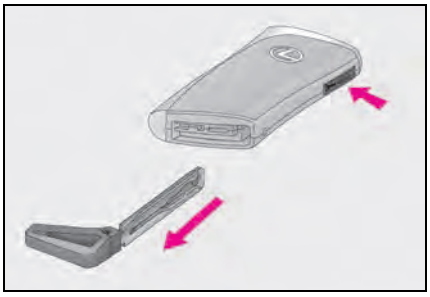
*2: If equipped

Using the mechanical key

To take out the mechanical key, push the release button and take the key out.

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

After using the mechanical key, store it in the electronic key. Carry the mechanical key together with the electronic key. If the electronic key battery is depleted or the entry function does not operate properly, you will need the mechanical key. (→P.452)



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

Lock the glove box (→P.347) as necessary.
Remove the mechanical key for your own use and provide the attendant with the electronic key only.

If you lose your mechanical keys

→P.451

If a wrong key is used

The key cylinder rotates freely to isolate inside mechanism.

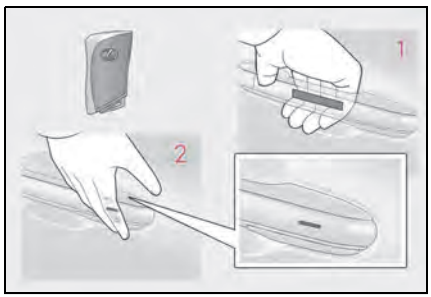
Side doors

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

Unlocking and locking the doors from the outside

■ Smart entry & start system (vehicles with entry function)

Carry the electronic key to enable this function.



1 Grip the handle to unlock all the doors.*

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

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

*: The door unlock settings can be changed.

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

Check that the door is securely locked.

■ Wireless remote control



1 Locks all the doors

Check that the door is securely locked.

Press and hold to close the windows.*

2 Unlocks all the doors

Press and hold to open the windows.*

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

■ Switching the door unlock function (vehicles with entry function)

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

1 Turn the power switch off.

2 When the indicator light on the key surface is not on, press and hold or for approximately 5 seconds while pressing and holding .

The setting changes each time an operation is performed, as shown below. (When changing the setting continuously, release the buttons, wait for at least 5 seconds, and repeat step **2**.)

Multi-information display	Unlocking function
 Exterior: Beeps 3 times	Holding the driver's door handle unlocks only the driver's door.
	Holding the front passenger door handle unlocks all the doors.
 Exterior: Beeps twice	Holding a front door handle unlocks all the doors.

To prevent unintended triggering of the alarm, unlock the doors using the wireless remote control and open and close a door once after the settings have been changed. (If a door is not opened within 30 seconds after is pressed, the doors will be locked again and the alarm will automatically be set.)

In a case that the alarm is triggered, immediately stop the alarm. (→P.67)

■ **Impact detection door lock release system**

If the vehicle is involved in a severe frontal or rear collision, manual release handle operation will be enabled for all of the doors. Depending on the force of the impact or the type of accident, however, the system may not operate.

■ **Operation signals**

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

A buzzer sounds to indicate that the windows are operating.

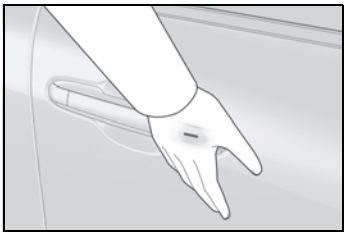
■ **Security feature**

If a door is not opened within approximately 30 seconds after the vehicle is unlocked, the security feature automatically locks the vehicle again.

■ **When the door cannot be locked by the lock sensor on the surface of the door handle (vehicles with entry function)**

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

When gloves are being worn, remove the gloves.



■ **Open door warning buzzer**

If an attempt to lock the doors is made when a door is not fully closed, a buzzer sounds continuously for 5 seconds. Fully close the door to stop the buzzer, and lock the vehicle once more.

■ **If a symbol indicating one or more doors are open is shown on the multi-information display**

The hood or one or more of the doors are not fully closed. The system also indicates which doors are not fully closed. If the vehicle reaches a speed of 5 km/h (3 mph), a buzzer sounds to indicate that the door(s) are not yet fully closed. Make sure that the hood and all the doors are closed.

■ **Setting the alarm**

Locking the doors will set the alarm system. (→P.67)

■ **Conditions affecting the operation of the smart entry & start system or wireless remote control**

→P.129

■ **If the smart entry & start system or the wireless remote control does not operate properly**

- Use the mechanical key to lock and unlock the doors. (→P.452)
- Replace the key battery with a new one if it is depleted. (→P.409)

■ **If the 12-volt battery is discharged**

The doors cannot be locked and unlocked using the smart entry & start system or wireless remote control. Lock or unlock the doors using the mechanical key. (→P.452)

■ **Passenger and rear seat reminder function**

As the first reminder so as not to forget luggage, etc. in the front passenger seat or a rear seat, when the power switch is turned off after any of the following conditions are met, a buzzer will sound and a message will be displayed on the multi-information display for approximately 6 seconds.

Also, as the second reminder, when the doors are locked, a buzzer will sound and the emergency flashers will flash for a few seconds, and a message will be displayed on the multi-information display

- The hybrid system is started within approximately 15 minutes after opening and closing a rear door or the front passenger's door.
- A rear door or the front passenger's door has been opened and closed after the hybrid system was started.

The second reminder will not be activated if a rear door or the front passenger door was opened before the doors are locked.

When this function is disabled by following the message displayed on the meters, the passenger and rear seat reminder will be off.

This function will be re-enabled when the hybrid system is turned on.

However, if a front passenger door and rear door is opened and then closed within approximately 2 seconds, the passenger and rear seat reminder function may not operate.

The passenger and rear seat reminder function determines that luggage, etc. has been placed in the front passenger seat or a rear seat based on opening and closing of the front passenger door or a rear door. Therefore, depending on the situation, the passenger and rear seat reminder function may not operate and you may still forget luggage, etc. in the front passenger seat or a rear seat, or it may operate unnecessarily.

■ **Customization**

Settings (e.g. unlocking function using a key) can be changed.
(Customizable features: →P.476)

WARNING

■ **To prevent an accident**

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

- Ensure that all doors are properly closed and locked.
- Do not press the door opener switch of the doors while driving.
  Be especially careful for the driver's door, as the doors may be opened even if the inside lock buttons are in locked position.
- Set the rear door child-protector locks when children are seated in the rear seats.

■ **When opening or closing a door**

When closing a door, swing it closed with slight force applied to it. If you press on the door by hand to close it, it may not be closed completely.

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

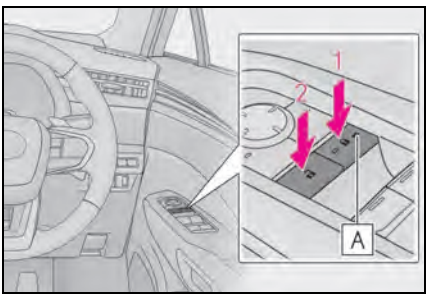
WARNING

■ When using the wireless remote control and operating the power windows

Operate the power window after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the window. Also, do not allow children to operate the wireless remote control. It is possible for children and other passengers to get caught in the power window.

Unlocking and locking the doors from the inside

■ Door lock switches (to lock/unlock)



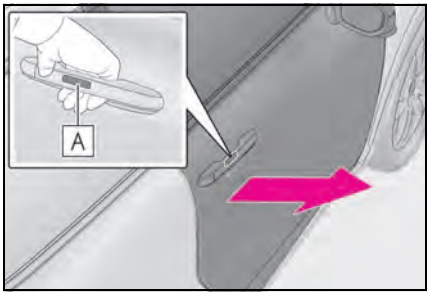
1 Front doors: Locks all the doors
Rear doors: Locks the doors

The indicator A comes on.

2 Front doors: Unlocks all the doors
Rear doors: Unlocks the doors

The indicator A turns off.

Opening the doors from outside the vehicle



Press the door opener switch A of the door handle to open the door.

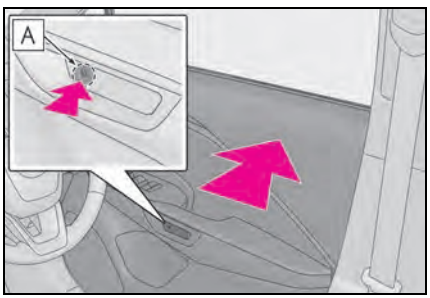
Make sure to securely press the door opener switch A on the inner side of the door handle

■ If the 12-volt vehicle battery is discharged

The doors cannot be locked or unlocked using the smart entry & start system or wireless remote control, and the door opener switches will not operate.

Use the mechanical key to enable/disable manual release handle operation. By enabling manual release handle operation, the door can be opened. (→P.454)

Opening the doors from inside the vehicle



Press the front side of the door opener switch [A] to open the door.

Driver's door: The door will open even if it is locked.

When the door is unlocked, the door lock indicator will turn off.

■ **Inside door opener switch operating conditions**

When any of the following conditions are met:

- The vehicle speed is less than 4 km/h (2.5 mph) and the parking brake is engaged
- The vehicle speed is less than 4 km/h (2.5 mph) and the brake pedal is depressed
- The shift position is in P

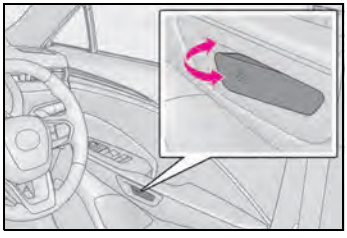
■ **When opening a door from inside the vehicle**

If the door is not fully unlatched, press the door opener switch twice to open the door.

■ **Manual release handles inside the vehicle**

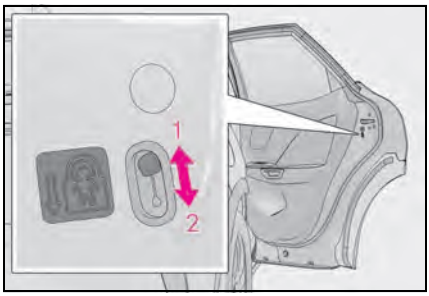
The door opener switches inside the vehicle can also be used to manually open the doors.

A door can be opened through electronic operation by pressing the door opener switch, or it can be opened using the door opener switch as a manual release handle and pulling it twice.



Rear door child-protector lock

The door cannot be opened from inside the vehicle when the lock is set.



1 Unlock

2 Lock

These locks can be set to prevent children from opening the rear doors. Push down on each rear door switch to lock both rear doors.

Automatic door locking and unlocking systems

The following functions can be set or canceled:

For instructions on customizing, refer to P.476.

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

Function	Operation
Shift position linked door unlocking function	All doors are automatically unlocked when shifting the shift position to P.
Driver's door linked door unlocking function	All doors are automatically unlocked when driver's door is opened within approximately 45 seconds after turning the power switch off.

Back door

The back door can be locked/unlocked and opened/closed by the following procedures.

WARNING

Observe the following precautions.

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

■ Before driving the vehicle

Before driving the vehicle, make sure that the back door is fully closed. If the back door is not fully closed, it may open unexpectedly while driving, causing an accident.

■ Caution while driving

- Keep the back door closed while driving.
  If the back door is left open, it may hit nearby objects while driving or luggage may be unexpectedly thrown out, causing an accident.
  In addition, exhaust gases may enter the vehicle, causing death or a serious health hazard. Make sure to close the back door before driving.
- Never let anyone sit in the luggage compartment. In the event of sudden braking, sudden swerving or a collision, they are susceptible to death or serious injury.

■ When children are in the vehicle

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

- Do not allow children to play in the luggage compartment.
  If a child is accidentally locked in the luggage compartment, they could have heat exhaustion or other injuries.

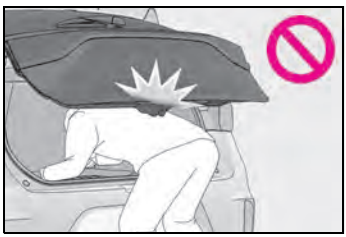
WARNING

- Do not allow a child to open or close the back door.
  Doing so may cause the back door to move unexpectedly, or cause the child's hands, arms, head, or neck to be caught by the closing back door.

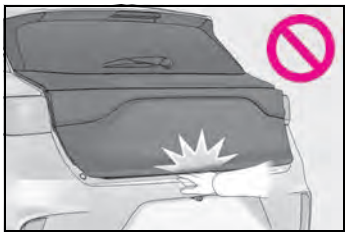
Operating the back door

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

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



- Vehicles with power back door: The back door may suddenly shut if it is not opened fully, while on a steep incline. Make sure that the back door is secured before using the luggage compartment.
- When closing the back door, take extra care to prevent your fingers, etc., from being caught.

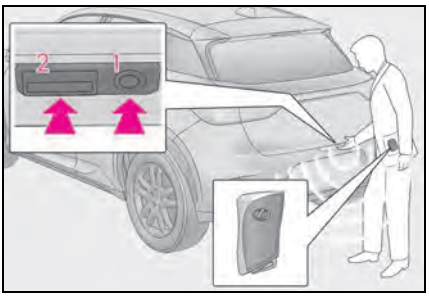


- When closing the back door, make sure to press it lightly on its outer surface. If the back door handle is used to fully close the back door, it may result in hands or arms being caught.
- Do not pull on the back door damper stay (vehicles without power back door) (→P.119) or back door spindle (vehicles with power back door) (→P.125) to close the back door, and do not hang on the back door damper stay (vehicles without power back door) or back door spindle (vehicles with power back door).
  Doing so may cause hands to be caught or the back door damper stay (vehicles without a power back door) or back door spindle (vehicles with power back door) to break, causing an accident.
- If a bicycle carrier or similar heavy object is attached to the back door, it may suddenly shut again after being opened, causing someone's hands, arms, head or neck to be caught and injured. When installing an accessory part to the back door, using a genuine Lexus part is recommended.

Unlocking and locking the back door from the outside

■ Smart entry & start system (vehicles with entry function)

Carry the electronic key to enable this function.



1 Locks all the doors

Check that the door is securely locked.

2 Unlocks all the doors

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

■ Wireless remote control

→P.111

Unlocking and locking the back door from the inside

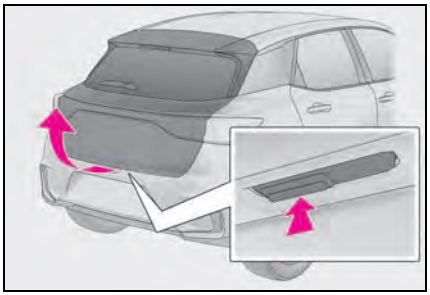
■ Door lock switch

→P.114

Opening/closing the back door (vehicles without power back door)

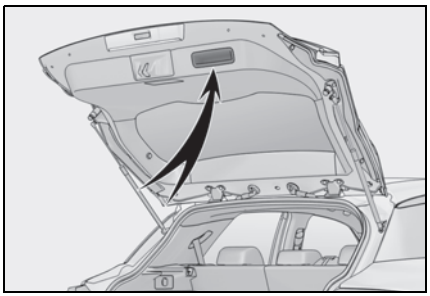
■ Open

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



■ Close

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



■ Luggage compartment light

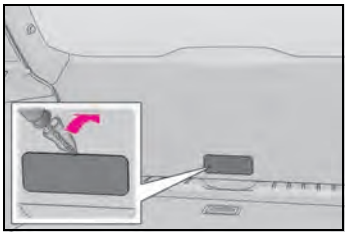
- The luggage compartment light turns on when the back door is opened.
- If the luggage compartment light is left on when the power switch is turned off, the light will go off automatically after 10 minutes.

■ If the back door opener is inoperative

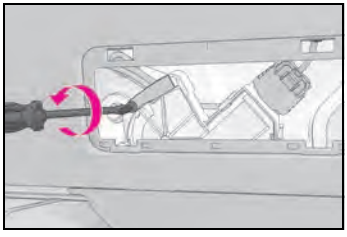
The back door can be unlocked from the inside.

1 Remove the cover.

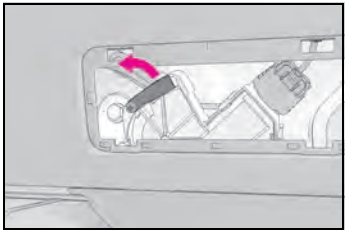
To prevent damage, cover the tip of the screwdriver with a rag.



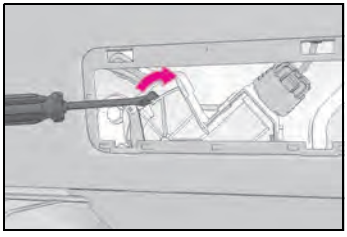
2 Loosen the screw.



3 Turn the cover.



4 Move the lever.

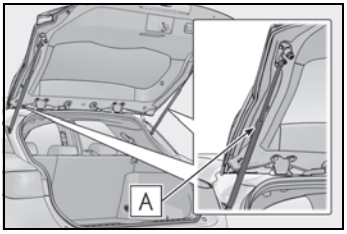


5 When installing, reverse the steps listed.

NOTICE

■ **Back door damper stays**

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



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

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

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

Press and hold the switch for approximately 1 second.

The power back door can be operated when it is unlocked*.

Pressing the switch while the power back door is opening/closing will stop

the operation.

Pressing and holding the switch again for approximately 1 second will operate the power back door in the opposite direction.

*: Opening of the power back door when it is locked can be enabled by a customized setting. (→P.476)



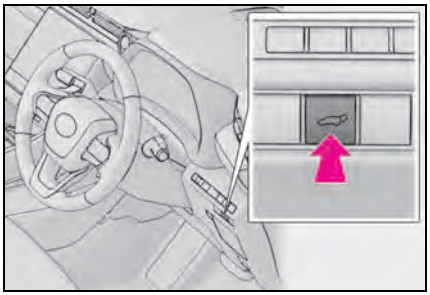
■ Opening/closing the back door from the inside

Press and hold the switch for approximately 1 second.

A buzzer will sound and the power back door will automatically open or close. However, if the power back door is locked, it will not open.

Pressing the switch while the power back door is opening/closing will stop the operation.

Pressing and holding the switch again for approximately 1 second will operate the power back door in the opposite direction.



■ Opening/closing the back door from the outside

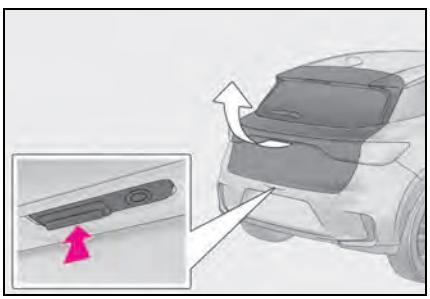
● Open

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

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

A buzzer will sound and the back door will automatically open.

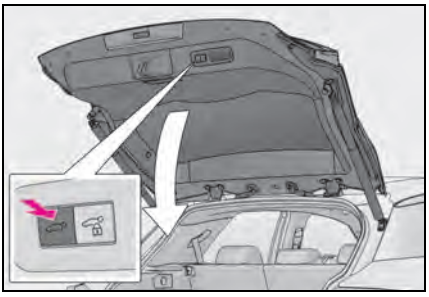
Pressing the switch while the power back door is opening/closing will stop the operation.



● Close

Press the switch.

A buzzer sounds and the back door will automatically close.
Pressing the switch while the back door is closing will stop the operation.
Pressing the switch again will open the back door automatically.

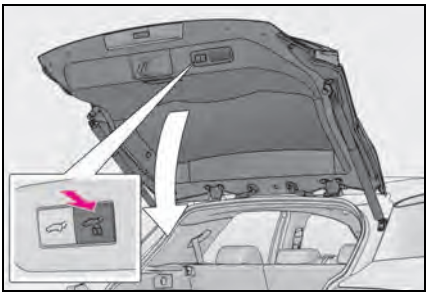


- Close the back door and lock all doors after moving away from the back door (close & lock [Walk-Away] function)*

*: This setting can be customized at your Lexus dealer.

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

A different buzzer than the normal one will sound and the close & lock (Walk-Away) function will go into standby.



2 While the buzzer is sounding, move away from the back door.

When the sensor detects that you are away from the back door, the emergency flashers will flash, and the buzzer will sound. Depending on the direction of moving away from the back door, the location and how to hold the electronic key or circumstances, it may not be detected properly.

All the doors other than the back door will be locked, and after the back door is closed, the back door will also be locked. When all the doors have been closed and locked, the buzzer (if equipped) will sound and the emergency flashers will flash.

The standby state is canceled if you do not move away from the back door for 30 seconds. To operate the function again, perform the procedure again from the beginning.

If you approach the back door carrying the electronic key, the back door operation will stop, all the doors will be unlocked, and the buzzer (if equipped) will sound and the emergency flashers will flash.

If the switch is pressed after the back door operation has stopped, the close & lock (Walk-Away) function will go into standby again.

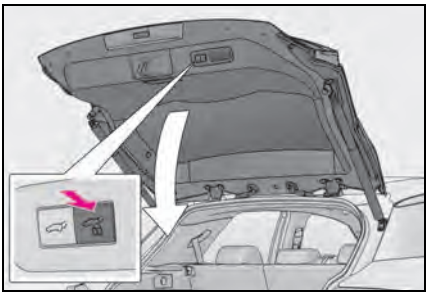
- Close the back door and lock all doors (close & lock function)

Press the switch.

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

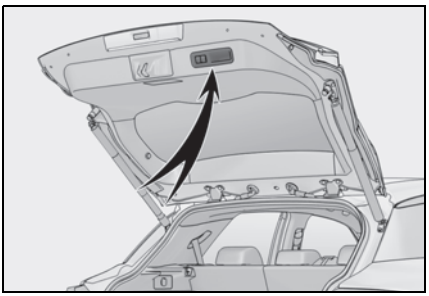
If the switch is pressed while the power back door is closing, the operation will stop.

Pressing the switch again will open the power back door automatically.



■ Closing the back door using the back door handle

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



■ Luggage compartment light

- The luggage compartment light turns on when the back door is opened.
- If the luggage compartment light is left on when the power switch is turned off, the light will go off automatically after 10 minutes.

■ Power back door operating conditions

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

- The power back door is unlocked. However, the power back door will operate if it is locked, in the following situations:
  - When an electronic key is being carried and the back door opener switch is pressed
  - When opening of the power back door using the wireless remote control when it is locked is enabled by a customized setting.
- When the power switch is in ON, in addition to the above for the opening operations, the back door operates for any of the following conditions:
  - Parking brake is engaged
  - The brake pedal is depressed
  - The shift position is in P

■ Back door closer

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

■ Operation of the power back door

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

■ Back door reserve lock function

This function reserves locking of all doors beforehand, when the power back door is open.

When the following procedure is performed, all the doors except the power back door are locked and then power back door will also be locked at the same time it is closed.

1. Close all doors, except the back door.
2. During the power back door closing operation, lock the doors using the smart entry & start system (→P.118) or the wireless remote control. (→P.109)

A buzzer sounds and the emergency flashers flash to indicate that all the doors have been closed and locked.

Before leaving the vehicle, make sure that all the doors are closed and locked. The doors may not be locked due to the jam

protection function or door lock prevention function.

■ **Close & lock function**

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

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

1 Close all of the doors except the power back door.

2 While carrying an electronic key, press the switch on the lower part of the power back door (→P.120).

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

The double locking system will not operate at this time.

■ **Situations in which the close & lock function may not operate properly**

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

- If the switch on the lower part of the power back door (→P.120) is pressed by a hand which is holding an electronic key
- If the switch on the lower part of the power back door (→P.120) is pressed when the electronic key is in a bag, etc. that is placed on the ground
- If the switch on the lower part of the power back door (→P.120) is pressed with the electronic key not near the vehicle.

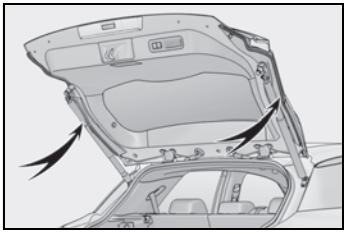
■ **When reconnecting the 12-volt battery**

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

■ **Jam protection function**

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

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

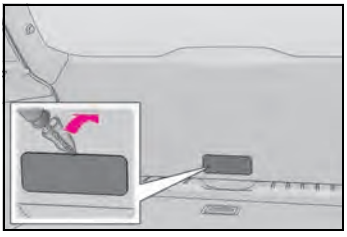


■ **If the back door opener is inoperative**

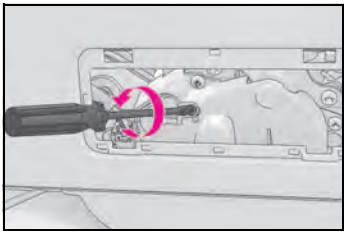
The back door can be unlocked from the inside.

1 Remove the cover.

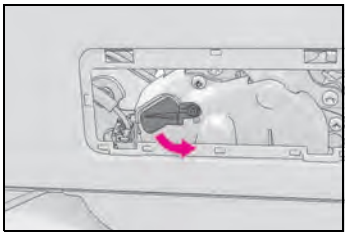
To prevent damage, cover the tip of the screwdriver with a rag.



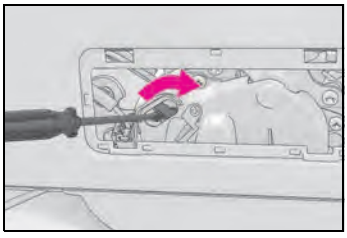
2 Loosen the screw.



3 Turn the cover.



4 Move the lever.



5 When installing, reverse the steps listed.

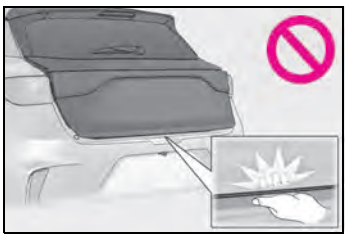
Customization

Some functions can be customized. (Customizable features: →P.476)

WARNING

Back door closer

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



- Be careful not to catch fingers or anything else when using the back door closer as it still operates when the power back door system is canceled.

Power back door

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

- Check the safety of the surrounding area to make sure there are no obstacles or anything that could cause any of your belongings to get caught.
- If anyone is in the vicinity, make sure they are safe and let them know that the back door is about to open or close.
- If the power back door system is disabled, while the back door is operating automatically, the automatic operation is stopped. The back door then has to be operated manually. Take extra care in this situation, as the back door may open or close suddenly.
- If the operating conditions of the power back door (→P.122) are no longer met, a buzzer may sound and the back door may stop opening or closing. The back door then has to be operated manually. Take extra care when on an incline, as the back door may open or close abruptly.
- On an incline, the back door may suddenly shut after it opens. Make sure the back door is fully open and secure.

WARNING

- In the following situations, the power back door may detect an abnormality and automatic operation may be stopped. In this case, the back door has to be operated manually. Take extra care in this situation, as the back door may open or close suddenly.
  - When the back door contacts an obstacle
  - When the 12-volt battery voltage suddenly drops, such as when the power switch is turned to ON or the hybrid system is started during automatic operation
- If a bicycle carrier or similar heavy object is attached to the back door, the power back door may not operate, causing itself to malfunction, or the back door may suddenly shut again after being opened, causing someone's hands, arms, head or neck to be caught and injured. When installing an accessory part to the back door, using a genuine Lexus part is recommended.

Jam protection function

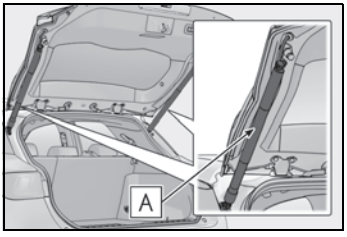
Observe the following precautions. Failure to do so may cause death or serious injury.

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

NOTICE

Back door spindles

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



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

To prevent back door closer malfunction

- Do not apply excessive force to the back door while the back door closer is operating. Applying excessive force may cause the back door closer to malfunction.
- If the power back door is opened and closed repeatedly in a short amount of time, the back door closer may stop operating. In this case, manually open the power back door once and wait for a while before attempting to close it again.

NOTICE

■ To prevent damage to the power back door

- Make sure that there is no ice between the back door and frame that would prevent movement of the back door. Operating the power back door when excessive load is present on the back door may cause a malfunction.
- Do not apply excessive force to the back door while the power back door is operating.
- Take care not to damage the sensors (installed on the right and left edges of the power back door) (→P.123) with a knife or other sharp object. If the sensor is disconnected, the power back door will not close automatically.

■ Close & lock function

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

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

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

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

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

The power back door system can be enabled/disabled on the Center Display. (→P.476)

1 Select ⚙ on the Center Display.

2 Select “Vehicle customize”.

3 Select “Door control”.

4 Select “Power back door”.

5 Select (ON)/ (OFF).

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

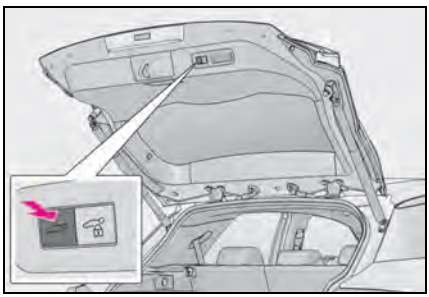
Adjusting the open position of the back door (vehicles with power back door)

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

1 Stop the back door in the desirable position. (→P.119)

2 Press and hold the power back door switch on the back door for 2 seconds.

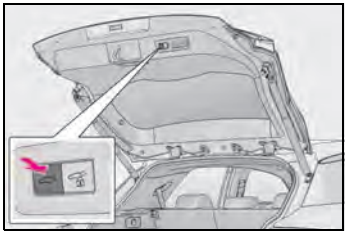
- When the settings are completed, the buzzer sounds 4 times.
- When opening the back door the next time, the back door will stop at that position.



Returning the back door automatic stop position to the initial settings

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

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

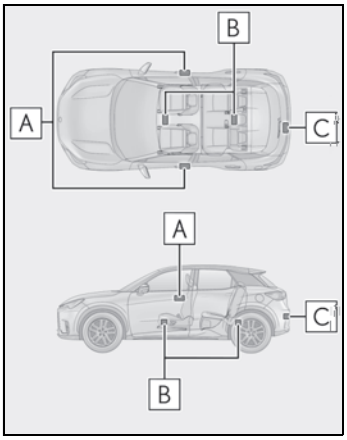


Smart entry & start system

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

- Locking and unlocking the doors (vehicles with entry function) (→P.111)
- Locking and unlocking the back door (vehicles with entry function) (→P.116)
- Starting the hybrid system (→P.168)

Antenna location

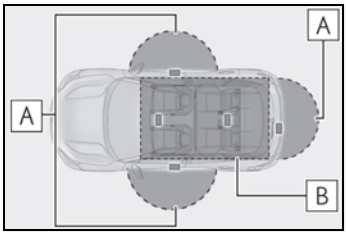


A Antennas outside the cabin (vehicles with entry function)

B Antennas inside the cabin

C Antenna outside the luggage compartment (vehicles with entry function)

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



A When locking or unlocking the doors (vehicles with entry function)

The system can be operated when the electronic key is within about 0.7 m (2.3 ft.) of either of the outside front door handles and back door opener switch. (Only the doors detecting the key can be operated.)

B When starting the hybrid system or changing power switch modes

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

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

An alarm sounds and warning message displays shown on the multi-information display are used to protect against unexpected accidents or theft of the vehicle resulting from erroneous operation. When a warning message is displayed, take appropriate measures based on the displayed message.

When only an alarm sounds, circumstances and correction procedures are as follows.

● When an exterior alarm sounds once for 5 seconds (vehicles with entry function)

Situation	Correction procedure
An attempt was made to lock the vehicle while a door was open.	Close all of the doors and lock the doors again.

● When an interior alarm pings continuously

Situation	Correction procedure
The power switch was turned to ACC while the driver's door was open (or the driver's door was opened while the power switch was in ACC).	Turn the power switch to OFF and close the driver's door.

■ **If "Key Detected in Vehicle" is shown on the multi-information display**

An attempt was made to lock the doors using the smart entry & start system while the electronic key was still inside the vehicle. Retrieve the electronic key from the vehicle and lock the doors again.

■ **Battery-saving function (vehicles with entry function)**

The battery-saving function will be activated in order to prevent the electronic key battery and the 12-volt battery from being discharged while the vehicle is not in operation for a long time.

● In the following situations, the smart entry & start system may take some time to unlock the doors.
- The electronic key has been left in an area of approximately 3.5 m (11.5 ft.) of the outside of the vehicle for 40 seconds or longer.
- The smart entry & start system has not been used for 5 days or longer.

● If the smart entry & start system has not been used for 14 days or longer, the doors cannot be unlocked at any doors except the driver's door. In this case, take hold of the driver's door handle, or use the wireless remote control or the mechanical key, to unlock the doors.

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

● When battery-saving mode is set, battery

depletion is minimized by stopping the electronic key from receiving radio waves.

Press twice while pressing and holding .

Confirm that the electronic key indicator flashes 4 times.

While the battery-saving mode is set, the smart entry & start system cannot be used.

To cancel the function, press any of the electronic key buttons.



- Electronic keys that will not be used for long periods of time can be set to the battery-saving mode in advance.

When electronic key function stops

If the position of the electronic key has not changed for a certain amount of time such as when the electronic key is left somewhere, the function of the electronic key stops to reduce depletion of the battery. In this case, function can automatically be restored by moving the position of the key such as by lifting it up.

Conditions affecting operation

The smart entry & start system uses weak radio waves. In the following situations, the communication between the electronic key and the vehicle may be affected, preventing the smart entry & start system, wireless remote control and immobilizer system from operating properly.

- When the electronic key battery is depleted
- Near a TV tower, electric power plant, gas station, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
- When the electronic key is in contact with, or is covered by the following metallic objects
  - Cards to which aluminum foil is attached
  - Cigarette boxes that have aluminum foil inside
  - Metallic wallets or bags
  - Coins
  - Hand warmers made of metal
  - Media such as CDs and DVDs
- When other wireless key (that emits radio waves) is being used nearby
- When carrying the electronic key together with the following devices that emit radio waves
  - Portable radio, cellular phone, cordless phone or other wireless communication devices
  - Another electronic key or a wireless key that emits radio waves
  - Personal computers or personal digital assistants (PDAs)
  - Digital audio players
  - Portable game systems
- If window tint with a metallic content or metallic objects are attached to the rear window
- When the electronic key is placed near a battery charger or electronic devices
- When the vehicle is parked in a pay parking spot where radio waves are emitted.

If the doors cannot be locked/unlocked using the smart entry & start system, lock/unlock the doors by performing any of the following:

- Bring the electronic key close to either front door handle and operate the entry function.
- Operate the wireless remote control.

If the doors cannot be locked/unlocked using the above methods, use the mechanical key. (→P.452)

If the hybrid system cannot be started using the smart entry & start system, refer to P.453.

Note for the entry function

- Even when the electronic key is within the effective range (detection areas), the sys-

tem 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 on the instrument panel, luggage compartment or floor, or in the door pockets or glove box when the hybrid system is started or power switch modes are changed.
- A person is between the vehicle and electronic key, blocking radio waves when the door is unlocked.

● Do not leave the electronic key on top of the instrument panel or near the door pockets when exiting the vehicle. Depending on the radio wave reception conditions, it may be detected by the antenna outside the cabin and the doors will become lockable from the outside, possibly trapping the electronic key inside the vehicle.

● As long as the electronic key is within the effective range, the doors may be locked or unlocked by anyone. However, only the doors detecting the electronic key can be used to unlock the vehicle.

● Even if the electronic key is not inside the vehicle, it may be possible to start the 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 doors will automatically be locked after approximately 30 seconds if the doors are not opened and closed.)

● If the wireless remote control is used to lock the doors when the electronic key is near the vehicle, there is a possibility that the door may not be unlocked by the entry function. (Use the wireless remote control to unlock the doors.)

● Touching the door lock sensor while wearing gloves may delay or prevent lock operation. Remove the gloves and touch the lock sensor again.

● When the lock operation is performed using the lock sensor, recognition signals will be shown up to two consecutive times. After this, no recognition signals will be given.

● If the door handle becomes wet while the electronic key is within the effective range, the door may lock and unlock repeatedly. In that case, follow the following correction procedures to wash the vehicle.
- Place the electronic key in a location 2 m (6 ft.) or more away from the vehicle. (Take care to ensure that the key is not stolen.)
- Set the electronic key to battery-saving mode to disable the smart entry & start system. (→P.128)

● If the electronic key is inside the vehicle and a door handle becomes wet during a car wash, a message may be shown on the multi-information display and a buzzer will sound outside the vehicle. To turn off the alarm, lock all the doors.

● The lock sensor may not work properly if it comes into contact with ice, snow, mud, etc. Clean the lock sensor and attempt to operate it again.

● A sudden approach to the effective range or door handle may prevent the doors from being unlocked. In this case, return the door handle to the original position and check that the doors unlock before pulling the door handle again.

● If there is another electronic key in the detection area, it may take slightly longer to unlock the doors after the door handle is gripped.

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

● To prevent theft of the vehicle, do not leave the electronic key within 2 m (6 ft.) of the vehicle.

● The smart entry & start system can be deactivated in advance. (→P.480)

● Battery-saving mode can reduce the power consumption of electronic keys. (→P.128)

■ To operate the system properly

Make sure to carry the electronic key when operating the system. Do not get the electronic key too close to the vehicle when operating the system from the outside of the vehicle.

Depending on the position and holding condition of the electronic key, the key may not be detected correctly and the system may not operate properly. (The alarm may go off accidentally, or the door lock prevention may not operate.)

■ If the smart entry & start system does not operate properly

- Locking and unlocking the doors: Use the mechanical key. (→P.452)
- Starting the hybrid system: →P.453

■ Customization

Settings (e.g. smart entry & start system) can be changed.

(Customizable features: →P.476)

If the smart entry & start system has been deactivated in a customized setting, refer to the explanations for the following operations.

- Locking and unlocking the doors: Use the wireless remote control or mechanical key. (→P.109, 452)
- Starting the hybrid system and changing power switch modes: →P.453
- Stopping the hybrid system: →P.169

WARNING

■ Caution regarding interference with electronic devices

- People with implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should maintain a reasonable distance between themselves and the smart entry & start system antennas. (→P.127)
  The radio waves may affect the operation of such devices. If necessary, the entry function can be disabled. Ask your Lexus dealer for details, such as the frequency of radio waves and timing of the emitted radio waves. Then, consult your doctor to see if you should disable the entry function.
- User of any electrical medical device other than implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should consult the manufacturer of the device for information about its operation under the influence of radio waves.
  Radio waves could have unexpected effects on the operation of such medical devices.

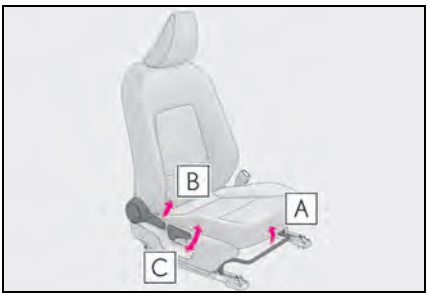
Ask your Lexus dealer for details for disabling the entry function.

Front seats

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

Adjustment procedure

▶ Manual seat

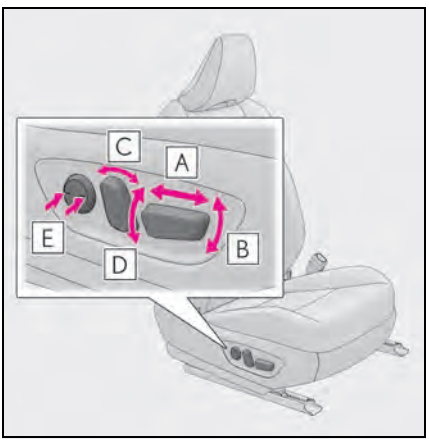


A Seat position adjustment lever

B Seatback angle adjustment lever

C Vertical height adjustment lever (if equipped)

▶ Power seat (for driver's side)



A Seat position adjustment switch

B Seat cushion (front) angle adjustment switch

C Seatback angle adjustment switch

D Vertical height adjustment switch

E Lumbar support adjustment switch

■ When adjusting the seat

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

■ Power easy access system (vehicles with driving position memory)

The driver's seat moves in accordance with power switch mode and the driver's seat belt condition. (→P.146)

■ Jam protection function (vehicles with driving position memory)

While the driving position is recalled or the power easy access system is operating, if an object is stuck behind the front seat, the front seat will stop and then slightly move forward. When the jam protection function operates, the seat stops at a position other than the set seat position. Check the seat position.

WARNING

■ When adjusting the seat position

- Take care when adjusting the seat position to ensure that other passengers are not injured by the moving seat.
- Do not put your hands under the seat or near the moving parts to avoid injury. Fingers or hands may become jammed in the seat mechanism.

WARNING

- Make sure to leave enough space around the feet so they do not get stuck.

■ Seat adjustment

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

Rear seats

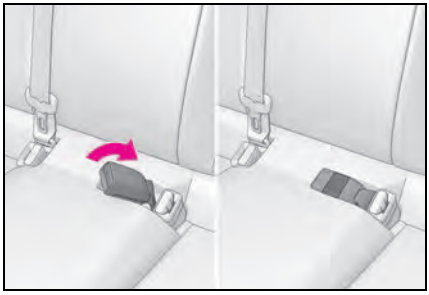
The seatbacks of the rear seats can be folded down.

Folding down and returning the rear seatbacks

■ Folding down the rear seatbacks

1 Move the front seats forward. (→P.132)

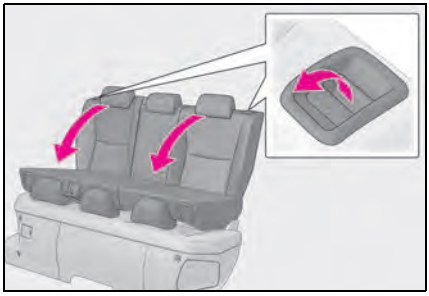
2 Stow the rear center seat belt buckle.



3 Lower the head restraints to the lowest position. (→P.135)

4 Pull the seatback lock release lever and fold the seatback down.

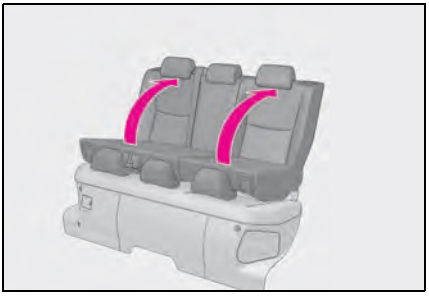
Each seatback may be folded separately.



■ Returning the rear seatbacks

Raise the rear seatback until it locks.

Check that the seat belts are not twisted or caught in the seatback.



WARNING

■ When folding the rear seatbacks down

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

- Do not attempt to fold the seatbacks down while driving.
- Stop the vehicle on level ground, set the parking brake and shift the shift position to P.
- Do not allow anyone to sit on a folded seatback or in the luggage compartment while driving.
- Do not allow children to enter the luggage compartment.
- Do not operate the rear seat if it is occupied.
- Be careful not to get feet or hands caught in the moving parts or joints of the seats during operation.
- Do not allow children to operate the seat.

■ After returning the rear seatback to the upright position

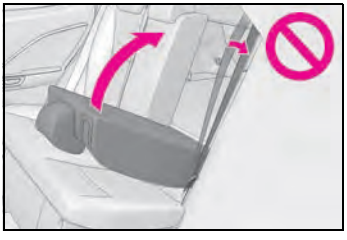
Observe the following precautions. Failure to do so may result in death or serious injury.

- Make sure that the seatback is securely locked in position by lightly pushing it back and forth. If the seatback is not securely locked, the red marking will be visible on the seatback lock release lever. Make sure that the red marking is not visible.



- Check that the seat belts are not twisted or caught in the seatback.

If the seat belt gets caught between the seatback's securing hook and latch, it may damage the seat belt.



Head restraints

Head restraints are provided for all seats.

WARNING

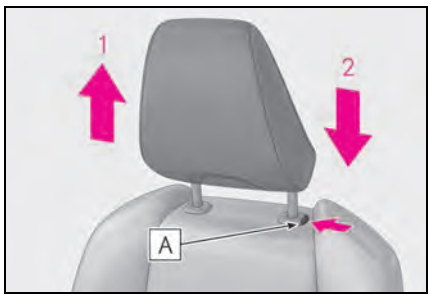
■ Head restraint precautions

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

- Use the head restraints designed for each respective seat.
- Adjust the head restraints to the correct position at all times.
- After adjusting the head restraints, push down on them and make sure they are locked in position.
- Do not drive with the head restraints removed.

Vertical adjustment

■ Front seats



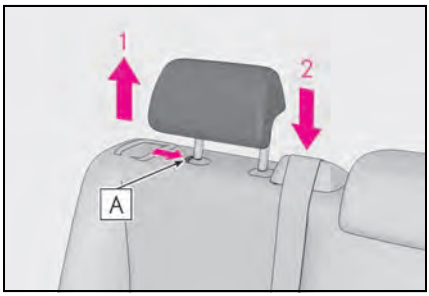
1 Up

Pull the head restraints up.

2 Down

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

■ Rear seats



1 Up

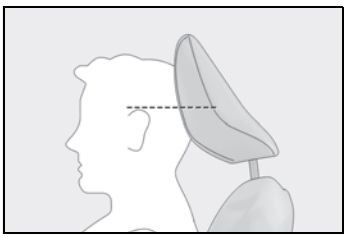
Pull the head restraints up.

2 Down

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

■ Adjusting the height of the head restraints (front seats)

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



■ Adjusting the rear seat head restraint

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

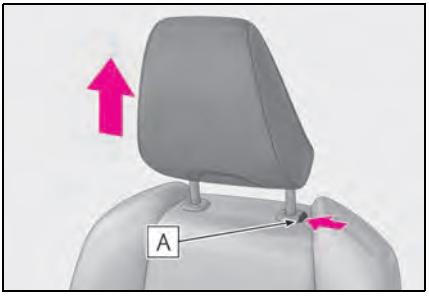
Removing the head restraints

■ Front and rear center seats

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

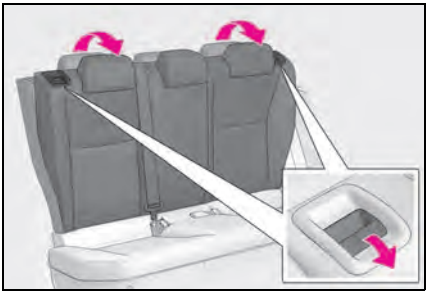
If the head restraint touches the ceiling, making the removal difficult, change

the seat height or angle. (→P.132, 133)

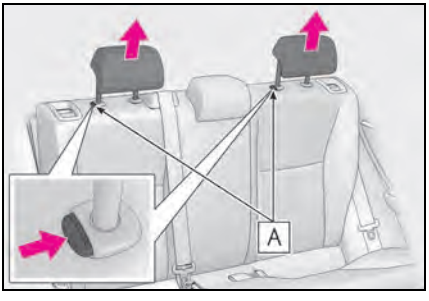


■ Rear outboard seats

1 Pull the seatback lock release lever and fold down the seatback until it reaches the position where the head restraints can be removed.



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

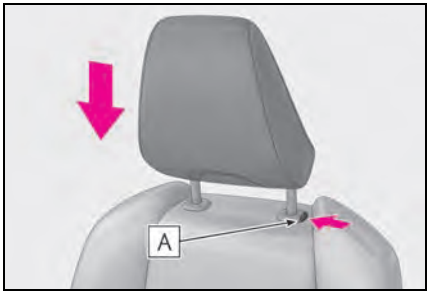


Installing the head restraints

■ Front and rear center seats

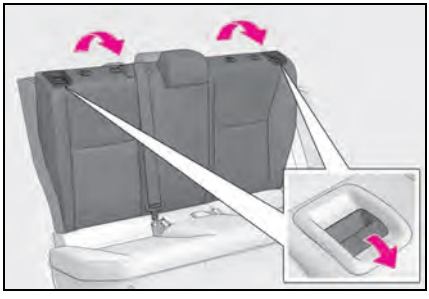
Align the head restraint with the installation holes and push it down to the lock position.

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



■ Rear outboard seats

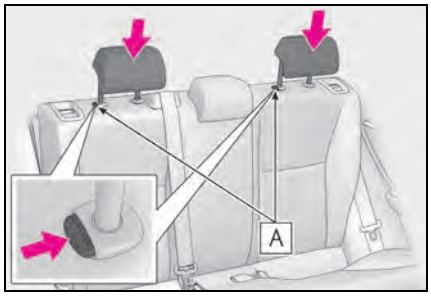
1 Pull the seatback lock release lever and fold down the seatback until it reaches the position where the head restraints can be installed.



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

Press and hold the lock release button A

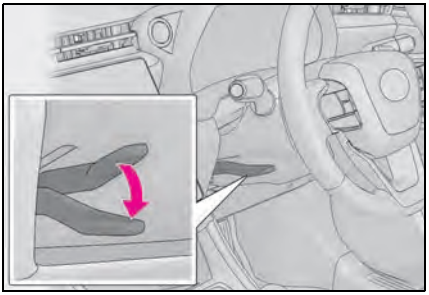
when lowering the head restraint.



Steering wheel

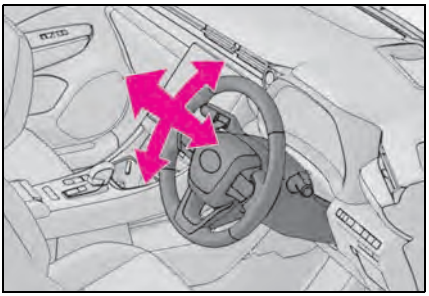
Adjustment procedure

1 Hold the steering wheel and push the lever down.



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

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



WARNING

■ Caution while driving

Do not adjust the steering wheel while driving.

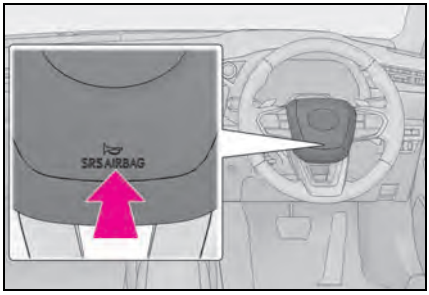
Doing so may cause the driver to mishandle the vehicle and cause an accident, resulting in death or serious injury.

■ After adjusting the steering wheel

Make sure that the steering wheel is securely locked.

Otherwise, the steering wheel may move suddenly, possibly causing an accident, and resulting in death or serious injury. Also, the horn may not sound if the steering wheel is not securely locked.

Sounding the horn



Press on or close to the mark.

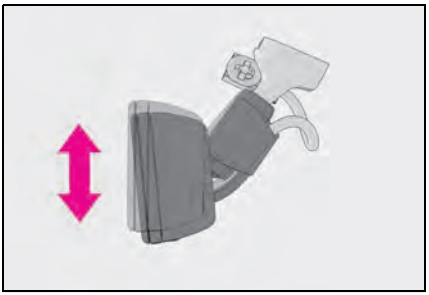
Inside rear view mirror

The rear view mirror's position can be adjusted to enable sufficient confirmation of the rear view.

Adjusting the height of rear view mirror

The height of the rear view mirror can be adjusted to suit your driving posture.

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



WARNING

■ Caution while driving

Do not adjust the position of the mirror while driving.

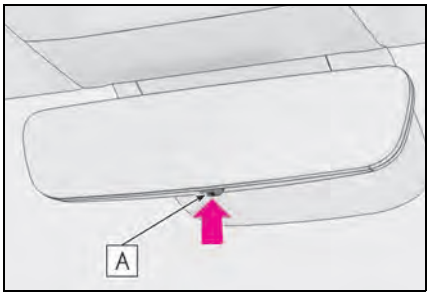
Doing so may lead to mishandling of the vehicle and cause an accident, resulting in death or serious injury.

Anti-glare function

Responding to the level of brightness of the headlights of vehicles behind, the reflected light is automatically reduced.

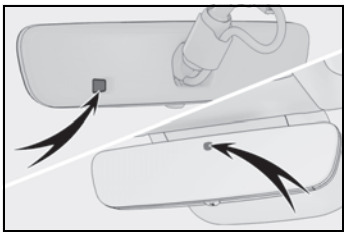
Turn the automatic anti-glare function mode on/off

When the automatic anti-glare function is in ON, the indicator A illuminates. The function will set to ON each time the power switch is turned to ON.
Pressing the button turns the function to OFF mode. (The indicator A also turns off.)



■ To prevent sensor error

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



Outside rear view mirrors

The rear view mirror's position can be adjusted to enable sufficient confirmation of the rear view.

■ When using the outside rear view mirrors in a cold weather

When it is cold and the outside rear view mirrors are frozen, it may not be possible to fold/extend them or adjust the mirror surface.

Remove the ice, snow, etc. covering the outside rear view mirrors.

⚠ WARNING

■ Important points while driving

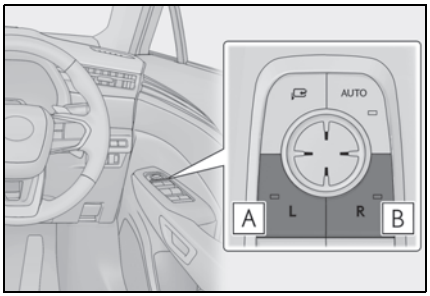
Observe the following precautions while driving.

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

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

Adjustment procedure

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

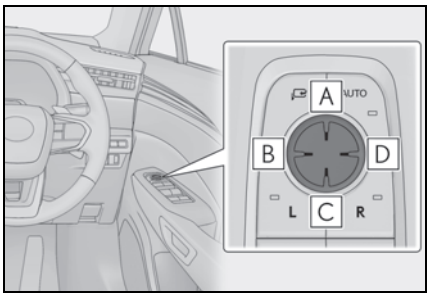


A Left

B Right

Pressing the same switch again will put the switch in neutral.

2 To adjust the mirror, press the switch.



A Up

B Left

C Down

D Right

■ Mirror angle can be adjusted when

The power switch is in ACC or ON.

■ Defogging the mirrors

The outside rear view mirrors can be

cleared using the mirror defoggers. Turn on the rear window defogger to turn on the outside rear view mirror defoggers. (→P.338)

Auto anti-glare function

When the anti-glare inside rear view mirror is set to automatic mode, the driver's side outside rear view mirror will activate in conjunction with the anti-glare inside rear view mirror to reduce reflected light. (→P.139)

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

A desired mirror face angle can be entered to memory and recalled automatically by the driving position memory. (→P.146)

*: If equipped

WARNING

When the mirror defoggers are operating

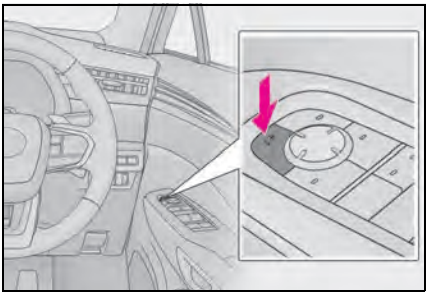
Do not touch the rear view mirror surfaces, as they can become very hot and burn you.

Folding and extending the mirrors

Using the switch

Press the switch to fold the mirrors.

Press it again to extend them to the original position.



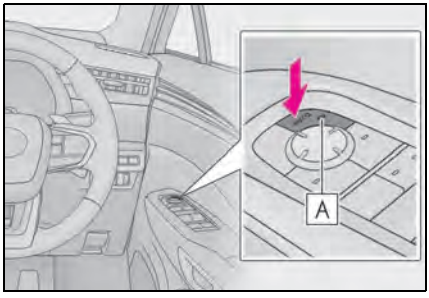
Setting automatic mode

Automatic mode allows the folding or extending of the mirrors to be linked to locking/unlocking of the doors.

Press the "AUTO" switch to set automatic mode.

The indicator A will come on.

Pressing the switch again will return to manual mode.



When disconnecting and reconnecting 12-volt battery terminals

The automatic folding/extending mirror function will return to off as default. To turn the function on, press the switch again to select on.

Customization

The automatic mirror folding and extending operation can be changed. (Customizable features: →P.481)

WARNING

When a mirror is moving

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

Linked mirror function when reversing

When either "L" or "R" of the mirror

select switch is selected, the outside rear view mirrors will automatically angle downwards when the vehicle is reversing in order to give a better view of the ground.

To disable this function, select neither "L" or "R".

■ Adjusting the mirror angle when the vehicle is reversing

With the shift lever in R, adjust the mirror angle to a desired position.

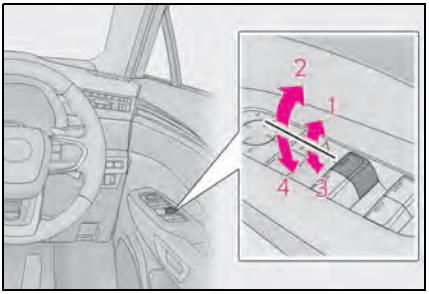
The adjusted angle will be memorized and the mirror will automatically tilt to the memorized angle whenever the shift lever is shifted to R from next time.

The memorized downward tilt position of the mirror is linked to the normal position (angle adjusted with the shift lever in other than R). Therefore, if the normal position is changed after adjustment, the tilt position will also change.
When the normal position is changed, readjust the angle in reversing.

Power windows

Opening and closing the power windows

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



1 Closing

2 One-touch closing*

3 Opening

4 One-touch opening*

*: To stop the window partway, operate the switch in the opposite direction.

■ The power windows can be operated when

The power switch is in ON.

■ 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 turned to ACC or OFF. They cannot, however, be operated once either front door is opened.

■ Using the voice control system (if equipped)

The power windows can be opened/closed using the voice control system. (Can be operated only when the window lock switch is off)

For details regarding the voice control system, refer to the "Multimedia Owner's Manual".

■ Jam protection function

If an object becomes jammed between the window and the window frame while the window is closing, window movement is stopped and the window is opened slightly.

■ Catch protection function

If an object becomes caught between the door and window while the window is opening, window movement is stopped.

■ When the window cannot be opened or closed

When the jam protection function or catch protection function operates unusually and the side window cannot be opened or closed, perform the following operations with the power window switch of that door.

- Stop the vehicle. With the power switch in ON, within 4 seconds of the jam protection function or catch protection function activating, continuously operate the power window switch in the one-touch closing direction or one-touch opening direction so that the side window can be opened and closed.
- If the side window cannot be opened and closed even when performing the above operations, perform the following procedure for function initialization.

1. Turn the power switch to ON.
2. Pull and hold the power window switch in the one-touch closing direction and completely close the side window.
3. Release the power window switch for a moment, resume pulling the switch in the one-touch closing direction, and hold it there for approximately 6 seconds or more.
4. Press and hold the power window switch in the one-touch opening direction. After the side window is completely opened, continue holding the switch for an additional 1 second or more.
5. Release the power window switch for a moment, resume pushing the switch in the one-touch opening direction, and

hold it there for approximately 4 seconds or more.

6 Pull and hold the power window switch in the one-touch closing direction again. After the side window is completely closed, continue holding the switch for a further 1 second or more.

If you release the switch while the window is moving, start again from the beginning. If the window reverses and cannot be fully closed or opened, have the vehicle inspected by your Lexus dealer.

Door lock linked window operation

- The power windows can be opened and closed using the mechanical key.* (→P.453)
- The power windows can be opened and closed using the wireless remote control.* (→P.111)

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

Power windows open warning buzzer

The buzzer sounds and "Window Open" 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 power windows open.

Customization

Setting (e.g. linked door lock operation) can be changed.
(Customizable features: →P.481)

WARNING

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

Closing the windows

- The driver is responsible for all the power window operations, including the operation for the passengers. In order to prevent accidental operation, especially by a child, do not let a child operate the power windows. It is possible for children and other passengers to have body parts caught in the power window. Also, when riding with a child, it is recommended to use the window lock switch. (→P.145)
- Check to make sure that all passengers do not have any part of their body in a position where it could be caught when a window is being operated.



- When using the wireless remote control or mechanical key and operating the power windows, operate the power window after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the window. Also do not let a child operate window by the wireless remote control or mechanical key. It is possible for children and other passengers to get caught in the power window.
- When exiting the vehicle, turn the power switch off, carry the key and exit the vehicle along with the child. There may be accidental operation, due to mischief, etc., that may possibly lead to an accident.

Jam protection function

- Never use any part of your body to intentionally activate the jam protection function.

WARNING

- The jam protection function may not work if something gets jammed just before the window is fully closed. Be careful not to get any part of your body jammed in the window.

■ Catch protection function

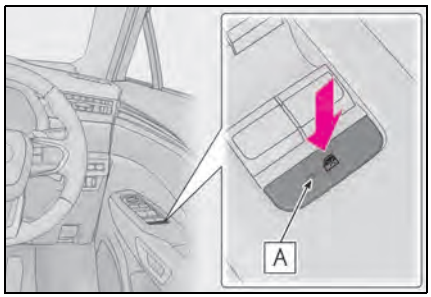
- Never use any part of your body or clothing to intentionally activate the catch protection function.
- The catch protection function may not work if something gets caught just before the window is fully opened. Be careful not to get any part of your body or clothing caught in the window.

Preventing accidental operation (window lock switch)

This function can be used to prevent children from accidentally opening or closing a passenger window.

Press the switch.

The indicator A will come on and the passenger window will be locked.



■ The power windows can be operated when

The power switch is in ON.

■ When the 12-volt battery is disconnected

The window lock switch is disabled. If necessary, press the window lock switch after reconnecting the 12-volt battery.

Driving position memory*

*: If equipped

This feature automatically adjusts the positions of the driver's seat, outside rear view mirrors and head-up display (if equipped) to make entering and exiting the vehicle easier or to suit your preferences.

When My Settings is turned on:

Up to 3 different driving positions can be recorded for each the driver and guest that have been registered for My Settings.

When electronic key assignment is registered for My Settings, the driving position for each driver can be recalled (memory recall function).

When My Settings is turned off:

Up to 3 different driving positions can be recorded.

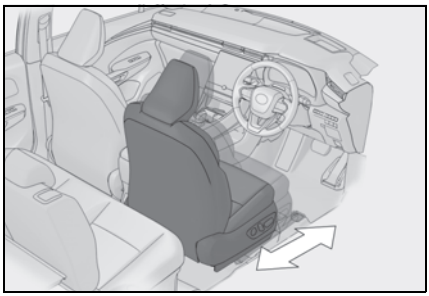
Each electronic key can be registered to recall your preferred driving position (memory recall function).

For details about My Settings, refer to P.150.

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

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

- The shift position has been shifted to P.
- The power switch has been turned to OFF.
- The driver's seat belt has been unfastened.



When any of the following has been performed, the driver's seat automatically returns to their original positions.

- The power switch has been turned to ACC or ON.
- The driver's seat belt has been fastened.

■ Operation of the power easy access system

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

■ Customization

The seat movement amount settings of the power easy access system can be customized. (Customizable features: →P.476)

WARNING

■ **While the power easy access system is operating and the seat is moving**

Be careful not to get body parts or luggage caught. Failure to do so may cause an injury or damage to the luggage.

Recording a driving position into memory button

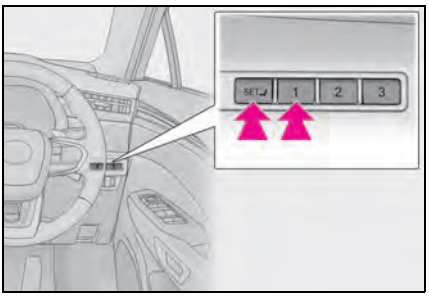
1 Check that the shift position is in P.

2 Turn the power switch to ON.

3 Adjust the driver's seat, outside rear view mirrors and head-up display (if equipped) to the desired positions.

4 While pressing the "SET" button, or within 3 seconds after the "SET" button is pressed, press button "1", "2" or "3" until the buzzer sounds.

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



■ **Seat position that can be memorized (→P.132)**

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

■ **In order to correctly use the driving position memory function**

If a seat position is already in the furthest possible position and the seat is operated in the same direction, the recorded position may be slightly different when it is recalled.

WARNING

■ **Seat adjustment caution**

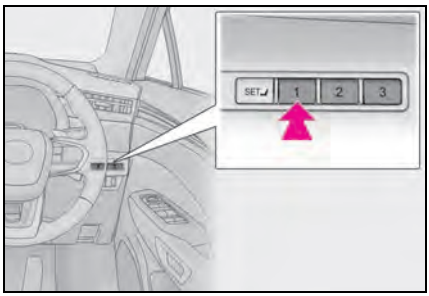
Take care during seat adjustment so that the seat does not strike the rear passenger or squeeze your body against the steering wheel.

Recalling a driving position

1 Check that the shift position is in P.

2 Turn the power switch to ON.

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



■ **To stop the position recall operation part-way through**

Perform any of the following:

- Press the "SET" button.
- Press button "1", "2" or "3".
- Operate any of the seat adjustment switches (only cancels seat position recall).

■ **Using the voice control system (if equipped)**

You can use the voice control system to do

the following operations.

- Driving position registration
- Recalling the driving position (can be operated only when the shift position is in P)

For details regarding the voice control system, refer to the "Multimedia Owner's Manual".

■ **Operating the driving position memory after turning the power switch off**

Recorded seat positions can be activated up to 180 seconds after the driver's door is opened and another 60 seconds after it is closed again.

■ **When recalling the driving position**

Take care when recalling the driving position so that the head restraint does not touch the ceiling.

■ **When the recorded seat position cannot be recalled**

The seat position may not be recalled in some situations when the seat position is recorded in a certain range. For details, contact your Lexus dealer.

Recalling a driving position automatically when getting in the vehicle (memory recall function)

■ **When My Settings is turned on (an individual is identified with an electronic key):**

The driving positions can be automatically recalled for each registered driver by registering electronic key assignments in My Settings.

- Driving position registration procedure

When the shift position is shifted to P after driving the vehicle, the current driving position will be recorded.

- Driving position recall procedure

1. Carry only the key that has been assigned and registered in My Settings, and then unlock and open the driver's door using the smart entry & start system or wireless remote control.

The driving position will move to the recorded position. However, the seat will move to a position slightly behind the recorded position in order to make entering the vehicle easier.

If the driving position is in a position that has already been recorded, the driving position will not move.

2. Turn the power switch to ACC or ON.

The seat will move to the recorded position.

- Memory recall function cancelation procedure

Initialize the driver registered settings in My Settings (→P.150).

■ **When My Settings is turned off:**

Each electronic key can be registered to automatically recall your preferred driving position.

- Driving position registration procedure

Record your driving position to button "1", "2" or "3" before performing the following:

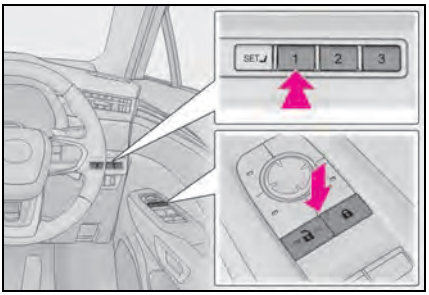
Carry only the key you want to register, and then close the driver's door.
If 2 or more keys are in the vehicle, the driving position cannot be recorded properly.

1. Check that the shift position is in P.
2. Turn the power switch to ON.

3 Recall the driving position that you want to record.

4 While pressing the recalled button, press and hold the door lock switch (either lock or unlock) until the buzzer sounds.

If the button could not be registered, the buzzer sounds continuously for approximately 3 seconds.



● Driving position recall procedure

1 Carry the electronic key that has been registered to the driving position, and then unlock and open the driver's door using the smart entry & start system or wireless remote control.

The driving position other than the head-up display (if equipped) will move to the recorded position. However, the seat will move to a position slightly behind the recorded position in order to make entering the vehicle easier.

If the driving position is in a position that has already been recorded, the driving position will not move.

2 Turn the power switch to ACC or ON, or fasten a seat belt.

The seat and head-up display (if equipped) (only when the power switch is in ON) will move to the recorded position.

● Memory recall function cancelation procedure

Carry only the key you want to cancel and then close the driver's door.
If 2 or more keys are in the vehicle, the driving position cannot be canceled properly.

1 Turn the power switch to ON.

2 While pressing the "SET" button, press and hold the door lock switch (either lock or unlock) until the buzzer sounds twice.

If the button could not be canceled, the buzzer sounds continuously for approximately 3 seconds.

■ Recalling the driving position using the memory recall function

If a door other than the driver's door is unlocked with the smart entry & start system, the driving position cannot be recalled. In this case, press the driving position button which has been set.

My Settings

Drivers are identified using devices such as electronic keys to store the driving position and vehicle settings for each. Then the information can be recalled the next time the vehicle is driven.

Authentication devices can be assigned in advance to drivers so that they can drive using their preferred settings.

Settings for 3 drivers can be stored in My Settings.

For details on how to assign/delete electronic keys, set driver names, perform initialization, change drivers manually, or delete a driver, refer to the "Multimedia Owner's Manual".

Types of assigned authentication devices

An individual can be identified using the following authentication devices.

- Electronic key

An individual is identified when the smart entry & start system detects their electronic key. (→P.108)

- Face ID

An individual is identified if their face is authenticated as a face that has been registered in the driver monitor.

- Bluetooth® devices

An individual can be identified if the same Bluetooth® device that was used as a hands-free phone the last time the vehicle was entered is connected to the multimedia system.

If an individual is identified by detecting an electronic key, identification by Bluetooth® device will not be performed.

Bluetooth® is a registered trademark of Bluetooth SIG, Inc.

Recalled functions

When an individual is identified from an authentication device, settings for the following functions are recalled.

- Driving position (memory recall function)

After an individual is identified, the driving position that was set when driving was last completed is recalled when either of the following operations is performed.

- Identification using electronic key: The door is unlocked and opened using the smart entry & start system or wireless remote control.
- Identification using face ID: The power switch is turned to ACC or ON after the driver monitor camera authenticates the facial information.

- Meter displays, head-up display*1 and multimedia information*2

When an individual is identified, the display settings used when the power switch was last turned off are recalled.

- Vehicle settings that can be set using the Center Display*2

When an individual is identified, the vehicle

settings used when the power switch was last turned off are recalled.

● Safe driving support function*2

When an individual is identified, the vehicle settings used when the power switch was last turned off are recalled.

*1: If equipped

*2: Some settings are excluded

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Driving the vehicle

The following procedures should be observed to ensure safe driving:

Driving procedure

■ **Starting the hybrid system**

→P.168

■ **Driving**

1 With the brake pedal depressed, shift the shift position to D.

Check that the shift position indicator shows D.

2 If the parking brake is set, release the parking brake. (→P.182)

If the parking brake is in automatic mode, the parking brake will be released automatically. (→P.183)

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

■ **Stopping**

1 Depress the brake pedal.

2 If necessary, set the parking brake.

If the vehicle is to be stopped for an extended period of time, shift the shift position to P. (→P.175)

■ **Parking the vehicle**

1 Depress the brake pedal to stop the vehicle completely.

2 If the parking brake is released, set the parking brake. (→P.182)

If the parking brake is in automatic mode, turning off the power switch will automatically set the parking brake. (→P.183)

3 Shift the shift position to P. (→P.175)

Check that the shift position indicator shows P and the parking brake indicator is illuminated.

4 Press the power switch to stop the hybrid system.

5 Slowly release the brake pedal.

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

If parking on a hill, block the wheels as needed.

■ **Starting off on a steep uphill**

1 Firmly depress the brake pedal and shift the shift position to D.

The hill-start assist control will be activated.

2 Set the parking brake. (→P.182)

3 Release the brake pedal and gently depress the accelerator pedal to accelerate the vehicle.

4 Release the parking brake. (→P.182)

■ **For fuel-efficient driving**

Keep in mind that Hybrid Electric Vehicles are similar to conventional vehicles, and it is necessary to refrain from activities such as sudden acceleration. (→P.324)

■ **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.

■ **Restraining the hybrid system output (Brake Override System)**

● When the accelerator and brake pedals are depressed at the same time, the hybrid system output may be restrained.

● A warning message is displayed on the multi-information display while the system is operating.

■ **Breaking in your new Lexus**

To extend the life of the vehicle, observing the following precautions is recommended:

● For the first 300 km (200 miles):
Avoid sudden stops.

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

■ **Operating your vehicle in a foreign country**

Comply with the relevant vehicle registration laws and confirm the availability of the correct fuel. (→P.469)

⚠ WARNING

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

■ **When starting the vehicle**

Always keep your foot on the brake pedal while stopped with the "READY" indicator is illuminated. This prevents the vehicle from creeping.

■ **When driving the vehicle**

● Do not drive if you are unfamiliar with the location of the brake and accelerator pedals to avoid depressing the wrong pedal.
- Accidentally depressing the accelerator pedal instead of the brake pedal will result in sudden acceleration that may lead to an accident.
- When backing up, you may twist your body around, leading to a difficulty in operating the pedals. Make sure to operate the pedals properly.
- Make sure to keep a correct driving posture even when moving the vehicle only slightly. This allows you to depress the brake and accelerator pedals properly.
- Depress the brake pedal using your right foot. Depressing the brake pedal using your left foot may delay response in an emergency, resulting in an accident.

● The driver should pay extra attention to pedestrians when the vehicle is powered only by the electric motor (traction motor). As there is no engine noise, the pedestrians may misjudge the vehicle's movement. Even if the Acoustic Vehicle Alerting System is operating, drive with care as pedestrians in the vicinity may still not notice the vehicle if the surrounding area is noisy.

● Do not drive the vehicle over or stop the vehicle near flammable materials such as leaves, paper or rags.
The exhaust system and exhaust gases can be extremely hot. These hot parts may cause a fire if there is any flammable material nearby.

WARNING

- During normal driving, do not turn off the hybrid system. Turning the hybrid system off while driving will not cause loss of steering or braking control. However, power assist for the steering wheel may be lost making it difficult to steer smoothly before stopping the vehicle depending on the remaining charge in the 12-volt battery or usage conditions. In this situation, you should pull over and stop the vehicle as soon as it is safe to do so.
  In the event of an emergency, such as if it becomes impossible to stop the vehicle in the normal way: →P.416
- 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.173)
- Do not adjust the position of the steering wheel, the seat, inside rear view mirror or outside rear view mirrors while driving.
  Doing so may result in a loss of vehicle control.
- Always check that all passengers' arms, head or other parts of their body are not outside the vehicle.
- AWD models:
  Do not drive the vehicle off-road. This is not an AWD vehicle designed for off-road driving. Drive with due care if it becomes unavoidable to drive off-road.
- Do not drive across a river 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.

■ When driving on slippery road surfaces

- Sudden braking, acceleration and steering may cause tire slippage and reduce your ability to control the vehicle.
- Sudden acceleration, engine braking due to shifting, or changes in engine speed could cause the vehicle to skid, 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.

■ When shifting the shift position

- Do not let the vehicle roll backward while a forward driving position is selected, or roll forward while the shift position is in R.
  Doing so may result in an accident or damage to the vehicle.
- Do not shift the shift position to P while the vehicle is moving.
  Doing so can damage the transmission and may result in a loss of vehicle control.
- Do not shift the shift position to R while the vehicle is moving forward.
  Doing so can damage the transmission and may result in a loss of vehicle control.
- Do not shift the shift position to a driving position while the vehicle is moving backward.
  Doing so can damage the transmission and may result in a loss of vehicle control.

WARNING

- Changing the shift position to N while the vehicle is moving will disengage the hybrid system. Regenerative braking is not available with the hybrid system disengaged.
- Be careful not to change the shift position with the accelerator pedal depressed.
  Changing the shift position to any positions other than P or N may lead to unexpected rapid acceleration of the vehicle that may cause an accident and result in death or serious injury.
  After changing the shift position, make sure to confirm the current shift position displayed on the shift position indicator inside the meter.

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

Have the brake pads checked and replaced by your Lexus dealer as soon as possible.
Rotor damage may result if the pads are not replaced when needed.
It is dangerous to drive the vehicle when the wear limits of the brake pads and/or those of the brake discs are exceeded.

■ When the vehicle is stopped

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

■ When the vehicle is parked

- Do not leave glasses, cigarette lighters, spray cans, or soft drink cans in the vehicle when it is in the sun.
  Doing so may result in the following:
  - Gas may leak from a cigarette lighter or spray can, and may lead to a fire.
  - The temperature inside the vehicle may cause the plastic lenses and plastic material of glasses to deform or crack.
  - Soft drink cans may fracture, causing the contents to spray over the interior of the vehicle, and may also cause a short circuit in the vehicle's electrical components.
- Do not leave cigarette lighters in the vehicle. If a cigarette lighter is in a place such as the glove box or on the floor, it may be lit accidentally when luggage is loaded or the seat is adjusted, causing a fire.
- Do not attach adhesive discs to the windshield or windows. Do not place containers such as air fresheners on the instrument panel or dashboard. Adhesive discs or containers may act as lenses, causing a fire in the vehicle.
- Do not leave a door or window open if the curved glass is coated with a metallized film such as a silver-colored one. Reflected sunlight may cause the glass to act as a lens, causing a fire.

WARNING

- Always apply the parking brake, shift the shift position to P, stop the hybrid system and lock the vehicle.
  Do not leave the vehicle unattended while the "READY" indicator is illuminated.
  If the vehicle is parked with the shift position in P but the parking brake is not set, the vehicle may start to move, possibly leading to an accident.
- Do not touch the exhaust pipes while the "READY" indicator is illuminated or immediately after turning the hybrid system off.
  Doing so may cause burns.

■ When taking a nap in the vehicle

Always turn the hybrid system off. Otherwise, if you accidentally shift the shift position or depress the accelerator pedal, this 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

- When the brakes are wet, drive more cautiously.
  Braking distance increases when the brakes are wet, and this may cause one side of the vehicle to brake differently than the other side. Also, the parking brake may not securely hold the vehicle.
- If the electronically controlled brake system does not operate, do not follow other vehicles closely and avoid hills or sharp turns that require braking.
  In this case, braking is still possible, but the brake pedal should be depressed more firmly than usual. Also, the braking distance will increase. Have your brakes fixed immediately.
- The brake system consists of 2 or more individual hydraulic systems; if one of the systems fails, the other(s) will still operate. In this case, the brake pedal should be depressed more firmly than usual and the braking distance will increase. Have your brakes fixed immediately.

■ If the vehicle becomes stuck (AWD vehicles)

- Do not spin the wheels excessively when any of the tires is up in the air, or the vehicle is stuck in sand, mud, etc. This may damage the driveline components or propel the vehicle forward or backward, causing an accident.

NOTICE

■ When driving the vehicle

- Do not depress the accelerator and brake pedals at the same time during driving, as this may restrain the hybrid system output.
- Do not use the accelerator pedal or depress the accelerator and brake pedals at the same time to hold the vehicle on a hill.

■ Avoiding damage to vehicle parts

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

■ 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.

NOTICE

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

Information on what to do in case of a flat tire (→P.439)

■ When encountering flooded roads

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

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

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

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

If the shift control system is damaged by flooding, it may not be possible to shift the shift position to P, or from P to other positions.
In this case, contact your Lexus dealer.

■ When parking the vehicle

Always set the parking brake, and shift the shift position to P. Failure to do so may cause the vehicle to move or the vehicle may accelerate suddenly if the accelerator pedal is accidentally depressed.

Sudden start restraint control (Drive-Start Control [DSC])

When the following unusual operation is performed with the accelerator pedal depressed, the hybrid system output may be restrained.

- When the shift lever is shifted to R*.
- When the shift lever is shifted from P or R to forward drive shift position such as D*.

When the system operates, a message appears on the multi-information display. Read the message and follow the instruction.

*: Depending on the situation, the shift position may not be changed.

■ Drive-Start Control (DSC)

When the TRC is turned off (→P.320), sudden start restraint control also does not operate. If your vehicle have trouble escaping from the mud or fresh snow due to sudden start restraint control operation, deactivate TRC (→P.320) so that the vehicle may become able to escape from the mud or fresh snow.

Cargo and luggage

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

WARNING

■ Things that must not be carried in the luggage compartment

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

- Receptacles containing gasoline
- Aerosol cans

■ Storage precautions

Observe the following precautions. Failure to do so may prevent the pedals from being depressed properly, may block the driver's vision, or may result in items hitting the driver or passengers, possibly causing an accident.

- Stow cargo and luggage in the luggage compartment whenever possible.
- Do not stack cargo and luggage in the luggage compartment higher than the seatbacks.
- When you fold down the rear seats, long items should not be placed directly behind the front seats.
- Never allow anyone to ride in the luggage compartment. It is not designed for passengers. They should ride in their seats with their seat belts properly fastened.
- Do not place cargo or luggage in or on the following locations.
  - At the feet of the driver
  - On the front passenger or rear seats (when stacking items)
  - On the luggage cover
  - On the instrument panel
  - On the dashboard
  - In front of the Center Display
- Secure all items in the occupant compartment.

■ Load and distribution

- Do not overload your vehicle.
- Do not apply loads unevenly.

Improper loading may cause deterioration of steering or braking control which may cause death or serious injury.

Trailer towing (vehicles without towing package)

Lexus does not recommend towing a trailer with your vehicle. Lexus also does not recommend the installation of a tow hitch or the use of a tow hitch carrier for a wheelchair, scooter, bicycle, etc. Your vehicle is not designed for trailer towing or for the use of tow hitch mounted carriers.



Trailer towing (vehicles with towing package)

Your vehicle is designed primarily as a passenger carrying vehicle. Towing a trailer will have an adverse effect on handling, performance, braking, durability, and fuel consumption. For your safety and the safety of others, do not overload the vehicle or trailer.
Lexus warranties do not apply to damage or malfunction caused by towing a trailer for commercial purposes.

Weight

For towing purposes, Lexus recommends using a sway control device when the total trailer weight is greater than the vehicle weight.

■ Weight limits

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

■ Gross vehicle weight

The gross vehicle weight must not exceed the following:

1755 kg (3869 lb.): 2WD models

1820 kg (4012 lb.): AWD models

The gross vehicle weight is the sum weight of the unloaded vehicle, driver, passengers, luggage, hitch and trailer tongue load. Also included is the

weight of any special equipment installed on your vehicle.

■ **Gross axle weight**

The load on either the front or rear axle resulting from distribution of the gross vehicle weight on both axles must not exceed the following:

Front: 955 kg (2105 lb.)

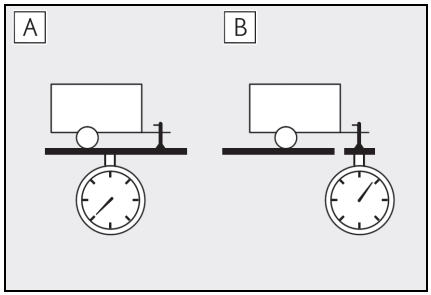
Rear: 1330 kg (2932 lb.)

■ **Trailer tongue load**

The trailer cargo load should be distributed so that the tongue load is 9 to 11% of the total trailer weight, not exceeding 40 kg (88 lb.).

(Tongue load/Total trailer weight × 100 = 9 to 11%)

The total trailer weight and tongue load can be measured with platform scales found at a highway weighing stations, building supply companies, trucking companies, junk yards, etc.



A Total trailer weight

B Tongue load

Towing a trailer

Contact your Lexus dealer for further information about additional requirements such as a towing kits etc.

Hitch

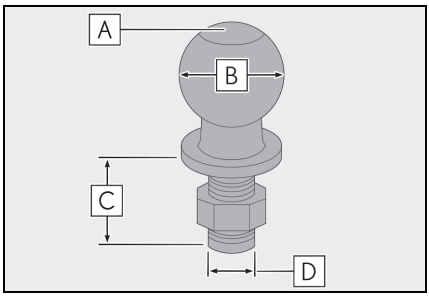
Trailer hitch assemblies have different weight capacities established by the hitch manufacturer. Even though the vehicle may be rated for towing a higher weight, the operator must never exceed the maximum weight rating specified for the trailer hitch.

For vehicles where the towing device blocks any of the lights or license plate, the following shall be observed:

- Do not use towing devices that cannot be easily removed or repositioned.
- Towing devices must be removed or repositioned when not in use.

Selecting a trailer ball

Use the correct trailer ball for your application.



A Trailer ball load rating

Matches or exceeds the gross trailer weight rating of the trailer.

B Ball diameter

Matches the size of the trailer coupler. Most couplers are stamped with the required trailer ball size.

C Shank length

Protrudes beyond the bottom of the lock washer and nut at least 2 threads.

D Shank diameter

Matches the ball mount hole diameter size.

Connecting trailer lights

Please consult your Lexus dealer when installing trailer lights, as incorrect installation may cause damage to the vehicle's lights. Please take care to comply with your state's laws when installing trailer lights.

Before towing

Check that the following conditions are met:

- The vehicle's tires are properly inflated. (→P.474)
- Trailer tires are inflated according to the trailer manufacturer's recommendation.
- All trailer lights work.
- All lights work each time you connect them.
- The trailer ball is set up at the proper height for the coupler on the trailer.
- The trailer is level when it is hitched. Do not drive if the trailer is not level, and check for improper tongue weight, overloading, worn suspension, or other possible causes.
- The trailer cargo is securely loaded.
- The rear view mirrors conform to all applicable federal, state/provincial or local regulations. If they do not, install rear view mirrors appropriate for towing purposes.

Break-in schedule

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

Maintenance

- If you tow a trailer, your vehicle will require more frequent maintenance due to the additional load. (See "Warranty and Service Booklet".)
- Retighten the fixing bolts of the towing ball and bracket after approximately 1000 km (600 miles) of trailer towing.

WARNING

To avoid accident or injury

- The total trailer weight (trailer weight plus the weight of cargo) must not exceed 400 kg (881 lb.).
- The gross combined weight (sum of your vehicle weight plus its load and the total trailer weight) must not exceed the following:

2155 kg (4750 lb.): 2WD models

2220 kg (4894 lb.): AWD models

- Do not exceed the trailer hitch assembly weight, gross vehicle weight, gross axle weight and trailer tongue load capacities.
- Never load more weight in the back than in the front of the trailer. About 60% of the load should be in the front half of the trailer, and the remaining 40% in the rear.
- Do not tow a trailer when the tire installed is repaired with the emergency tire puncture repair kit.

Hitches

- Use only a hitch that conforms to the total trailer weight requirement.

WARNING

- Follow the directions supplied by the hitch manufacturer.
- Depending on the type of trailer coupler you use, the trailer ball may need to be coated with grease. If so, apply grease to the trailer ball in accordance with the instructions of the manufacturer of the trailer coupler.
- Remove the trailer ball whenever you are not towing a trailer. Remove the trailer hitch if you do not need it. After removing the hitch, seal any mounting holes in the vehicle body to prevent entry of any substances into the vehicle.

■ When towing a trailer

- Never tap into your vehicle's hydraulic system, as this will lower the vehicle's braking effectiveness.
- Never tow a trailer without using a safety chain securely attached to both the trailer and the vehicle. If damage occurs to the coupling unit or hitch ball, there is a risk of the trailer wandering into another lane.

NOTICE

■ When installing a trailer hitch

- Use only the position recommended by your Lexus dealer. Do not install the trailer hitch on the bumper; this may cause body damage.
- Do not use axle-mounted hitches, as they can cause damage to the axle housing, wheel bearings, wheels or tires.

■ Brakes

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

■ Do not directly splice trailer lights

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

Trailer towing tips

Your vehicle will handle differently when towing a trailer. In order to avoid accident, death or serious injury, keep the following in mind when towing:

- Before starting out, check the trailer lights and the vehicle-trailer connections. Recheck after driving a short distance.
- Practice turning, stopping and reversing with the trailer attached in an area away from traffic until you become accustomed to the feel of the vehicle.
- Reversing with a trailer attached is difficult and requires practice. Grip the bottom of the steering wheel and move your hand to the left to move the trailer to the left. Move your hand to the right to move the trailer to right. (This is generally opposite to reversing without a trailer attached.) Avoid sharp or prolonged turning. Have someone guide you when reversing to reduce the risk of an accident.
- As stopping distance is increased when towing a trailer, vehicle-to-vehicle distance should be increased. For each 10 km/h (6 mph) of speed, allow at least one vehicle and trailer length.

- Avoid sudden braking as you may skid, resulting in jackknifing and loss of control. This is especially true on wet or slippery surfaces.
- Avoid jerky starts or sudden acceleration.
- Avoid jerky steering and sharp turns, and slow down before making turns.
- Note that when making a turn, the trailer wheels will be closer than the vehicle wheels to the inside of the turn. Compensate by making a larger than normal turning radius.
- Crosswinds and rough roads will adversely affect handling of your vehicle and trailer, causing sway. Periodically check the rear to prepare for being passed by large trucks or buses, which may cause your vehicle and trailer to sway. If swaying occurs, firmly grip the steering wheel, reduce speed immediately but gradually, and steer straight ahead. Never increase speed. If you make no extreme correction with the steering or brakes, your vehicle and trailer will stabilize.
- Take care when passing other vehicles. Passing requires considerable distance. After passing a vehicle, do not forget the length of your trailer, and be sure you have plenty of room before changing lanes.
- To maintain engine braking efficiency and charging system performance when using engine braking, do not use the transmission in D. (→P.173)
- Due to the added load of the trailer, your vehicle's engine may overheat on hot days (at temperatures over 30°C [85°F]) when driving up a long or steep grade. If the engine coolant temperature gauge indicates overheating, immediately turn off the air conditioning (if in use), pull your vehicle off the road and stop in a safe spot. (→P.462)
- Always place wheel blocks under both the vehicle and the trailer wheels when parking. Apply the parking brake and put the transmission in P. Avoid parking on a slope, but if unavoidable, do so only after performing the following:

1. Apply the brakes and keep them applied.
2. Have someone place wheel blocks under both the vehicle and trailer wheels.
3. When the wheel blocks are in place, release the brakes slowly until the blocks absorb the load.
4. Apply the parking brake.
5. Shift into P and turn off the engine.

- When restarting after parking on a slope:

1. With the transmission in the P, start the hybrid system. Be sure to keep the brake pedal depressed.
2. Shift into a forward gear. If reversing, shift into R.

3 If the parking brake is in manual mode, release the parking brake. (→P.182)

4 Release the brake pedal, and slowly pull or back away from the wheel blocks. Stop and apply the brakes.

5 Have someone retrieve the blocks.

WARNING

■ **To avoid an accident**

- Observe the legal maximum speeds for trailer towing.
- Slow down and downshift before descending steep or long downhill grades. Do not make sudden downshifts while descending steep or long downhill grades.
- Avoid holding the brake pedal down too long or applying the brakes too frequently. This could cause the brakes to overheat and result in reduced braking efficiency.
- Do not tow a trailer when the compact spare tire is installed on your vehicle.
- Do not use dynamic radar cruise control with full-speed range when trailer towing.

Power (ignition) switch

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

1 Pull the parking brake switch to check that the parking brake is set. (→P.182)

The Parking brake indicator will come on.

2 Firmly depress the brake pedal.

 and a message will be displayed on the multi-information display.

If it is not displayed, the hybrid system cannot be started.

When the shift position is N, the hybrid system cannot start. Shift the shift position to P when starting the hybrid system. (→P.175)

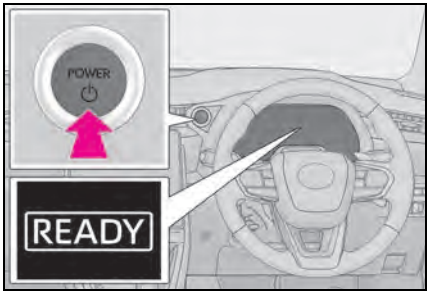
3 Press the power switch shortly and firmly.

When operating the power switch, one short, firm press is enough. It is not necessary to press and hold the switch.

If the "READY" indicator turns on, the hybrid system will operate normally.

Continue depressing the brake pedal until the "READY" indicator is illuminated.

The hybrid system can be started from any power switch mode.



4 Check that the "READY" indicator is illuminated.

The vehicle cannot be driven if the "READY" indicator is off.

■ **Power switch illumination**

According to the situation, the power switch illumination operates as follows.

- When a front door is opened, or the power switch mode is changed from ACC or ON to OFF, the power switch illumination illuminates dimly.
- When depressing the brake pedal with carrying the electronic key on your person, the power switch illumination illuminates brightly.
- When the power switch is in ACC or ON, the power switch illumination illuminates.

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

- The immobilizer system may not have been deactivated. (→P.66) Contact your Lexus dealer.
- If a message related to start-up is shown on the multi-information display, read the message and follow the instructions.
- If the door is unlocked with the mechanical key, the hybrid system cannot be started using the smart entry & start system. Refer to P.453 to start the hybrid system. However, if the 0electronic key is carried inside the vehicle and the doors are locked (→P.114), the hybrid system can be started.

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

When starting the hybrid system, the flashing time of the "READY" indicator may be long. Leave the vehicle as it is until the "READY" indicator is steady on, as steady means the vehicle is able to move.

■ **Sounds and vibrations specific to a Hybrid Electric Vehicle**

→P.60

■ **If the 12-volt battery is discharged**

The hybrid system cannot be started using the smart entry & start system. Refer to P.456 to restart the hybrid system.

■ **Electronic key battery depletion**

→P.108

■ **Conditions affecting operation**

→P.129

■ **Note for the entry function**

→P.129

■ **When "Smart Entry & Start System Malfunction See Owner's Manual" is displayed on the multi-information display**

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

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

In the event that the "READY" indicator does not come on even after performing the proper procedures for starting the vehicle, contact your Lexus dealer immediately.

■ **If the hybrid system is malfunctioning**

→P.65

■ **Electronic key battery**

→P.409

■ **Operation of the power switch**

- If the switch is not pressed shortly and firmly, the power switch mode may not change or the hybrid system may not start.
- If attempting to restart the hybrid system immediately after turning the power switch off, the hybrid system may not start in some cases. After turning the power switch off, please wait a few seconds before restarting the hybrid system.

■ **Customization**

If the smart entry & start system has been deactivated in a customized setting, refer to P.452.

WARNING

■ **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.

NOTICE

■ **When starting the hybrid system**

If the hybrid system becomes difficult to start, have your vehicle checked by your Lexus dealer immediately.

■ **Symptoms indicating a malfunction with the power switch**

If the power switch seems to be operating somewhat differently than usual, such as the switch sticking slightly, there may be a malfunction. Contact your Lexus dealer immediately.

Stopping the hybrid system

1. Stop the vehicle completely.
2. If the parking brake is in manual mode, set the parking brake. (→P.182)
3. Press the P position switch. (→P.175)

Check that the shift position indicator shows P and the parking brake indicator is illuminated.

4 Press the power switch.

The hybrid system will stop, and the meter display will be extinguished (the shift position indicator will be extinguished a few seconds after the meter display).

5 Release the brake pedal and check that "ACCESSORY" or "POWER ON" is not shown on the meter.

When the shift control system malfunctions

If the shift control system is malfunctioning, when attempting to turn the power switch off, it may not be able to be turned off. In this situation, it may be possible to turn the power switch off by applying the parking brake and then operating the power switch.

If there is a malfunction in the system, have the vehicle inspected by your Lexus dealer immediately.

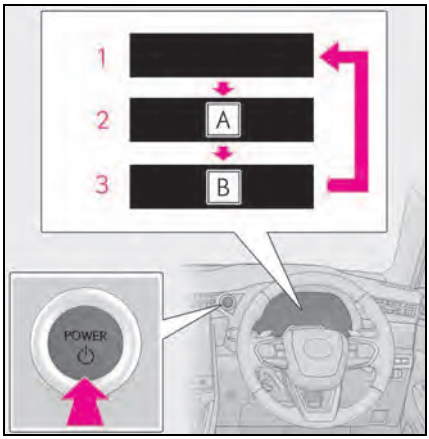
WARNING

Stopping the hybrid system in an emergency

- If you want to stop the hybrid system in an emergency while driving the vehicle, press and hold the power switch for more than 2 seconds, or press it briefly 3 times or more in succession. (→P.416)
  However, do not touch the power switch while driving except in an emergency. Turning the hybrid system off while driving will not cause loss of steering or braking control. However, power assist for the steering wheel may be lost making it difficult to steer smoothly before stopping the vehicle depending on the remaining charge in the 12-volt battery or usage conditions. In this situation, you should pull over and stop the vehicle as soon as it is safe to do so.
- If the power switch is operated while the vehicle is running, a warning message will be shown on the multi-information display and a buzzer sounds.
- When restarting the hybrid system after an emergency shutdown, press the power switch shortly and firmly.

Changing power switch modes

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



A "ACCESSORY"

B "POWER ON"

1 OFF

The emergency flashers can be used.

2 ACC*

Some electrical components such as the power outlets can be used.
"ACCESSORY" will be displayed on the meter.

3 ON

All electrical components can be used.
"POWER ON" will be displayed on the

meter.

*: ACC mode can be enabled/disabled on the customize menu. (→P.488)

■ When ACC customization is in off

- With the power switch turned off, the multimedia system can still be used for a certain time until the battery saving function starts operating.
- When the safe exit assist is operating, a buzzer will sound and a voice guidance will be given.

■ Auto power off function

- If the vehicle is left in ACC or ON (the hybrid system is not operating) for more than 20 minutes with the shift position in P, the power switch will automatically turn to OFF.
- If the 12-volt battery is low with the shift position is in P and the power switch is in ACC or ON (the hybrid system is not operating), a buzzer sounds and a message will be displayed on the multi-information display. If this continues, the power switch is automatically turn to OFF.

However, this function cannot entirely prevent the 12-volt battery discharge. Do not leave the vehicle with the power switch in ACC or ON for long periods of time when the hybrid system is not operating.

⚠ NOTICE

■ To prevent 12-volt battery discharge

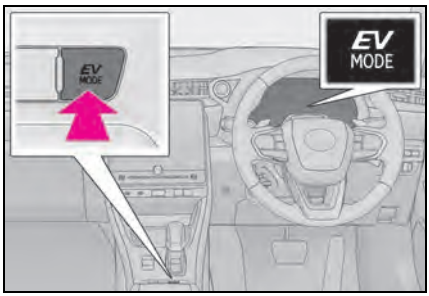
- Do not leave the power switch in ACC or ON for long periods of time without the hybrid system on.
- If "ACCESSORY" or "POWER ON" is displayed on the meter, the power switch is not in OFF. Exit the vehicle after turning the power switch to OFF.

EV drive mode

In EV drive mode, electric power is supplied by the hybrid battery (traction battery), and only the electric motor (traction motor) is used to drive the vehicle.
This mode allows you to drive in residential areas early in the morning and late at night, or in indoor parking lots, etc., without concern for noises and gas emissions.

When the Acoustic Vehicle Alerting System is active, the vehicle may produce sound.

Operating instructions



Turns EV drive mode 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 the vehicle 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 0°C (32°F) for a long period of time, etc.
- The gasoline engine is warming up.
- The hybrid battery (traction battery) is low.
  The remaining battery level indicated in the energy monitor display is low. (→P.100)
- Vehicle speed is high.
- The accelerator pedal is depressed firmly or the vehicle is on a hill, etc.
- The windshield defogger is in use.

■ Switching to EV drive mode when the gasoline engine is cold

If the hybrid system is started while the gasoline engine is cold, the gasoline engine will start automatically after a short period of time in order to warm up. In this case, you will become unable to switch to EV drive mode.
After the hybrid system has started and the "READY" indicator has illuminated, press the EV drive mode switch before the gasoline engine starts to switch to EV drive mode.

■ 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, the EV drive mode indicator will go off after flashing, and a message is displayed on the multi-information display.

- The hybrid battery (traction battery) becomes low.
  The remaining battery level indicated in the energy monitor display is low. (→P.100)
- Vehicle speed is high.
- The accelerator pedal is depressed firmly or the vehicle is on a hill, etc.

■ Possible driving distance when driving in EV drive mode

EV drive mode's possible driving distance ranges from a few hundred meters to approximately 1 km (0.6 mile). However, depending on vehicle conditions, there are situations when EV drive mode cannot be used. (The distance that is possible depends on the hybrid battery [traction battery] level and driving conditions.)

■ Fuel economy

The hybrid system 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.

■ If "EV Mode Unavailable" is shown on the multi-information display

The EV drive mode is not available. The reason the EV drive mode is not available (the vehicle is idling, battery charge is low, vehicle speed is higher than the EV drive mode operating speed range or accelerator pedal is depressed too much) may be displayed. Use the EV drive mode when it becomes available.

■ If "EV Mode Deactivated" is shown on the multi-information display

The EV drive mode has been automatically canceled. The reason the EV drive mode is not available (the battery charge is low, vehicle speed is higher than the EV drive mode operating speed range or accelerator pedal is depressed too much) may be displayed. Drive the vehicle for a while before attempting to turn on the EV drive mode again.

WARNING

■ 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. Take extra care while driving even if the Acoustic Vehicle Alerting System is active.

Transmission

Select the shift position depending on your purpose and situation.

Shift position purpose and functions

▶ Vehicles without paddle shift switches

Shift position	Objective or function
P	Parking the vehicle/starting the hybrid system
R	Reversing
N	Neutral (Condition in which the power is not transmitted)
D	Normal driving*
B	Applying engine braking or strong braking when the accelerator pedal has been released on steep downward slopes etc.

*: To improve fuel efficiency and reduce noise, set the shift position in D for normal driving.

▶ Vehicles with paddle shift switches

Shift position	Objective or function
P	Parking the vehicle/starting the hybrid system
R	Reversing

Shift position	Objective or function
N	Neutral (Condition in which the power is not transmitted)
D	Normal driving*1
S	S mode driving*2 (→P.180)

*1: To improve fuel efficiency and reduce noise, set the shift position in D for normal driving. You can choose gear range suitable for your driving situation by operating the paddle shift switches.

*2: By selecting shift ranges using S mode, you can control accelerating force and engine braking force.

■ When driving with dynamic radar cruise control activated (vehicles with paddle shift switches)

Even when performing the downshifting to 5 or 4 with the intent of enabling engine braking while driving in D or S mode, engine braking will not activate because dynamic radar cruise control with full-speed range will not be canceled. (→P.179)

■ If a message about a shift operation is shown

To prevent the shift position from being selected incorrectly or the vehicle from moving unexpectedly, the shift position may be changed automatically or operating the shift lever may be required. In this case, change the shift position following the messages on the multi-information display.

■ Restraining sudden start (Drive-Start Control)

→P.160

WARNING

■ When driving on slippery road surfaces

Do not accelerate or shift the shift position suddenly.

Sudden changes in engine braking may cause the vehicle to spin or skid, resulting in an accident.

NOTICE

■ Hybrid battery (traction battery) charge

If the shift position is in N, the hybrid battery (traction battery) will not be charged. To help prevent the battery from discharging, avoid leaving the N position selected for a certain amount of time.

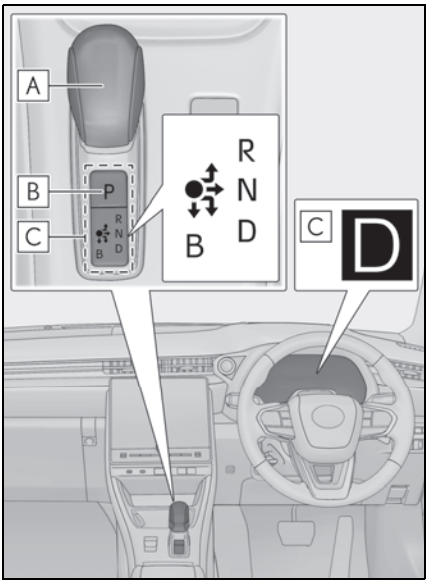
■ Situations where shift control system malfunctions are possible

If any of the following situations occurs, shift control system malfunctions are possible.
Immediately stop the vehicle in a safe place on level ground, apply the parking brake, and then contact your Lexus dealer.

- When the warning message indicating the shift control system appears on the multi-information display. (→P.432)
- The display indicates that no shift position is selected for more than a few seconds.

Shift position display and how to change the shift position

▶ Vehicles without paddle shift switches



A Shift lever

Operate the shift lever gently and securely in the direction of the arrow on the shift position indicator.

To shift to N, slide the shift lever in the direction of the arrow and hold it.

Release the shift lever after each shifting operation to allow it to return to its regular position (●).

Shifting to B is only possible when the shift position is in D.

When shifting from P to N, D or R, from N, D, B or R to P, from D or B to R, or from R to D, ensure that the brake pedal is being depressed and the vehicle is stationary.

B P position switch

Fully stop the vehicle and set the parking brake, and then press the P position switch.

When the shift position is changed to P, the switch illuminates.

Check that the shift position indicator shows P.

C Shift position indicator

Meter display:

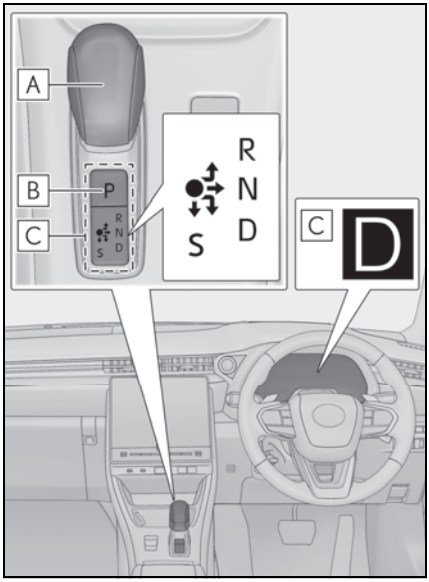
The current shift position is illuminated.

Shift lever display:

The current shift position is illuminated.

When selecting the shift position, make sure that the shift position has been changed to the desired position by checking the shift position indicator provided on the instrument cluster.

▶ Vehicles with paddle shift switches



A Shift lever

Operate the shift lever gently and securely in the direction of the arrow on the shift position indicator.

To shift to N, slide the shift lever in the direction of the arrow and hold it.

Release the shift lever after each shifting operation to allow it to return to its regular position (●).

Shifting to S is only possible when the shift position is in D.

When shifting from P to N, D or R, from N, D, S or R to P, from D or S to R, or from R to D, ensure that the brake pedal is being depressed and the vehicle is stationary.

B P position switch

Fully stop the vehicle and set the parking brake, and then press the P position switch.

When the shift position is changed to P, the switch illuminates.

Check that the shift position indicator shows P.

C Shift position indicator

Meter display:

The current shift position is illuminated.

Shift lever display:

The current shift position is illuminated.

When selecting the shift position, make sure that the shift position has been changed to the desired position by checking the shift position indicator provided on the instrument cluster.

■ **Changing the shift position in each power switch mode**

- The shift position cannot be changed when the power switch is in ACC or off.
- When the power switch is in ON, if the READY indicator is not illuminated, the shift position can only be changed to N.
- When the READY indicator is illuminated, the shift position can be changed from P to D, N, or R.
- When the READY indicator is flashing, the shift position cannot be changed from P to any other position, even if the shift lever is operated. Operate the shift lever again after the READY indicator changes from flashing to illuminated.

■ **Shifting the shift position from P to other positions**

- While depressing the brake pedal firmly, operate the shift lever. If the shift lever is operated without depressing the brake pedal, the buzzer will sound and the shifting operation will be disabled.
- When selecting the shift position, make sure that the shift position has been changed to the desired position by checking the shift position indicator provided on the instrument cluster.
- The shift position cannot be changed from P to B*1 or S*2 directly.

*1: Vehicles without paddle shift switches

*2: Vehicles with paddle shift switches

■ **The shift position cannot be changed when**

In the following situations, a buzzer will sound to inform you that the shift position cannot be changed. Use the appropriate operation to attempt to change the shift position again.

- When attempting to change the shift position from P with the brake pedal not depressed
- When attempting to change the shift position from P with the accelerator pedal depressed
- When attempting to change the shift position from N while stopped or driving at an extremely low speed with the brake pedal not depressed
- When attempting to change the shift position from N while stopped or driving at an extremely low speed with the accelerator pedal depressed
- When attempting to change the shift position from P or N to B*1 or S*2
- When the P position switch is pressed while driving

When driving at an extremely low speed, the shift position may change to P.

*1: Vehicles without paddle shift switches

*2: Vehicles with paddle shift switches

■ **The shift position automatically changes to N when**

In the following situations, a buzzer will sound to inform you that the shift position has been changed to N. Use the appropriate operation to attempt to change the shift position again.

● When attempting to change the shift position to R while the vehicle is moving forward

When driving at a low speed, the shift position may change to R.

● When attempting to change the shift position to D while the vehicle is moving backward

When driving at a low speed, the shift position may change to D.

● When attempting to change the shift position from R to B*1 or S*2

*1: Vehicles without paddle shift switches

*2: Vehicles with paddle shift switches

■ **If the N shift position is selected while driving**

If the shift lever is moved to N while driving above a certain speed, the shift position will change to N without holding the shift lever in the N position. In this situation, a buzzer will sound and a message will be displayed on the multi-information display to inform you that the shift position has been changed to N.

■ **Automatic P position selection function**

In the following situations, the shift position is automatically changed to P.

● When pressing the power switch with the vehicle stopped while the power switch is in ON and the shift position is in a position other than P (after the shift position has changed to P, the power switch will turn off)*

● If the driver's door is opened and all of the following conditions are met, while the shift position is in a position other than P

- The power switch is in ON.
- The driver is not wearing the seat belt.
- The brake pedal is not depressed.

To start off the vehicle after the shift position is changed to P, operate the shift lever again.

● When the vehicle is stopped after the hybrid system has been stopped in an emergency while driving.

● When voltage of the 12-volt battery drops while the shift position is in a position other than P.

*: When the power switch is pressed while driving at extremely slow speeds, such as immediately before stopping the vehicle, the shift position may automatically change to P. Make sure that the vehicle is completely stopped before pressing the power switch.

■ **If the shift position cannot be shifted from P**

There is a possibility that the 12-volt battery is discharged. Check the 12-volt battery in this situation. (→P.456)

■ **Customization**

Some functions can be customized. (→P.476)

WARNING

■ **For the shift lever**

● Do not remove the shift lever knob or use anything but a genuine Lexus shift lever knob. Also, do not hang anything on the shift lever. Doing so could prevent the shift lever from returning to position, causing unexpected accidents to occur when the vehicle is in motion.

● In order to prevent the shift position from accidentally being changed, do not touch the shift lever when not using them.

WARNING

■ **P position switch**

● Do not press the P position switch while the vehicle is moving.

If the P position switch is pressed when driving at very low speeds (for example, directly before stopping the vehicle), the vehicle may stop suddenly when the shift position switches to P, which could lead to an accident.

● In order to prevent the shift position from accidentally being changed, do not touch the P position switch when not using them.

NOTICE

■ **When exiting the vehicle (driver's seat only)**

Check that the shift position indicator shows P and that the parking brake indicator is illuminated before opening the door and exiting the vehicle.

Keeping the shift position in N without activating the automatic P position selection function

● By performing the following operation, the shift position can be held in N until the shift position switches to P without activating the automatic P position selection function.

1 Operate the shift lever and change the shift position to N when the hybrid system is operating.

2 Return the shift lever to its regular position (●).

3 Operate the shift lever to N and hold it there until the buzzer sounds.

4 Press the power switch within 5 seconds after the buzzer sounds.

The hybrid system stops with the shift position in N.*

Make sure to check that the buzzer sounds and "Holding N Push P Switch When Done" is displayed on the multi-information display.

● In order to shift to a position other than N, first press the P position switch to change the shift position to P.

● If the automatic P position switching operation selection function is performed operated with the hybrid system stopped, the automatic P position selection function may not operate.
Always perform the operation with the hybrid system started.

● Make sure to operate the shift lever with the hybrid system is operating. If the hybrid system is not operating, it may not be possible to hold the shift position in N.

*: To keep this state, do not operate the power switch. If the power switch is operated repeatedly, the power switch will turn off after the shift position has automatically changed to P.

Selecting the Eco drive mode

Use Eco drive mode to help achieve low fuel consumption during trips that involve frequent accelerating and

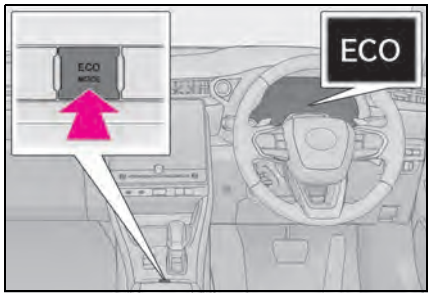
braking.

Press the "ECO MODE" switch to select Eco drive mode.

The "ECO" indicator will come on.

Press the switch again to cancel Eco drive mode.

The Eco drive mode will remain on or off even if the power switch is turned off.



■ Operation of the air conditioning system in Eco drive mode

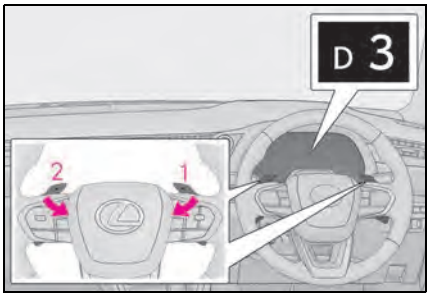
Eco drive mode controls the heating/cooling operations and fan speed of the air conditioning system to enhance fuel efficiency (→P.337). To improve air conditioning performance, adjust the fan speed or turn off Eco drive mode.

Selecting shift ranges in the D position (vehicles with paddle shift switches)

To drive using temporary shift range selection, operate the "-" paddle shift switch.

Changing the shift range enables the level of engine braking force to be selected.

The shift range can then be selected by operating the "-" and "+" paddle shift switches.



1 Upshifting

2 Downshifting

The selected shift range, from D1 to D6, will be displayed on the multi-information display.

To return to normal D position driving, hold the "+" puddle shift switch for a period of time.

■ Shift ranges and their functions

- You can choose from 5 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.

■ When the "-" paddle shift switch is operated in the D position

The shift range is downshifted to a range that enables engine braking force that is suitable to driving conditions.

■ Automatic deactivation of shift range selection in the D position

Shift range selection in the D position will be deactivated in the following situations:

- When the vehicle comes to a stop
- If the accelerator pedal is depressed for more than a certain period of time
- When the shift position is shifted to a

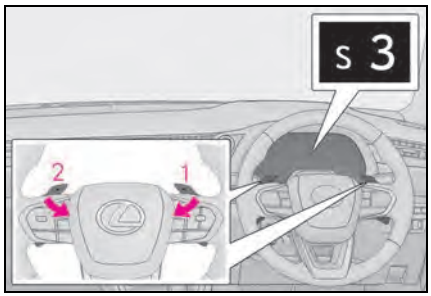
position other than D

■ **Downshifting restriction warning buzzer**

To help ensure safety and driving performance, downshifting operation may sometimes be restricted. In some circumstances, downshifting may not be possible even when the paddle shift switch is operated. (A buzzer will sound twice.)

Selecting shift ranges in the S mode (vehicles with paddle shift switches)

To enter S mode, shift the shift position to S. Shift ranges can be selected by operating the paddle shift switches, allowing you to drive in the shift range of your choosing. The shift range can then be selected by operating the "-" and "+" paddle shift switches.



1 Upshifting

2 Downshifting

The selected shift range, from S1 to S6, will be displayed on the meter.

The initial shift range in S mode is automatically set to S4.

■ **Shift ranges and their functions**

- You can choose from 6 levels of accelerating force and engine braking force.
- A lower shift range will provide greater accelerating force and engine braking force than a higher shift range, and the engine revolutions will also increase.

■ **S mode**

- To prevent the engine from over-revving, upshifting may automatically occur.
- When in S4 or lower, if the paddle shift switch is held toward "+" the shift range will be set to S6.

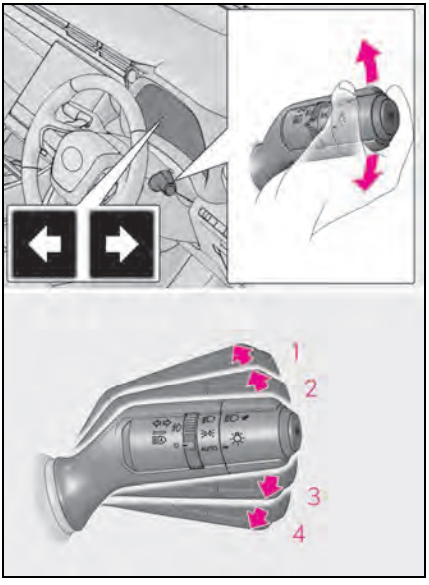
■ **Downshifting restriction warning buzzer**

To help ensure safety and driving performance, downshifting operation may sometimes be restricted. In some circumstances, downshifting may not be possible even when the paddle shift switch is operated. (A buzzer will sound twice.)

Turn signal lever

Operating instructions

The turn signal lever can be used to show the following intentions of the driver.



1 Left turn

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

The left hand signals will flash 3 times.

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

The right hand signals will flash 3 times.

4 Right turn

■ Turn signals can be operated when

The power switch is in ON.

■ If the indicator flashes faster than usual

Have the vehicle inspected by your Lexus dealer.

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

Operate the lever again.

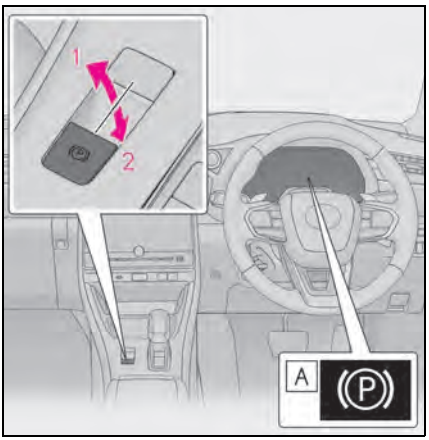
Parking brake

The parking brake can be set or released automatically or manually. In automatic mode, the parking brake can be set or released automatically according to shift position operation. Also, even in automatic mode, the parking brake can be set or released manually.

Operating instructions

■ Using the manual mode

The parking brake can be set and released manually.



A Parking brake indicator light

1 Pull the switch to set the parking brake

The parking brake indicator light will turn on.

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

2 Press the switch to release the parking brake

- Operate the parking brake switch while depressing the brake pedal.
- Using the parking brake automatic release function, the parking brake can be released by depressing the accelerator pedal. When using this function, slowly depress the accelerator pedal. (→P.183)

Make sure that the parking brake indicator light turn off. If the parking brake indicator light flash, operate the switch again. (→P.430)

■ Turning the automatic mode on

While the vehicle is stopped, pull and hold the parking brake switch until a buzzer sounds and a message is shown on the multi-information display

When the automatic mode is turned on, the parking brake operates as follows.

- When the shift position is shifted from P, the parking brake will be released, and the parking brake indicator light will turn off.
- When the shift position is shifted to P, the parking brake will be set, and the parking brake indicator light will turn on.

Operate the shift position and P position switch with the vehicle stopped and the brake pedal depressed.

The auto function may not operate if the shift lever is moved extremely quickly or the brake pedal is not firmly depressed. In this situation, apply the parking brake manually. (→P.182)

- When the hybrid system is off, the

parking brake will be set, and the parking brake indicator light turn on.

■ Turning the automatic mode off

While the vehicle is stopped and depressing the brake pedal, press and hold the parking brake switch until a buzzer sounds and a message is shown on the multi-information display.

■ Parking brake operation

- When the power switch is not in ON, the parking brake cannot be released using the parking brake switch.
- When the power switch is not in ON, automatic mode (automatic brake setting and releasing) is not available.

■ Parking brake automatic release function

When all of the following conditions are met, the parking brake can be released by depressing the accelerator pedal.

- The driver's door is closed
- The driver is wearing the seat belt
- The shift position is in a forward driving position or reverse driving position
- The malfunction indicator lamp or brake system warning light is not illuminated.

When depressing the accelerator pedal, depress it slowly.

If the parking brake is not released when the accelerator pedal is depressed, release the parking brake manually.

When the shift position is shifted from P, the parking brake will be released automatically.

■ Parking brake automatic lock function

The parking brake will be set automatically under the following conditions:

- The brake pedal is not depressed
- The driver's door is open
- The driver's seat belt is not fastened
- The shift position is in a position other than P or N

(The shift position is in P during Advanced Park* operation.)

- The malfunction indicator lamp and brake system warning light are not illuminated

*: If equipped

■ If "Parking Brake Temporarily Unavailable" is displayed on the multi-information display

If the parking brake is operated repeatedly over a short period of time, the system may restrict operation to prevent overheating. If this happens, refrain from operating the parking brake. Normal operation will return after about 1 minute.

■ If "Parking Brake Unavailable" is displayed on the multi-information display

Operate the parking brake switch. If the message does not disappear after operating the switch several times, the system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

■ Parking brake operation sound

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

■ Parking brake indicator light

- Depending on the power switch mode, the parking brake indicator light will turn on and stay on as described below:
  ON: Comes on until the parking brake is released.
  Not in ON: Stays on for approximately 15 seconds.
- 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.

■ When the parking brake switch malfunctions

Automatic mode (automatic brake setting and releasing) will be turned on automatically.

■ **Parking the vehicle**

→P.155

■ **Parking brake engaged warning buzzer**

A buzzer will sound if the vehicle is driven with the parking brake engaged. "Parking Brake ON" is displayed on the multi-information display (with the vehicle reaching a speed of 5 km/h [3 mph]).

■ **If the brake system warning light comes on**

→P.424

■ **Usage in winter time**

→P.327

WARNING

■ **When parking the vehicle**

Do not leave a child in the vehicle alone. The parking brake may be released unintentionally by a child and there is the danger of the vehicle moving that may lead to an accident resulting in death or serious injury.

■ **Parking brake switch**

Do not set any objects near the parking brake switch. Objects may interfere with the switch and may lead the parking brake to unexpectedly operate.

■ **Parking brake automatic lock function**

Never use the automatic parking brake engagement function in place of normal parking brake operation. This function is designed to reduce the risk of a collision due to the driver forgetting to engage the parking brake. Over-reliance on this function to park the vehicle safely may lead to an accident resulting in death or serious injury.

NOTICE

■ **When parking the vehicle**

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

■ **When the system malfunctions**

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

■ **When the vehicle 12-volt battery is discharged**

The parking brake system cannot be activated. (→P.456)

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

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

Have the vehicle inspected by your Lexus dealer immediately if this occurs.

Brake Hold

The brake hold system keeps the brake applied when the shift position is in D, B*1, S*2, N or P with the system on and the brake pedal has been depressed to stop the vehicle. The system releases the brake when the accelerator pedal is depressed with the shift position in D, B*1 or S*2 to allow smooth start off.

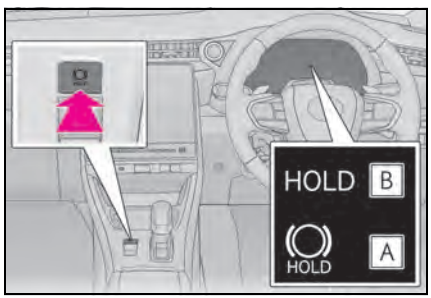
*1: Vehicles without paddle shift switches

*2: Vehicles with paddle shift switches

Enabling the system

Turns the brake hold system on

The brake hold standby indicator A (green) comes on. While the system is holding the brake, the brake hold operated indicator B (yellow) comes on.



■ Brake hold system operating conditions

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

- The driver's door is not closed.
- The driver is not wearing the seat belt.
- "Parking Brake Unavailable" or "Parking Brake Malfunction Visit Your Dealer" is displayed on the multi-information display.

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

■ Brake hold function

- If the brake pedal is left released for a period of about 3 minutes after the system has started holding the brake, the parking brake will be set automatically. In this case, a warning buzzer sounds and a message is shown on the multi-information display.
- To turn the system off while the system is holding the brake, firmly depress the brake pedal and press the button again.
- The brake hold function may not hold the vehicle when the vehicle is on a steep incline. In this situation, it may be necessary for the driver to apply the brakes. A warning buzzer will sound and the multi-information display will inform the driver of this situation. If a warning message is shown on the multi-information display, read the message and follow the instructions.
- When do not wish for the parking brake to operate automatically, press and hold the brake hold switch until the standby indicator (green) turns off, and then turn the power switch off.

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

Perform any of the following operations to release the parking brake.

- Depress the accelerator pedal. (The parking brake will not be released automatically if the seat belt is not fastened.)

● Operate the parking brake switch with the brake pedal depressed.

Make sure that the parking brake indicator light goes off. (→P.182)

■ When an inspection at your Lexus dealer is necessary

When the brake hold standby indicator (green) does not illuminate even when the brake hold switch is pressed with the brake hold system operating conditions met, the system may be malfunctioning. Have the vehicle inspected at your Lexus dealer.

■ If "Brake Hold Malfunction Visit Your Dealer" is displayed on the multi-information display

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

■ Warning messages and buzzers

Warning messages and buzzers are used to indicate a system malfunction or to inform the driver of the need for caution. If a warning message is shown on the multi-information display, read the message and follow the instructions.

■ If the brake hold operated indicator flashes

→P.430

WARNING

■ When the vehicle is on a steep incline

Take care when using the brake hold system on a steep incline, exercise caution. The brake hold function may not hold brakes in such situations.

Also, the system may not activate depending on the angle of the slope.

■ 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

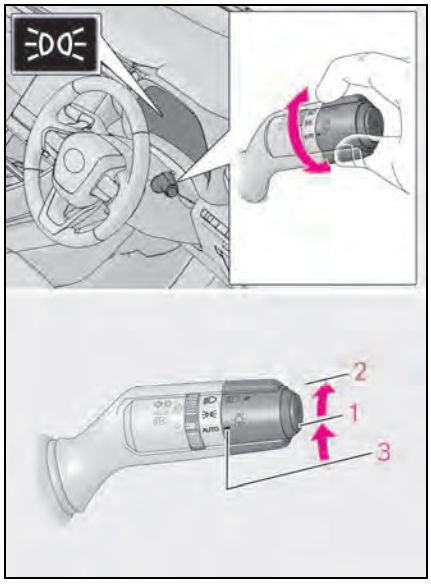
The brake hold system is not designed for use when parking the vehicle for a long period of time. Turning the power switch off while the system is holding the brake may release the brake, which would cause the vehicle to move. When operating the power switch, depress the brake pedal, shift the shift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

Headlight switch

The headlights can be operated manually or automatically.

Turning on the headlights

Operating the switch turns on the lights as follows:



1 The front position, tail, license plate and instrument panel lights turn on.

2 The headlights and all the lights listed above turn on.

3 AUTO The headlights, daytime running lights (→P.187) and all the lights listed above turn on and off automatically.

■ **AUTO mode can be used when**

The power switch is in ON.

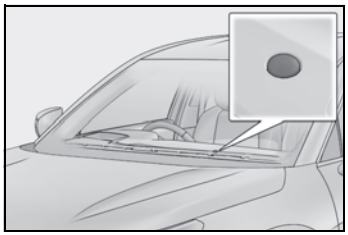
■ **Daytime running light function**

To make your vehicle more visible to other drivers during daytime driving, the daytime running lights turn on automatically whenever the hybrid system is started and the parking brake is released with the headlight switch in the AUTO position. (Illuminate brighter than the front position lights.) Daytime running lights are not designed for use at night.

■ **Headlight control sensor**

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

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



■ **Automatic light off system**

- When the headlights come on: The headlights and tail lights turn off 30 seconds after the driver's door is opened and closed if the power switch is turned to ACC or OFF. (The lights turn off immediately if on the key is pressed after all the doors are locked.)
- When only the tail lights come on: The tail lights turn off automatically if the power switch is turned to ACC or OFF and the driver's door is opened.

To turn the lights on again, turn the power switch to ON, or turn the light switch off once and then back to or .

■ **Light reminder buzzer**

A buzzer sounds when the power switch is turned off or turned to ACC and the driver's door is opened while the lights are turned on.

■ **Automatic headlight leveling system (if equipped)**

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

■ **12-volt battery-saving function**

In order to prevent the 12-volt battery of the vehicle from discharging, if the headlights and/or tail lights are on when the power switch is turned off, the 12-volt battery saving function will operate and automatically turn off all the lights after approximately 10 minutes. When the power switch is turned to ON, the 12-volt battery-saving function will be disabled.

When any of the following are performed, the 12-volt battery-saving function is canceled once and then reactivated. All the lights will turn off automatically 10 minutes after the 12-volt battery-saving function has been reactivated:

- When the headlight switch is operated
- When a door is opened or closed

■ **Welcome light illumination control**

The front position lights automatically turn on at night when the doors are unlocked using the entry function or wireless remote control if the light switch is in the AUTO position.

■ **Customization**

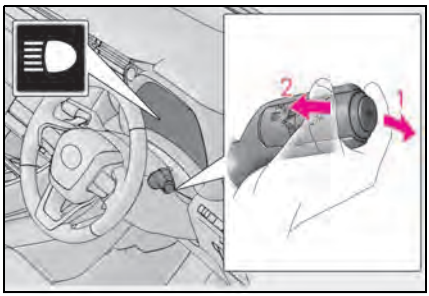
Settings (e.g. light sensor sensitivity) can be changed.
(Customizable features: →P.476)

NOTICE

■ **To prevent 12-volt battery discharge**

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

Turning on the high beam headlights



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

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

2 Pull the lever toward you and release it to flash the high beams once.

You can flash the high beams with the headlights on or off.

Cornering lights (if equipped)

When any of the following conditions is met, while the headlights (low beam) are on, the cornering lights will additionally turn on and light up the direction of movement for the vehicle. This is to ensure excellent visibility when either driving at intersections or parking at night.

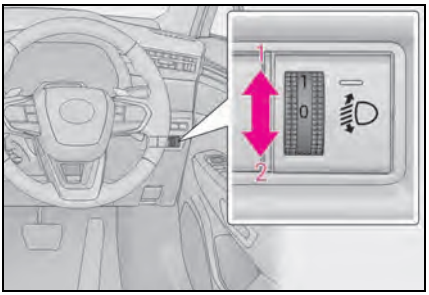
- The steering wheel is operated
- The turn signal lever is operated
- The shift lever is in R (both left and right side cornering lights)

■ Cornering light control

- The lights illuminate when the vehicle speed is approximately 30 km/h (19 mph) or less. However, the lights turn off when the vehicle speed increases to approximately 35 km/h (22 mph) or more.
- After the lights remain illuminated for 30 minutes, they automatically turn off.

Manual headlight leveling dial (if equipped)

The level of the headlights can be adjusted according to the number of passengers and the loading condition of the vehicle.



1 Raises the level of the headlights

2 Lowers the level of the headlights

■ Guide to dial settings

▶ 2WD models

Occupancy and luggage load conditions		Dial position
Occupants	Luggage load	
Driver	None	0
Driver and front passenger	None	0.5
All seats occupied	None	1.5
All seats occupied	Full luggage loading	2.5
Driver	Full luggage loading	3.5

▶ AWD models

Occupancy and luggage load conditions		Dial position
Occupants	Luggage load	
Driver	None	0
Driver and front passenger	None	0.5
All seats occupied	None	1.5
All seats occupied	Full luggage loading	2
Driver	Full luggage loading	3

AHS (Adaptive High-beam System)*

*: If equipped

The Adaptive High-beam System uses a front camera located on the upper portion of the windshield to detect the brightness of the lights of vehicles ahead, streetlights, etc., and automatically controls the light distribution of the headlights.

WARNING

■ For safe use

Do not overly rely on the Adaptive High-beam System. Always drive safely, taking care to observe your surroundings and turning the high beams on or off manually if necessary.

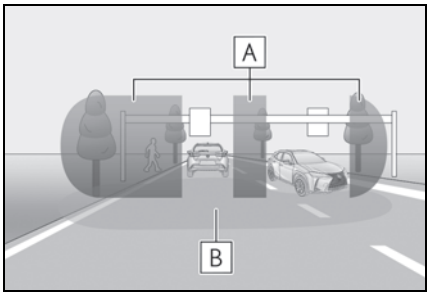
■ To prevent incorrect operation of the Adaptive High-beam System

When it is necessary to disable the system: →P.205

System controls

- According to the vehicle speed, the brightness and illuminated area of the high beams are adjusted.
- When driving around a curve, the system uses the high beams to brightly illuminate the direction of travel of the vehicle.
- The high beams are illuminated so that the area around a vehicle ahead is shaded. (Shaded high beam)

The shaded high beam helps ensure forward visibility while reducing the dazzling effect on the drivers of vehicles ahead.



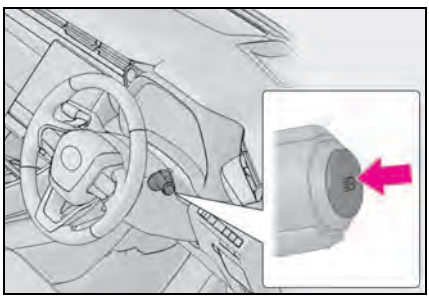
A Area illuminated by the high beams

B Area illuminated by the low beams

- According to the distance to a preceding vehicle, the illuminated area of the low beams is adjusted.

Using the Adaptive High-beam System

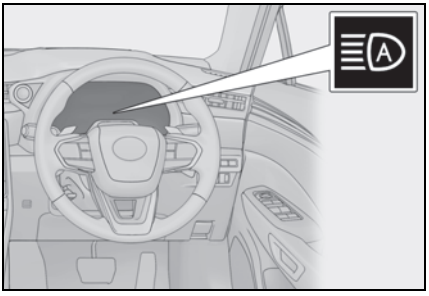
1 Press the Adaptive High-beam System switch.



2 Turn the headlight switch to the AUTO or position.

When the headlight switch lever is in the low beam position, the AHS will be enabled and the AHS indicator will illumi-

nate.



■ System operating conditions

● When all of the following conditions are met, the high beams will illuminate and the system will operate:
- The vehicle speed is approximately 15 km/h (9 mph) or more*.
- The area ahead of the vehicle is dark.

*: When driving around a curve at a vehicle speed of approximately 30 km/h or more, the direction of travel of the vehicle will be brightly illuminated.

● When all of the following conditions are met, the headlights will change to the shaded high beams according to the position of vehicles ahead:
- The vehicle speed is approximately 15 km/h (9 mph) or more.
- The area ahead of the vehicle is dark.
- There is a vehicle ahead with lights on.
- There are few streetlights or other lights on the road ahead.

● If any of the following conditions are met, the system will change to the low beams:
- The vehicle speed is approximately 12 km/h (7.5 mph) or lower.
- The area ahead of the vehicle is not dark.
- There are many vehicles ahead.
- There are many streetlights or other lights on the road ahead.

■ Front camera detection

● In the following situations, the high beams may not be automatically changed to the shaded high beams:
- When a vehicle cuts in front of your vehicle
- When another vehicle crosses in front of the vehicle
- When vehicles ahead are repeatedly detected and then hidden due to repeated curves, road dividers or roadside trees
- When a vehicle ahead approaches from a far lane
- When a vehicle ahead is far away
- When a vehicle ahead has no lights
- When the lights of a vehicle ahead are dim
- When a vehicle ahead is reflecting strong light, such as the headlights of your vehicle
- Situations in which the sensors may not operate properly: →P.209

● The high beams may change to the shaded high beams if a vehicle ahead that is using fog lights without its headlights turned on is detected.

● House lights, street lights, traffic signals, and illuminated billboards or signs and other reflective objects may cause the high beams to change to the shaded high beams, cause the high beams not to change to the shaded high beams, or change the area that is not illuminated.

● The following may change the speed at which the shaded areas change or the timing at which the headlights change to the low beams:
- The brightness of lights of vehicles ahead
- The movement and direction of vehicles ahead
- The distance between the vehicle and a vehicle ahead
- When a vehicle ahead only has lights illuminated on one side
- When a vehicle ahead is a two-wheeled vehicle
- The condition of the road (gradient, curve, condition of the road surface, etc.)
- The number of passengers and amount of luggage

● The light distribution control of the headlights may not match the driver's expectations

● Bicycles and other small vehicles may not be detected.

- In the following situations, the system may not be able to correctly detect the brightness of the surroundings. This may cause the low beams to remain on or the high beams to flash or dazzle pedestrians or vehicles ahead. In such a case, it is necessary to manually change between the high beams and low beams.
  - When there are lights similar to headlights or tail lights in the surrounding area
  - When headlights or tail lights of vehicles ahead are turned off, dirty, changing color, or not aimed properly
  - When the headlights are repeatedly changing between the high beams and low beams.
  - When use of the high beams is inappropriate or when the high beams may be flashing or dazzling pedestrians or other drivers.
  - When the vehicle is used in an area in which vehicles travel on the opposite side of the road of the country for which the vehicle was designed, for example using a vehicle designed for right-hand traffic in a left-hand traffic area, or vice versa
  - When it is necessary to disable the system: →P.205
  - Situations in which the sensors may not operate properly: →P.209

Customization

Some functions can be customized. (→P.476)

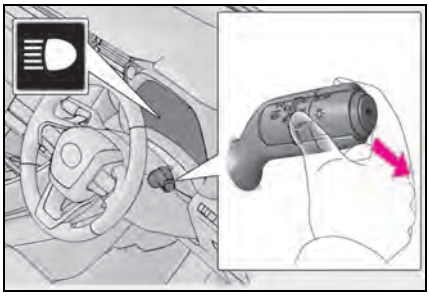
Turning the high beams on/off manually

Changing to the high beams

Push the lever forward.

The AHS indicator will turn off and the high beam indicator will turn on.

Pull the lever to its original position to enable the Adaptive High-beam System again.

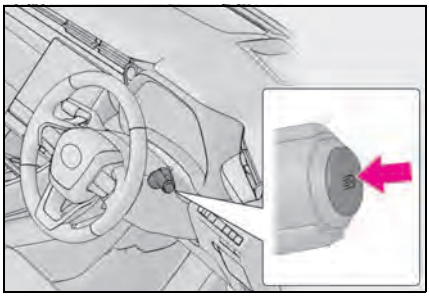


Changing to the low beams

Press the Adaptive High-beam System switch.

The AHS indicator will turn off.

Press the switch to enable the Adaptive High-beam System again.



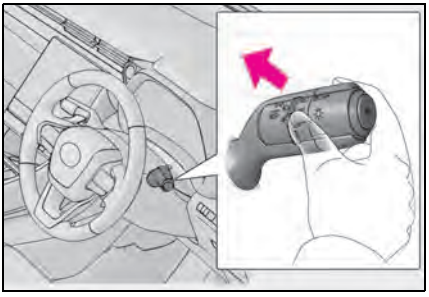
Temporarily switching to the low beams

It is recommended to switch to the low beams when use of the high beams is inappropriate or when the high beams may cause problems or distress to other drivers or pedestrians nearby.

Pull the lever rearward and then return it to its original position.

The high beams will illuminate while the lever is pulled, however, after the lever is returned to its original position, the low beams will remain on for a certain amount of time. After this, the Adaptive High-beam

System will operate.



AHB (Automatic High Beam)

The Automatic High Beam uses a front camera located on the upper portion of the windshield to detect the brightness of the lights of vehicles ahead, streetlights, etc., and automatically changes the head lights between the high beams and low beams.

WARNING

■ For safe use

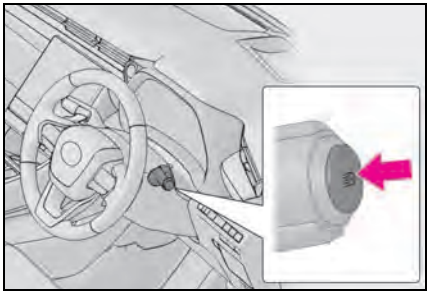
Do not overly rely on the Automatic High Beam. Always drive safely, taking care to observe your surroundings and turning the high beams on or off manually if necessary.

■ To prevent incorrect operation of the Automatic High Beam system

When it is necessary to disable the system: →P.205

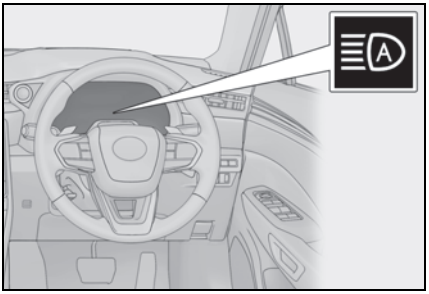
Using the Automatic High Beam system

1 Press the Automatic High Beam switch.



2 Turn the headlight switch to the AUTO or position.

When the headlight switch lever is in the low beam position, the AHB system will be enabled and the AHB indicator will illuminate.



■ **Automatic operating conditions of the high beams**

● When all of the following conditions are met, the high beams will illuminate automatically:
- The vehicle speed is approximately 30 km/h (19 mph) or more.
- The area ahead of the vehicle is dark.
- There are no vehicles ahead with lights on.
- There are few streetlights or other lights on the road ahead.

● If any of the following conditions are met, the headlights will change to the low beams:
- Vehicle speed drops below approximately 25 km/h (16 mph).
- The area ahead of the vehicle is not dark.
- There is a vehicle ahead with lights on.
- There are many streetlights or other lights on the road ahead.

■ **Front camera detection**

● In the following situations, the high beams may not be automatically changed to the low beams:
- When a vehicle cuts in front of your vehicle
- When another vehicle crosses in front of the vehicle
- When vehicles ahead are repeatedly detected and then hidden due to repeated curves, road dividers or roadside trees
- When a vehicle ahead approaches from a far lane
- When a vehicle ahead is far away
- When a vehicle ahead has no lights
- When the lights of a vehicle ahead are dim
- When a vehicle ahead is reflecting strong light, such as own headlights
- Situations in which the sensors may not operate properly: →P.209

● The headlights may change to the low beams if a vehicle ahead that is using fog lights without its headlights turned on is detected.

● House lights, street lights, traffic signals, and illuminated billboards or signs may cause the high beams to change to the low beams, or the low beams to remain on.

● The following may change the timing at which the headlights change to the low beams:
- The brightness of lights of vehicles ahead
- The movement and direction of vehicles ahead
- The distance between the vehicle and a vehicle ahead
- When a vehicle ahead only has lights illuminated on one side
- When a vehicle ahead is a two-wheeled vehicle
- The condition of the road (gradient, curve, condition of the road surface, etc.)
- The number of passengers and amount of luggage

● The headlights may change between the high beams and low beams unexpectedly.

● Bicycles and other small vehicles may not be detected.

● In the following situations, the system may not be able to correctly detect the brightness of the surroundings. This may cause the low beams to remain on or the high beams to flash or dazzle pedestrians or vehicles ahead. In such a case, it is necessary to manually change between the

high beams and low beams.
- When there are lights similar to headlights or tail lights in the surrounding area
- When headlights or tail lights of vehicles ahead are turned off, dirty, changing color, or not aimed properly
- When the headlights are repeatedly changing between the high beams and low beams.
- When use of the high beams is inappropriate or when the high beams may be flashing or dazzling pedestrians or other drivers.
- When the vehicle is used in an area in which vehicles travel on the opposite side of the road of the country for which the vehicle was designed, for example using a vehicle designed for right-hand traffic in a left-hand traffic area, or vice versa
- When it is necessary to disable the system: →P.205
- Situations in which the sensors may not operate properly: →P.209

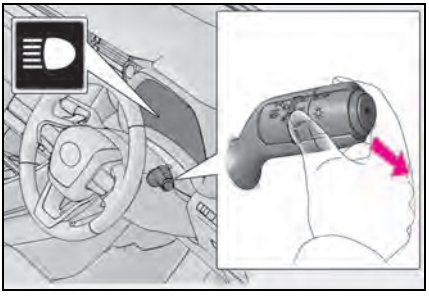
Turning the high beams on/off manually

■ Changing to the high beams

Push the lever forward.

The AHB indicator will turn off and the high beam indicator will turn on.

Pull the lever to its original position to enable the Automatic High Beam system again.

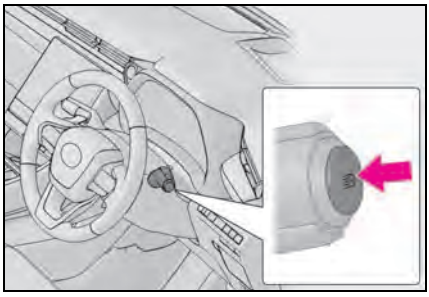


■ Changing to the low beams

Press the Automatic High Beam switch.

The AHB indicator will turn off.

Press the switch to enable the Automatic High Beam system again.

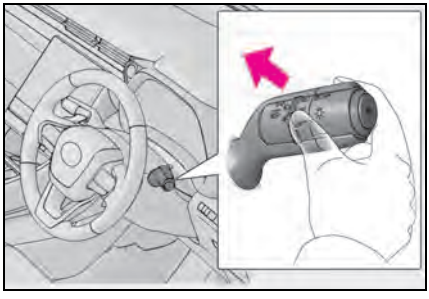


Temporarily switching to the low beams

It is recommended to switch to the low beams when use of the high beams is inappropriate or when the high beams may cause problems or distress to other drivers or pedestrians nearby.

Pull the lever rearward and then return it to its original position.

The high beams will illuminate while the lever is pulled, however, after the lever is returned to its original position, the low beams will remain on for a certain amount of time. After this, the Automatic High Beam system will operate.

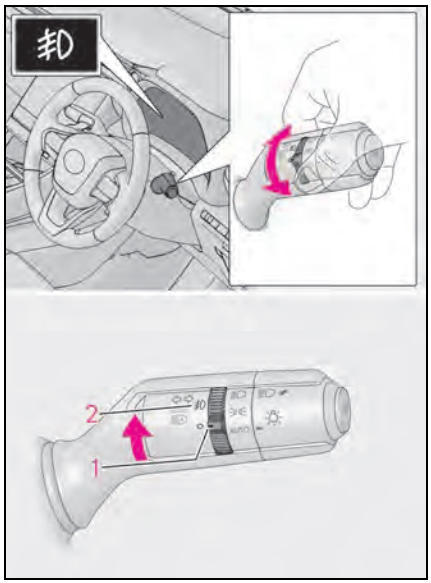


Fog light switch*

*: If equipped

When in difficult driving conditions, such as in rain and fog, turn on the fog lights to secure front visibility.

Turning on the fog lights



1 ○ Turns the fog lights off

2 Turns the fog lights on

■ Fog lights can be used when

The front position lights are turned on.

NOTICE

■ To prevent 12-volt battery discharge

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

Windshield wipers and washer

Operating the lever can change wiper operation to automatic/manual or squirt washer fluid.

NOTICE

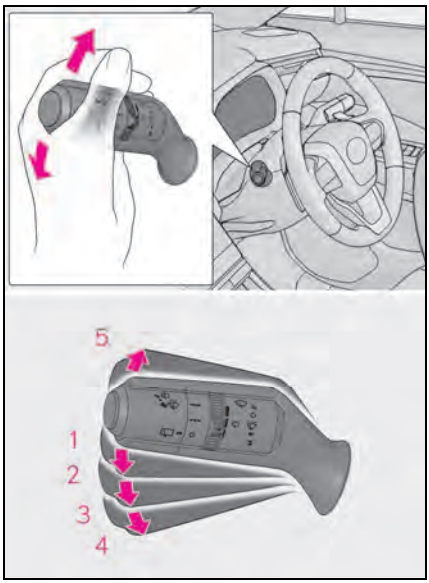
■ When the windshield is dry

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

Operating the wiper lever

Operating the lever operates the wipers or washer as follows:

▶ Intermittent windshield wipers with interval adjuster



1 ○ Off

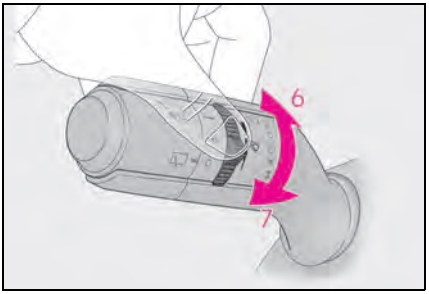
2 Intermittent operation

3 ▼ Low speed operation

4 ▼▼ High speed operation

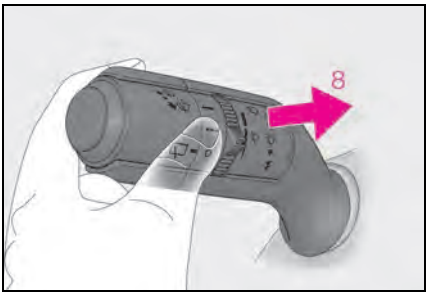
5 ▲ Temporary operation

Wiper intervals can be adjusted when intermittent operation is selected.



6 Increases the intermittent windshield wiper frequency

7 Decreases the intermittent windshield wiper frequency



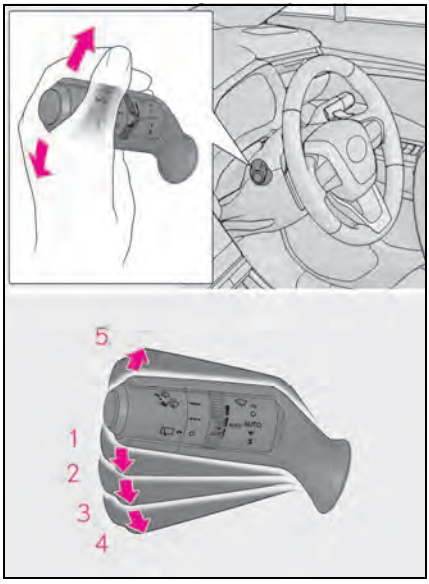
8 Washer/wiper dual operation

Pulling the lever operates the wipers and washer.

The wipers will automatically operate a couple of times after the washer squirts.

▶ Rain-sensing windshield wipers

When AUTO is selected, the wipers will operate automatically when the sensor detects falling rain. The system automatically adjusts wiper timing in accordance with rain volume and vehicle speed.



1 ○ Off

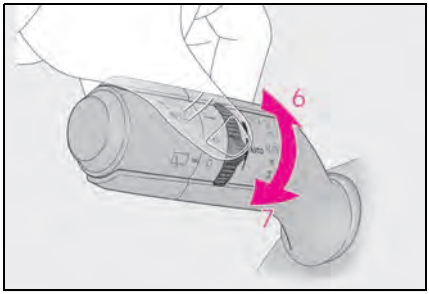
2 AUTO Rain-sensing operation

3 ▼ Low speed operation

4 ▼▼ High speed operation

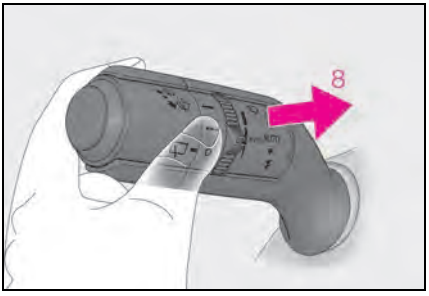
5 ▲ Temporary operation

When AUTO is selected, the sensor sensitivity can be adjusted by turning the switch ring.



6 Increases the sensitivity

7 Decreases the sensitivity



8 Washer/wiper dual operation

Pulling the lever operates the wiper and washer.

The wipers will automatically operate a couple of times after the washer squirts. (After operating several times, the wipers operate once more time after a short delay to prevent dripping. However, the dripping prevention does not operate while the vehicle is moving.)

The windshield wipers and washer can be operated when

The power switch is in ON.

Using the voice control system (if equipped)

The following operations can be performed using the voice control system:

- Operating the windshield wipers only once
- Operating the windshield cleaning washer (it can be performed only when the vehicle is stopped)

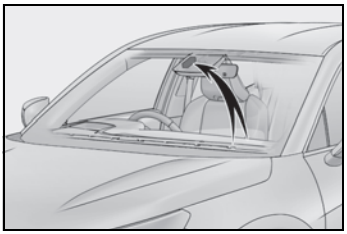
For details regarding the voice control system, refer to "Multimedia Owner's Manual".

Effects of vehicle speed on wiper operation (vehicles with rain-sensing windshield wipers)

Vehicle speed affects the Intermittent wiper interval.

Raindrop sensor (vehicles with rain-sensing windshield wipers)

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



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

If no windshield washer fluid sprays

Check that the washer nozzles are not blocked, if there is washer fluid in the washer fluid tank.

WARNING

■ **Caution regarding the use of windshield wipers in AUTO mode (vehicles with rain-sensing windshield wipers)**

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

■ **Caution regarding the use of washer fluid**

When it is cold, do not use the washer fluid until the windshield becomes warm. The fluid may freeze on the windshield and cause low visibility. This may lead to an accident, resulting in death or serious injury.

NOTICE

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

Do not operate the switch continually as the washer fluid pump may overheat.

■ **When a nozzle becomes blocked**

In this case, contact your Lexus dealer. Do not try to clear it with a pin or other object. The nozzle will be damaged.

■ **To prevent 12-volt battery discharge**

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

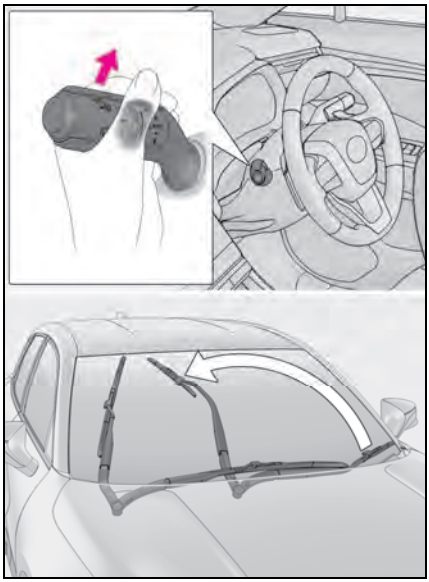
Changing the windshield wiper rest position/Lifting the windshield wipers

When the windshield wipers are not being used, they retract to below the hood. To enable the windshield wipers to be lifted when parking in cold conditions or when replacing a windshield wiper insert, change the rest position of the windshield wipers to the service position using the wiper lever.

■ **Raising the wipers to the service position**

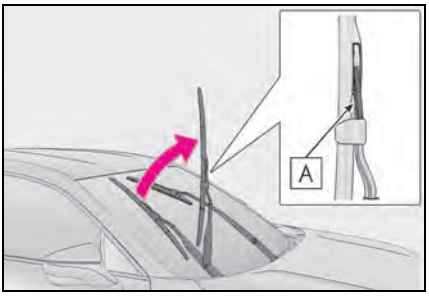
Within approximately 45 seconds of turning the power switch off, move the wiper lever to the △ position and hold it for approximately 2 seconds or more.

The wipers will move to the service position.



■ **Lifting the windshield wipers**

While holding the hook portion A of the wiper arm, lift the windshield wiper from the windshield.



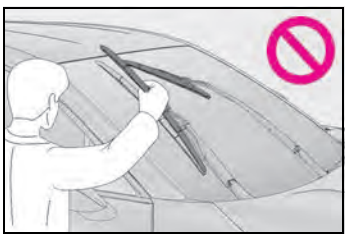
Lowering the windshield wipers to the retracted position

With the windshield wipers placed on the windshield, turn the power switch to ON and then move the wiper lever to an operating position. When the wiper switch is turned off, the windshield wipers will stop at the retracted position. Even if the wipers deviate while the power switch is OFF, the wipers will return to the normal position.

NOTICE

When lifting the windshield wipers

- When lifting the wiper arms away from the windshield pull the driver side wiper arm upward first, and repeat for the passenger's side. When returning the wipers to their original position, do so from the passenger's side first. Otherwise, the wiper arms may be damaged.
- Do not lift a windshield wiper by the wiper blade. Otherwise, the wiper blade may be deformed.



- Do not operate the wiper lever when the windshield wipers are lifted. Otherwise, the windshield wipers may contact the hood, possibly resulting in damage to the windshield wipers and/or hood.

Rear window wiper and washer

The rear window wiper and washer can be used by operating the lever.

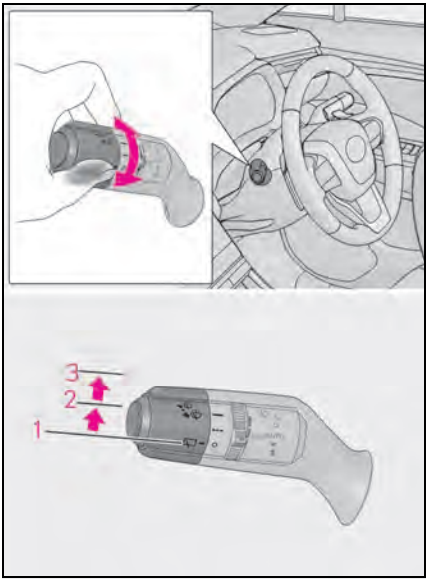
NOTICE

■ When the rear window is dry

Do not use the wiper, as it may damage the rear window.

Operating the wiper lever

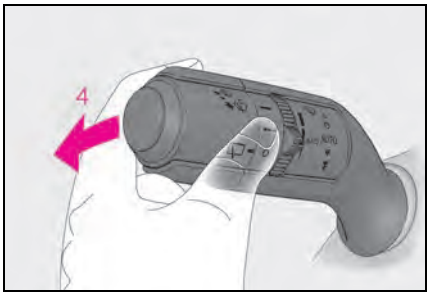
Operating the switch operates the rear wiper as follows:



1 ○ Off

2 - - - Intermittent operation

3 — Normal operation



4 Washer/wiper dual operation

Pushing the lever operates the wiper and washer.

The wiper will automatically operate a couple of times after the washer squirts.

The washer will automatically operate and clean the rear camera.*

*: Refer to "Multimedia Owner's Manual".

■ The rear window wiper and washer can be operated when

The power switch is in ON.

■ Using the voice control system (if equipped)

The following operations can be performed using the voice control system:

- Operating the rear window wiper only once
- Operating the rear window cleaning washer (it can be performed only when the vehicle is stopped)

For details regarding the voice control system, refer to "Multimedia Owner's Manual".

■ If no windshield washer fluid sprays

Check that the washer nozzles are not blocked, if there is washer fluid in the washer fluid tank.

■ Reverse-linked rear window wiper function

When the shift lever is shifted to R when the

front wipers are operating, the rear window wiper will operate once.

Back door opening linked rear window wiper stop function

When the rear window wiper is operating, if the back door is opened while the vehicle is stopped, operation of the rear window wiper will be stopped to prevent anyone near the vehicle from being sprayed by water from the wiper. When the back door is closed, wiper operation will resume.

Customization

Setting of the reverse-linked function can be changed. (Customizable features: →P.476)

NOTICE

When the washer fluid tank is empty

Do not operate the switch continually as the washer fluid pump may overheat.

When a nozzle becomes blocked

In this case, contact your Lexus dealer. Do not try to clear it with a pin or other object. The nozzle will be damaged.

To prevent 12-volt battery discharge

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

Opening the fuel tank cap

Before refueling the vehicle

- Turn the power switch off and ensure that all the doors and windows are closed.
- Confirm the type of fuel.

■ Fuel types

→P.475

■ Fuel tank opening for unleaded gasoline

To help prevent incorrect fueling, your vehicle has a fuel tank opening that only accommodates the special nozzle on unleaded fuel pumps.

WARNING

■ When refueling the vehicle

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

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

■ When refueling

Observe the following precautions to prevent fuel overflowing from the fuel tank:

- Securely insert the fuel nozzle into the fuel filler neck.
- Stop filling the tank after the fuel nozzle automatically clicks off.
- Do not top off the fuel tank.

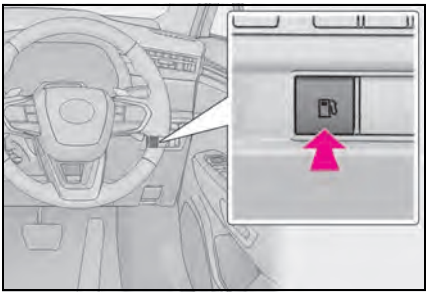
NOTICE

■ Refueling

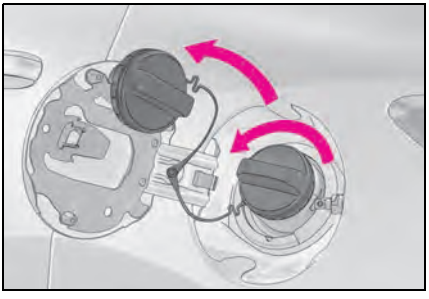
Do not spill fuel during refueling.
Doing so may damage the vehicle, such as causing the emission control system to operate abnormally or damaging fuel system components or the vehicle's painted surface.

Opening the fuel tank cap

1 Press the opener switch.



2 Turn the fuel tank cap slowly and remove it, then put it into the holder on the fuel filler door.

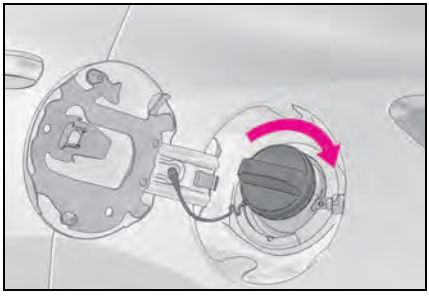


■ If the fuel filler door cannot be opened

Consult your Lexus dealer.

Closing the fuel tank cap

After refueling, turn the fuel tank cap until you hear a click. Once the cap is released, it will turn slightly in the opposite direction.



WARNING

■ When replacing the fuel tank cap

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

Lexus Safety System +

The Lexus Safety System + consists of the driving assist systems and contributes to a safe and comfortable driving experience:

WARNING

■ Lexus Safety System +

The Lexus Safety System + operates under the assumption that the driver will drive safely, and is designed to help reduce the impact to the occupants in a collision and assist the driver under normal driving conditions.

As there is a limit to the degree of recognition accuracy and control performance that this system can provide, do not overly rely on this system. The driver is solely responsible for paying attention to the vehicle's surroundings and driving safely.

■ For safe use

- Do not overly rely on this system. The driver is solely responsible for paying attention to the vehicle's surroundings and driving safely. This system may not operate in all situations and provided assistance is limited. Over-reliance on this system to drive the vehicle safely may lead to an accident resulting in death or serious injury.
- Do not attempt to test the operation of the system, as it may not operate properly, possibly leading to an accident.
- If attention is necessary while performing driving operations or a system malfunction occurs, a warning message or warning buzzer will be operated. If a warning message is displayed on the display, follow the instructions displayed.
- Depending on external noise, the volume of the audio system, etc. it may be difficult to hear the warning buzzer. Also, depending on the road conditions, it may be difficult to recognize the operation of the system.

■ When it is necessary to disable the system

In the following situations, make sure to disable the system.

Failure to do so may lead to the system not operating properly, possibly leading to an accident resulting in death or serious injury.

- When the vehicle is tilted due to being overloaded or having a flat tire
- When driving at extremely high speeds
- When towing another vehicle
- When the vehicle is being transported by a truck, ship, train, etc.
- When the vehicle is raised on a lift and the tires are allowed to rotate freely
- When inspecting the vehicle using a drum tester such as a chassis dynamometer or speedometer tester, or when using an on vehicle wheel balancer
- When the vehicle is driven in a sporty manner or off-road
- When using an automatic car wash
- When a sensor is misaligned or deformed due to a strong impact being applied to the sensor or the area around the sensor
- When accessories which obstruct a sensor or light are temporarily installed to the vehicle

WARNING

- When a compact spare tire or tire chains are installed to the vehicle or an emergency tire puncture repair kit has been used
- When the tires are excessively worn or the inflation pressure of the tires is low
- When tires other than the manufacturer specified size are installed
- When the vehicle cannot be driven stably, due to a collision, malfunction, etc.

Driving assist systems

■ **AHS (Adaptive High-beam System)***

→P.190

■ **AHB (Automatic High Beam)**

→P.193

■ **PCS (Pre-Collision System)**

→P.213

■ **LTA (Lane Tracing Assist)**

→P.224

■ **LDA (Lane Departure Alert)**

→P.229

■ **RSA (Road Sign Assist)**

→P.234

■ **Dynamic radar cruise control**

→P.236

■ **Cruise control**

→P.248

■ **Emergency Driving Stop System**

→P.253

■ **Driver monitor**

→P.212

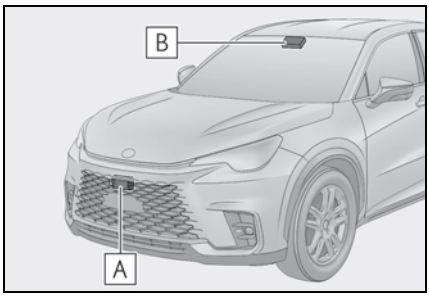
*: If equipped

Sensors used by Lexus Safety System +

Various sensors are used to obtain the necessary information for system operation.

■ **Sensors which detect the surrounding conditions**

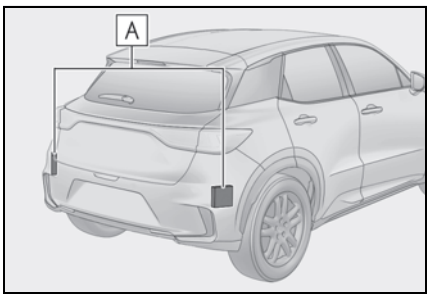
▶ Front



A Front radar sensor

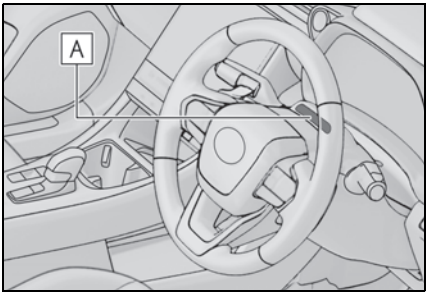
B Front camera

▶ Rear



A Rear side radar sensors

■ Sensors which detect the driver condition



A Driver monitor camera

WARNING

■ To prevent malfunction of the radar sensors

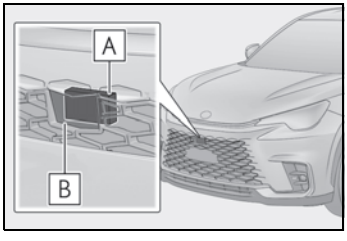
Observe the following precautions.

Failure to do so may lead to a radar sensor not operating properly, possibly leading to an accident resulting in death or serious injury.

- Keep the radar sensors and radar sensor covers clean at all times.

Clean the front of a radar sensor or the front or back of a radar sensor cover if it is dirty or covered with water droplets, snow, etc.

When cleaning the radar sensor and radar sensor cover, use a soft cloth to remove dirt so as to not damage them.



A Radar sensor

B Radar sensor cover

- Do not attach accessories, stickers (including transparent stickers), aluminum tape, etc. to a radar sensor or radar sensor cover and their surrounding area.
- Do not subject a radar sensor or its surrounding area to impact.

If a radar sensor, the front grille, or front bumper has been subjected to a impact, have the vehicle inspected by your Lexus dealer.

- Do not disassemble the radar sensors.
- Do not modify or paint the radar sensors or radar sensor cover, or replace them with anything other than Lexus genuine parts.
- In the following situations, recalibration of the radar sensors will be necessary. For details, contact your Lexus dealer.
  - When a radar sensor is removed and installed, or replaced
  - When the front bumper or the front grille has been replaced

■ To prevent malfunction of the front camera

Observe the following precautions.

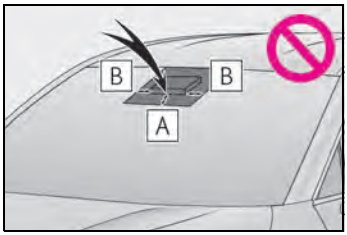
Failure to do so may lead to the front camera not operating properly, possibly leading to an accident resulting in death or serious injury.

- Always keep the windshield clean.
  - If the windshield is dirty or covered with an oily film, water droplets, snow, etc., clean the windshield.
  - Even if a glass coating agent is applied to the windshield, it will still be necessary to use the windshield wipers to remove water droplets, etc. from the area of the windshield in front of the front camera.

WARNING

- If the inner side of the windshield where the front camera is installed is dirty, contact your Lexus dealer.

- Do not attach stickers (including transparent stickers) or other items to the area of the windshield in front of the front camera (shaded area in the illustration).



A Approximately 4 cm (1.6 in.)

B Approximately 4 cm (1.6 in.)

- If the part of the windshield in front of the front camera is fogged up or covered with condensation or ice, use the windshield defogger to remove the fog, condensation, or ice.

- If water droplets cannot be properly removed from the area of the windshield in front of the front camera by the windshield wipers, replace the wiper insert or wiper blade.

- Do not attach window tint to the windshield.

- Replace the windshield if it is damaged or cracked.

If the windshield has been replaced, recalibration of the front camera will be necessary. For details, contact your Lexus dealer.

- Do not allow liquids to contact the front camera.

- Do not allow bright lights to shine into the front camera.

- Do not damage the lens of the front camera or allow it to become dirty.

When cleaning the inside of the windshield, do not allow glass cleaner to contact the lens of the front camera. Do not touch the lens of the front camera.

If the lens of the front camera is dirty or damaged, contact your Lexus dealer.

- Do not subject the front camera to a strong impact.

- Do not change the position or orientation of the front camera or remove it.

- Do not disassemble the front camera.

- Do not modify any parts around the front camera, such as the inside rear view mirror or ceiling.

- Do not attach accessories which may obstruct the front camera to the hood, front grille, or front bumper. For details, contact your Lexus dealer.

- If a surfboard or other long object is to be mounted on the roof, make sure that it will not obstruct the front camera.

- Do not modify or change the headlights and other lights.

Front camera installation area on the windshield

If the system determines that the windshield may be fogged up, it will automatically operate the heater to defog the part of the windshield around the front camera. When cleaning, etc., be careful not to touch the area around the front camera until the windshield has cooled sufficiently, as touching it may cause burns.

WARNING

■ Precautions for the driver monitor camera

Observe the following precautions.

Failure to do so may lead to malfunction of the driver monitor camera and the systems not operating properly, possibly leading to an accident resulting in death or serious injury.

- Do not subject the driver monitor camera or its surrounding area to strong impact.

If subjected to a strong impact, the driver monitor camera may move out of alignment and the driver may no longer be detected correctly. In this case, have the vehicle inspected by your Lexus dealer.

- Do not disassemble or modify the driver monitor camera.
- Do not attach accessories, stickers (including transparent stickers), etc. to the driver monitor camera or its surrounding area.
- Do not allow the driver monitor camera or its surrounding area to get wet.
- Do not cover the driver monitor camera or place anything in front of it.
- Keep the lens of the driver monitor camera free from damage.
- Do not touch the lens of the driver monitor camera or allow it to become dirty.

When there is dirt or fingerprints on the camera lens, clean it with a dry, soft cloth so as to not mark or damage it.

- When cleaning the lens, do not use detergents or organic solvents that may damage plastic.

■ Situations in which the sensors and the systems may not operate properly

- When the height or inclination of the vehicle has been changed due to modifications
- When the windshield is dirty, fogged up, cracked or damaged
- When the ambient temperature is high or low
- When mud, water, snow, dead insects, foreign matter, etc., is attached to the front of the sensor
- When in inclement weather such as heavy rain, fog, snow, or a sandstorm
- When water, snow, dust, etc. is thrown up in front of the vehicle, or when driving through mist or smoke
- When the headlights are not illuminated while driving in the dark, such as at night or when in a tunnel
- When the lens of a headlight is dirty and illumination is weak
- When the headlights are misaligned
- When a headlight is malfunctioning
- When the headlights of another vehicle, sunlight, or reflected light shines directly into the front camera
- When the brightness of the surrounding area changes suddenly
- When driving near a TV tower, broadcasting station, electric power plant, radar equipped vehicles, etc., or other location where strong radio waves or electrical noise may be present
- When a wiper blade is blocking the front camera
- When in a location or near objects which strongly reflect radio waves, such as the following:
  - Tunnels
  - Truss bridges
  - Gravel roads
  - Rutted, snow-covered roads
  - Walls
  - Large trucks
  - Manhole covers

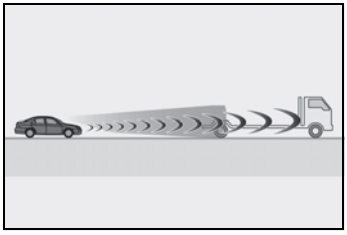
- Guardrail
- Metal plates

● When near a step or protrusion

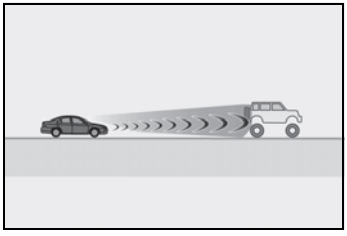
● When a detectable vehicle is narrow, such as a small mobility vehicle

● When a detectable vehicle has a small front or rear end, such as an unloaded truck

● When a detectable vehicle has a low front or rear end, such as a low bed trailer



● When a detectable vehicle has extremely high ground clearance



● When a detectable vehicle is carrying a load which protrudes from its cargo area

● When a detectable vehicle has little exposed metal, such as a vehicle which is partially covered with cloth, etc.

● When a detectable vehicle is irregularly shaped, such as a tractor, sidecar, etc.

● When the distance between the vehicle and a detectable vehicle has become extremely short

● When a detectable vehicle is at an angle

● When snow, mud, etc. is attached to a detectable vehicle

● When driving on the following kinds of roads:

- Roads with sharp curves or winding roads
- Roads with changes in grade, such as sudden inclines or declines
- Roads which is sloped to the left or right
- Roads with deep ruts
- Roads which are rough and unmaintained
- Roads which frequently undulate or are bumpy

● When the steering wheel is being operated frequently or suddenly

● When the vehicle is not in a constant position within a lane

● When parts related to this system, the brakes, etc. are cold or extremely hot, wet, etc.

● When the wheels are misaligned

● When driving on slick road surfaces, such as when it is covered with ice, snow, gravel, etc.

● When the course of the vehicle differs from the shape of a curve

● When the vehicle speed is excessively high when entering a curve

● When entering/exiting a parking lot, garage, car elevator, etc.

● When driving in a parking lot

● When driving through an area where there are obstructions which may contact your vehicle, such as tall grass, tree branches, a curtain, etc.

● When driving in strong wind

■ **Situations in which the lane may not be detected**

● When the lane is extremely wide or narrow

● Immediately after changing lanes or passing through an intersection

● When driving in a temporary lane or lane regulated by construction

● When there are structures, patterns, shadows which are similar to lane lines in the surrounding

● When there are multiple white lines for a lane line

● When the lane lines are not clear or driv-

ing on a wet road surface

- When a lane line is on a curb
- When driving on a bright, reflective road surface, such as concrete

■ Situations in which some or all of the functions of the system cannot operate

- When a malfunction is detected in this system or a related system, such as the brakes, steering, etc.
- When the VSC, TRC, or other safety related system is operating
- When the VSC, TRC, or other safety related system is off

■ Changes in brake operation sound and pedal response

- When the brakes have been operated, brake operation sounds may be heard and the brake pedal response may change, but this does not indicate a malfunction.
- When the system is operating, the brake pedal may feel stiffer than expected or sink. In either situation the brake pedal can be depressed further. Further depress the brake pedal as necessary.

■ Situations in which the driver monitor may not operate properly

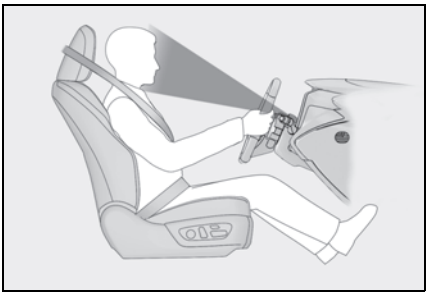
In situations such as the following, the driver monitor camera may not be able to detect the driver's face, and the function may not operate properly.

- When the inside of the vehicle is hot, such as after the vehicle has been parked in the sun
- When a very bright light, such as the sun or the headlights of following vehicle, shines onto the driver monitor camera
- When the brightness inside the vehicle changes frequently due to the shadows of surrounding structures, etc.
- When a very bright light, such as the sun or the headlights of an oncoming vehicle, is shining onto the driver's face
- When light, either inside or outside of the vehicle, is being reflected from the lenses of eyeglasses or sunglasses
- When there are multiple faces in the detection range of the driver monitor camera, such as when a front or rear passenger is leaning toward the driver's seat
- When the driver's face is outside of the detection range of the driver monitor camera, such as when leaned forward or when their head is outside of the window
- When the driver monitor camera is being blocked by the steering wheel, a hand holding the steering wheel, an arm, etc.
- When the driver is wearing a hat
- When the driver is wearing an eyepatch
- When the driver is wearing eyeglasses or sunglasses that do not easily transmit infrared rays
- When the driver is wearing contact lenses
- When the driver is wearing a face mask
- When the driver is laughing or their eyes are only slightly open
- When the driver's eyes, nose, mouth, or shape of their face is blocked
- When the driver is wearing makeup which makes it difficult to detect their eyes, nose, mouth, or shape of their face
- When the driver's eyes are blocked by the frame of eyeglasses, sunglasses, hair, etc.
- When there is a device inside the vehicle that radiates near infrared rays, such as a non-genuine driver monitoring system.

Driver monitor

Basic functions

During controlled driving, the driver monitor camera detects the position and direction the driver is facing, and whether their eyes are opened or closed. Through this, the system determines if the driver is checking their surroundings and if the driver can perform driving operations.



Warning function

In situations such as the following, a buzzer will sound and a message will be displayed to warn the driver.

- When the system determines that the driver is not paying attention to the road or their eyes are closed
- When the driver's face cannot be detected or the system determines that the driver has poor driving posture

Face identification

The driver monitor is used as a device to identify faces in order to identify an individual.

For information about how to use the face identification function, priorities among other devices of individual identification, and linked vehicle settings, see "My Settings". (→P.150)

WARNING

For safe use

- The driver monitor is not designed to prevent the driver from driving carelessly or having a poor driving posture. Pay careful attention to the surrounding conditions in order to ensure safe driving.
- The driver monitor cannot reduce drowsiness. If you feel unable to concentrate or drowsy, take a break and sleep as necessary in order to ensure safe driving.

Warning function

These functions may not operate when the vehicle speed is low.

Face identification

Face identification starts when the door is opened then closed.

In face identification, facial traits are digitized and stored in a built-in computer, to be used for identification in My Settings.

- Face image or video are not stored. Voice is not stored either.
- Digitized face information is not used for any purpose other than identification in My Settings. Additionally, face information cannot be decoded and will not be disclosed or provided to a third party.
- Face information can be deleted by yourself.
- For the handling of face information, please consent to the following before using it:
  - Face identification does not guarantee a complete identity authentication, collation, or identification.
  - When face information registration fails frequently or face identification fails fre-

quently, the driver cameras should be cleaned or face information should be registered again.
- Face information stored in the vehicle computer cannot be decoded or moved to another media. Therefore, it is necessary to register face information again once it is deleted or relevant parts are replaced.
- Once deleted, face information cannot be restored. It is necessary to register face information again.

■ **Situations where face identification may not be performed correctly**

This system is designed for use to identify facial traits. In the following situations, face information may not be able to be registered or identified correctly:

- When a part of the driver's face (eyebrows, eyes, nose, or mouth) is not visible
- When the driver is wearing glasses/sun glasses, a face mask, muffler, etc.
- When the driver is not facing front
- When part of driver's face is covered with hair, beard, a hand, clothes, jewelry, etc.
- When the driver is closing eyes
- When a non-registered driver is a twin, etc. with a registered driver, whose face looks quite alike with each other

■ **Situations in which the driver monitor may not operate properly**

→P.211

Changing Driver monitor settings

The settings of Driver monitor can be changed through customize settings. (→P.485)

PCS (Pre-Collision System)

The pre-collision system uses sensors to detect objects (→P.214) in the path of the vehicle. When the system determines that the possibility of a frontal collision with a detectable object is high, a warning operates to urge the driver to take evasive action and the potential brake pressure is increased to help the driver avoid the collision. If the system determines that the possibility of a collision is extremely high, the brakes are automatically applied to help avoid the collision or help reduce the impact of the collision.

The pre-collision system can be disabled/enabled and the warning timing can be changed. (→P.223)

WARNING

■ **For safe use**

- Driving safely is solely the responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving.

Never use the pre-collision system in place of normal braking operations. This system cannot help avoid or reduce the impact of a collision in every situation. Over-reliance on this system to drive the vehicle safely may lead to an accident resulting in death or serious injury.

WARNING

- Although the pre-collision system is designed to help avoid or help reduce the impact of a collision, its effectiveness may change according to various conditions. Therefore, it may not always be able to achieve the same level of performance.

Read the following items carefully. Do not overly rely on this system and always drive carefully.

- For safe use: →P.205

■ When to disable the pre-collision system

- When it is necessary to disable the system: →P.205

Detectable objects

The system can detect the following as detectable objects. (Detectable objects differ depending on the function.)

- Vehicles
- Bicycles*
- Pedestrians
- Motorcycles*
- Walls

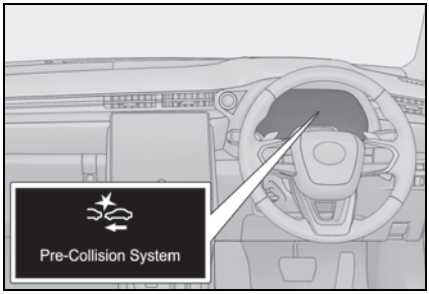
*: Detected as a detectable object only when being ridden.

System functions

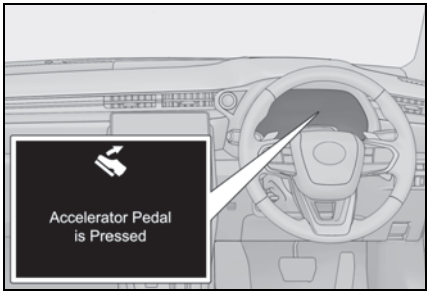
■ Pre-collision warning

When the system determines that the possibility of a collision is high, a buzzer will sound and an icon and warning message will be displayed on the multi-information display to urge the driver to take evasive action.

If the detectable object is a vehicle, moderate braking will be performed with the warning.



If the system determines that the accelerator pedal is strongly depressed, the following icon and message will be displayed on the multi-information display.



■ Pre-collision brake assist

If the system determines that the possibility of a collision is high and the brake operation by the driver is insufficient, the braking power will be increased.

■ Pre-collision brake control

If the system determines that the possibility of a collision is extremely high, the brakes are automatically applied to help avoid the collision or reduce the

impact of the collision.

■ **Emergency steering assist**

If the system determines that the following conditions are met, assistance will be provided to help enhance vehicle stability and prevent lane departure. During assistance, in addition to the pre-collision warning, the following icon will be displayed on the multi-information display.

- The possibility of a collision is high
- There is sufficient space within the lane to perform evasive steering maneuvers
- The driver is operating the steering wheel

During assistance, the pre-collision warning will operate and a message will be displayed to warn the driver.

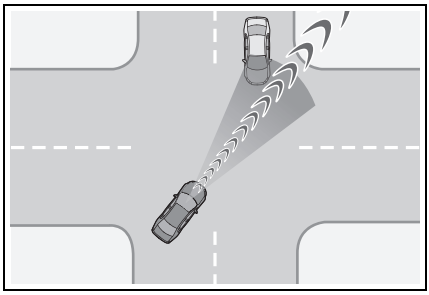


■ **Intersection collision avoidance support (left/right turn)**

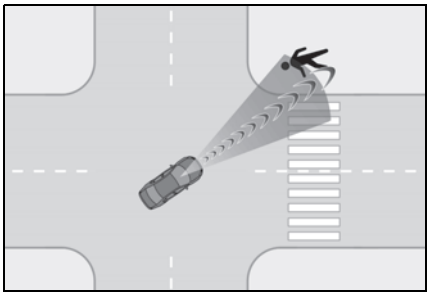
In situations such as the following, if the system determines that the possibility of a collision is high, the pre-collision warning and pre-collision braking will operate.

Depending on the intersection, assistance may not operate correctly.

- When turning left/right at an intersection and crossing the path of an oncoming vehicle



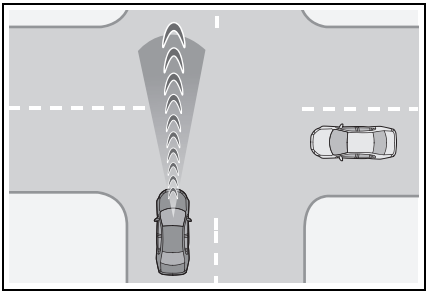
- When turning left/right and a pedestrian or bicycle is detected



■ **Intersection collision avoidance support (crossing vehicles)**

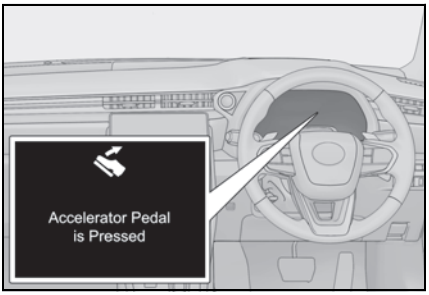
At an intersection, etc., if the system determines that the possibility of a collision with an approaching vehicle or motorcycle is high, the pre-collision warning and pre-collision braking will operate.

Depending on the intersection, assistance may not operate correctly.



■ Acceleration Suppression at Low Speed

When driving at a low speed, if the accelerator pedal is strongly depressed and the system determines that there is a possibility of a collision, hybrid system output will be restrained or the brakes will be applied weakly to restrict acceleration. During operation, a buzzer will sound and a warning indicator and message will be displayed on the multi-information display.



WARNING

■ Pre-collision braking

- When the pre-collision braking function is operating, a large amount of braking force will be applied.
- The pre-collision braking function is not designed to hold the vehicle stopped. If the vehicle is stopped by pre-collision brake control, the driver should operate the brakes immediately as necessary.
- The pre-collision braking function may not operate if certain operations are performed by the driver. If the accelerator pedal is being depressed strongly or the steering wheel is being turned, the system may determine that the driver is taking evasive action and possibly prevent the pre-collision braking function from operating.
- If the brake pedal is being depressed, the system may determine that the driver is taking evasive action and possibly delay the operation timing of the pre-collision brake control.

■ Acceleration Suppression at Low Speed

If the steering wheel is being turned, the system may determine that the driver is taking evasive action and possibly prevent the Acceleration Suppression at Low Speed function from operating or possibly causing its operation to be canceled.

■ Emergency steering assist

- The emergency steering assist will be canceled when the system determines that lane departure prevention control has completed.
- Depending on operations performed by the driver, emergency steering assist may not operate or operation may be canceled.

• If the accelerator pedal is depressed strongly, the steering wheel is turned heavily, the brake pedal is depressed, or the turn signal lever is operated, the system may determine that the driver is taking evasive action and the emergency steering assist may not operate.

WARNING

- While the emergency steering assist is operating, if the accelerator pedal is depressed strongly, the steering wheel is turned heavily, or the brake pedal is depressed, the system may determine that the driver is taking evasive action and emergency steering assist operation may be canceled.
- While the emergency steering assist is operating, if the steering wheel is held or turned in the opposite direction of system operation, emergency steering assist operation will be canceled.

Operating conditions of each function of the pre-collision system

The pre-collision system is enabled and the system determines that the possibility of a frontal collision with a detected object is high.

However, the system will not operate in the following situations:

- When the vehicle has not been driven a certain amount after a terminal of the 12-volt battery has been disconnected and reconnected
- When the shift position is in R
- When the VSC OFF indicator is illuminated (only the pre-collision warning function will be operational)

The following are the operational speeds and cancelation conditions of each function:

- Pre-collision warning

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles, stopped vehicles	Approximately 5 to 180 km/h (3 to 110 mph)	Approximately 5 to 180 km/h (3 to 110 mph)
Oncoming vehicles	Approximately 30 to 180 km/h (20 to 110 mph)	Approximately 80 to 220 km/h (50 to 130 mph)
Bicycles	Approximately 5 to 80 km/h (3 to 50 mph)	Approximately 5 to 80 km/h (3 to 50 mph)
Pedestrians	Approximately 5 to 80 km/h (3 to 50 mph)	Approximately 5 to 80 km/h (3 to 50 mph)

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Preceding motorcycles, stopped motorcycles	Approximately 5 to 180 km/h (3 to 110 mph)	Approximately 5 to 80 km/h (3 to 50 mph)
Oncoming motorcycles	Approximately 30 to 180 km/h (20 to 110 mph)	Approximately 30 to 180 km/h (20 to 110 mph)

While the pre-collision warning is operating, if the steering wheel is operated heavily or suddenly, the pre-collision warning may be cancelled.

● Pre-collision brake assist

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles, stopped vehicles	Approximately 30 to 180 km/h (20 to 110 mph)	Approximately 10 to 180 km/h (7 to 110 mph)
Bicycles	Approximately 30 to 80 km/h (20 to 50 mph)	Approximately 30 to 80 km/h (20 to 50 mph)
Pedestrians	Approximately 30 to 80 km/h (20 to 50 mph)	Approximately 30 to 80 km/h (20 to 50 mph)
Preceding motorcycles, stopped motorcycles	Approximately 30 to 180 km/h (20 to 110 mph)	Approximately 10 to 80 km/h (7 to 50 mph)

● Pre-collision braking

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles, stopped vehicles	Approximately 5 to 180 km/h (3 to 110 mph)	Approximately 5 to 180 km/h (3 to 110 mph)
Oncoming vehicles	Approximately 30 to 180 km/h (20 to 110 mph)	Approximately 80 to 220 km/h (50 to 130 mph)
Bicycles	Approximately 5 to 80 km/h (3 to 50 mph)	Approximately 5 to 80 km/h (3 to 50 mph)
Pedestrians	Approximately 5 to 80 km/h (3 to 50 mph)	Approximately 5 to 80 km/h (3 to 50 mph)
Preceding motorcycles, stopped motorcycles	Approximately 5 to 180 km/h (3 to 110 mph)	Approximately 5 to 80 km/h (3 to 50 mph)
Oncoming motorcycles	Approximately 30 to 180 km/h (20 to 110 mph)	Approximately 30 to 180 km/h (20 to 110 mph)

If either of the following occur while the pre-collision braking function is operating, it will be canceled:

- The accelerator pedal is strongly depressed
- The steering wheel is operated heavily or suddenly

● Emergency steering assist

The emergency steering assist will not operate when the turn signal lights are flashing.

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles, stopped vehicles, bicycles, pedestrians, motorcycles	Approximately 40 to 80 km/h (25 to 50 mph)	Approximately 40 to 80 km/h (25 to 50 mph)

While the emergency steering assist is operating, if any of the following are performed, emergency steering assist operation may be cancelled:

- The accelerator pedal is strongly depressed
- The steering wheel is operated heavily or suddenly
- The brake pedal is depressed

● Intersection collision avoidance support (left/right turn)

The intersection collision avoidance support (for left/right turning vehicles) will not operate when the turn signal lights are not flashing.

Detectable objects	Vehicle speed	Oncoming vehicle speed	Relative speed between your vehicle and object
Oncoming vehicles	Approximately 5 to 40 km/h (3 to 25 mph)	Approximately 5 to 75 km/h (3 to 45 mph)	Approximately 10 to 115 km/h (7 to 70 mph)
Pedestrians	Approximately 5 to 30 km/h (3 to 20 mph)	-	Approximately 5 to 40 km/h (3 to 25 mph)
Bicycles	Approximately 5 to 30 km/h (3 to 20 mph)	-	Approximately 5 to 50 km/h (3 to 30 mph)
Oncoming motorcycles	Approximately 5 to 40 km/h (3 to 25 mph)	Approximately 5 to 75 km/h (3 to 45 mph)	Approximately 10 to 115 km/h (7 to 70 mph)

● Intersection collision avoidance support (crossing vehicles)

Detectable objects	Vehicle speed	Crossing vehicle speed	Relative speed between your vehicle and object
Vehicles, Motorcycles (side)	Approximately 5 to 60 km/h (3 to 38 mph)	• Your vehicle speed or less • Approximately 40 km/h or less (25mph or less)	Approximately 5 to 60 km/h (3 to 38 mph)

● Acceleration Suppression at Low Speed

The Acceleration Suppression at Low Speed function will not operate when the turn signal lights are flashing.

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles, stopped vehicles, Pedestrians, Bicycles, Wall	Approximately 0 to 15 km/h (0 to 9 mph)	Approximately 0 to 15 km/h (0 to 9 mph)

While the Acceleration Suppression at Low Speed function is operating, if any of the following are performed, the low speed sudden acceleration suppression function operation will be cancelled:

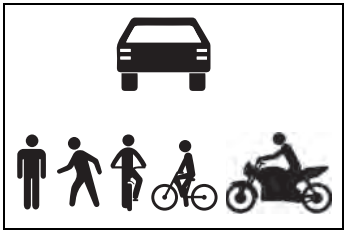
- The accelerator pedal is released.
- The steering wheel is operated heavily or suddenly

■ **Detection of detectable objects**

Objects are detected based on their size, shape, and movement.

Depending on the ambient brightness, movement, posture and direction of a detectable object, it may not be detected and the system may not operate properly.

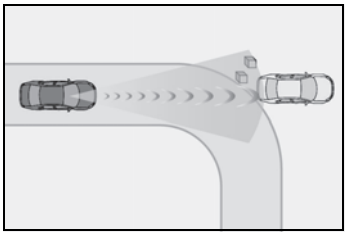
The system detects shapes, such as the following, as detectable objects.



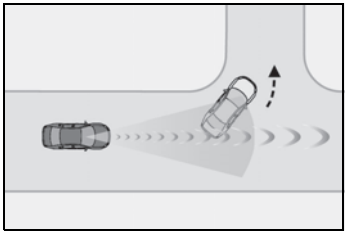
■ **Situations in which the system may operate even though the possibility of a collision is not high**

● In certain situations, such as the following, the system may determine that the possibility of a collision is high and operate:

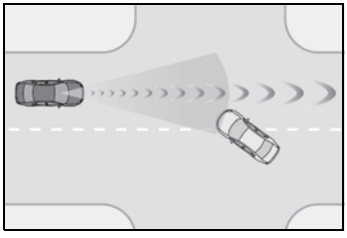
- When passing a detectable object
- When changing lanes while overtaking a detectable object
- When suddenly approaching a detectable object
- When approaching a detectable object or other object on the roadside, such as guardrails, utility poles, trees, walls, etc.
- When there is a detectable object or other object by the roadside at the entrance of a curve



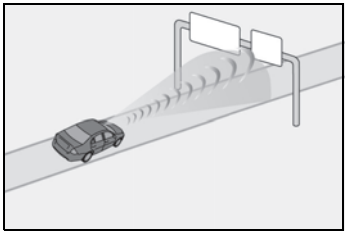
- When there are patterns or a painting ahead of the vehicle that may be mistaken for a detectable object
- When passing a detectable object that is changing lanes or turning left/right



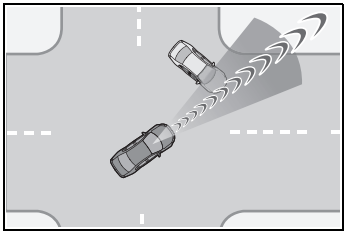
- When passing a detectable object which is stopped to make a left/right turn



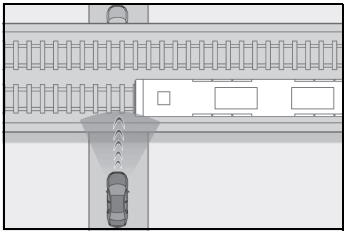
- When a detectable object stops immediately before entering the path of the vehicle
- When passing through a location with a structure above the road (traffic sign, billboard, etc.)



- When approaching an electric toll gate barrier, parking lot barrier, or other barrier that opens and closes
- When turning left/right and an oncoming vehicle, oncoming motorcycle, pedestrian or bicycle crosses in front of the vehicle
- When attempting to turn left/right in front of an oncoming vehicle, oncoming motorcycle, pedestrian or bicycle
- When turning left/right and an oncoming vehicle, oncoming motorcycle, pedestrian or bicycle stops or changes course immediately before entering the path of the vehicle
- When turning left/right and an oncoming vehicle turns left/right in front of the vehicle



- When the steering wheel is operated toward the path of an oncoming vehicle
- When there is an object moving above or under the road

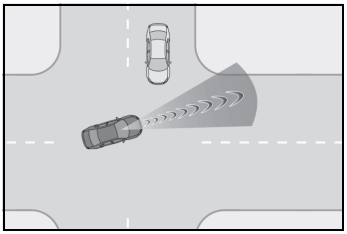


■ Situations in which the system may not operate properly

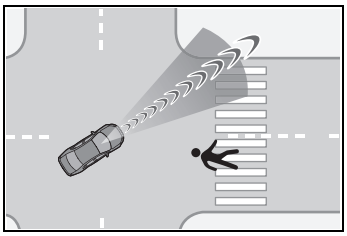
● In certain situations, such as the following, a detectable object may not be detected by the front sensors, and the system may not operate properly:

- When a detectable object is approaching your vehicle
- When your vehicle or a detectable object is wandering
- When a detectable object makes an abrupt maneuver (such as sudden swerv-

ing, acceleration or deceleration)
- When suddenly approaching a detectable object
- When the detectable object is near a wall, fence, guardrail, manhole cover, steel plate on the road surface, or another vehicle
- When there is a structure above a detectable object
- When part of a detectable object is hidden by another object (large luggage, umbrella, guardrail, etc.)
- When multiple detectable objects are overlapping
- When a bright light, such as the sun, is reflecting off of a detectable object
- When a detectable object is white and looks extremely bright
- When the color or brightness of a detectable object causes it to blend in with its surroundings
- When a detectable object cuts in front of or suddenly emerges in front of your vehicle
- When approaching a vehicle which is diagonal
- If a bicycle is a child sized bicycle, is carrying a large load, is carrying an extra passenger, is carrying a forward leaning rider, or has an unusual shape (bicycles equipped with a child seat, tandem bicycles, etc.)
- If a pedestrian or bicycle is shorter than approximately 1 m (3.2 ft.) or taller than approximately 2 m (6.5 ft.).
- When the silhouette of a pedestrian or bicycle is unclear (such as when they are wearing a raincoat, long skirt, etc.)
- When a pedestrian is bending forward or squatting
- When a pedestrian or bicycle is moving at high speed
- When a pedestrian is pushing a stroller, wheelchair, bicycle or other vehicle
- When a detectable object blends in with the surrounding area, such as when it is dim (at dawn or dusk) or dark (at night or in a tunnel)
- When the vehicle has not been driven for a certain amount of time after the hybrid system was started
- While turning left/right or a few seconds after turning left/right
- While driving around a curve and a few seconds after driving around a curve
- When turning left/right and an oncoming vehicle is driving in a lane 3 or more lanes from the vehicle
- When turning left/right and the direction of the vehicle differs greatly from the direction traffic flows in the oncoming lane



- When turning left/right, a pedestrian or bicycle behind the vehicle comes in front of it as if it overtakes the vehicle



- When at an intersection, the approaching crossing vehicle is long in overall length, such as a large truck, towing trailer, etc.

● In addition to the preceding, in certain situations, such as the following, the emergency steering assist may not operate properly:
- When a detectable object is too close to the vehicle
- When there is insufficient space to perform evasive steering maneuvers or an obstruction exists in the evasion direction
- When there is an oncoming vehicle

● In addition to the preceding, in certain situations, such as the following, walls may not be detected as a target object and the Acceleration Suppression at Low Speed function may not operate properly:
- When scenery behind the wall is visible, such as a glass door, grid fence, etc.

- When the wall is slanted or low
- When the wall is narrow, such as a pole, etc.
- When the wall is made of plants, such as a hedge, etc.
- When the road, etc. is reflected on the wall
- When the vehicle is approaching the wall at an angle

Changing the pre-collision setting

- The pre-collision system can be enabled/disabled through a customize setting. (→P.483)

The system is enabled each time the power switch is turned to ON.

- When the system is disabled, the PCS warning light will illuminate and a message will be displayed on the multi-information display.
- The pre-collision setting can be changed on the customize settings. (→P.483)
- When the pre-collision warning timing is changed, the emergency steering assist timing will also be changed.
  When later is selected, the emergency steering assist will not operate in most cases.
- When the system determines that the driver is not facing forward, the pre-collision warning and emergency steering assist will operate at the earlier timing, regardless of the user setting.
- When the dynamic radar cruise control is operating, the pre-collision warning will operate at the earlier timing, regardless of the user setting.

LTA (Lane Tracing Assist)

LTA functions

- When driving on a road with clear lane lines with the dynamic radar cruise control operating, lane lines and preceding and surrounding vehicles are detected using the front camera and radar sensor, and the steering wheel is operated to maintain the vehicle's lane position.

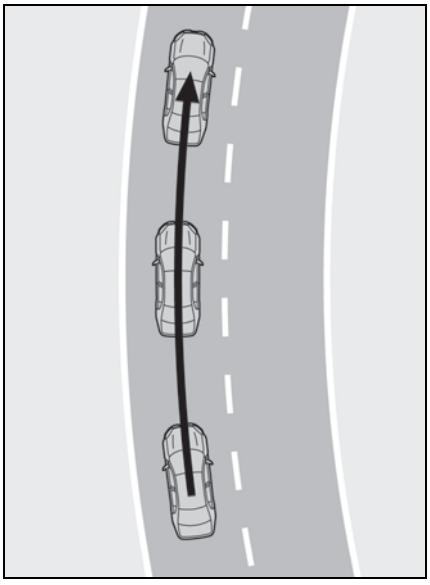
Use this function only on highways and expressways.

If the dynamic radar cruise control is not operating, the function will not operate.

In situations where the lane lines are difficult to see or are not visible, such as when in a traffic jam, support will be provided using the path of preceding and surrounding vehicles.

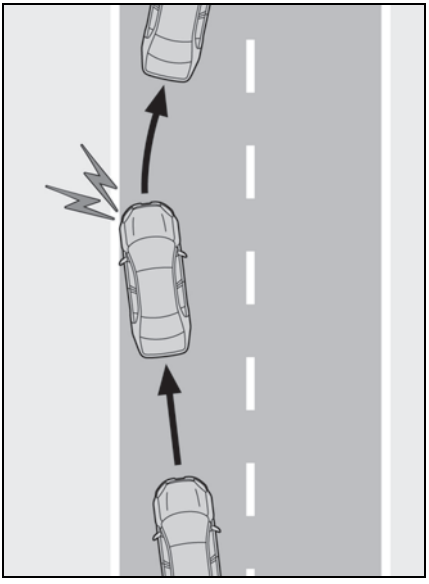
If the system determines that the steering wheel has not been operated for a certain amount of time or the steering wheel is not being firmly gripped, the driver will be alerted and this function will be temporarily canceled.

If the steering wheel is firmly gripped, the function will begin operating again.



- When the function is operating, if the vehicle is likely to depart from its lane, the driver will be alerted via a display and buzzer.

When the buzzer sounds, check the area around the vehicle and carefully operate the steering wheel to move the vehicle back to the center of the lane.



WARNING

■ Before using the LTA system

- Do not overly rely on the LTA system. The LTA system is not a system which provides automated assistance in driving and it is not a system which reduces the amount of attention necessary for safe driving. The driver is solely responsible for paying attention to their surroundings and operating the steering wheel as necessary to ensure safety. Also, the driver is responsible for taking adequate breaks when fatigued, such as when driving for a long time.
- Failure to perform appropriate driving operations and pay careful attention may lead to an accident.
- When not using the LTA system, turn it off using the LTA switch.

■ Operating conditions of function

This function is operable when all of the following conditions are met:

- The LTA system detects lane lines or the path of preceding or surrounding vehicles.
- The dynamic radar cruise control is operating.
- The lane width is approximately 3 to 4 m (10 to 13 ft.).
- The turn signal lever is not being operated.
- The vehicle is not being driven around a sharp curve.
- The vehicle is not accelerating or decelerating more than a certain amount.
- The steering wheel is not being turned with a large force.
- The hands off steering wheel warning (→P.226) is not operating.
- The vehicle is being driven in the center of a lane.

■ Temporary cancelation of functions

- When the operating conditions are no longer met, a function may be temporarily canceled. However, when the operation conditions are met again, operation of the function will automatically be restored. (→P.225)
- If the operating conditions of a function are no longer met while the function is operating, a buzzer may sound to indicate that the function has been temporarily canceled.
- The steering assist operation of the function can be overridden by the steering wheel operation of the driver.

■ Lane departure warning function when the LTA is operating

- Even if the LDA warning method is changed to vibration of the steering wheel, if the vehicle deviates from the lane while the LTA is operating, the warning buzzer will sound to alert the driver.
- If steering wheel operation equivalent to that necessary for a lane change is detected, the system will determine the vehicle is not deviating from the lane and the warning will not operate.

■ **Hands off steering wheel warning operation**

● When the system determines the driver is not holding the steering wheel, a message urging the driver to grip the steering wheel and the icon shown in the illustration will be displayed on the multi-information display to warn the driver. If the system detects that the steering wheel is held, the warning will be canceled. When using the system, make sure to grip the steering wheel firmly, regardless of whether the warning is operating or not.



● If no operations are detected for a certain amount of time, the warning will operate and the function will be temporarily canceled. This warning may also operate if the driver only operates steering wheel a small amount continuously.

■ **Situations in which the hands off steering wheel warning may not operate properly**

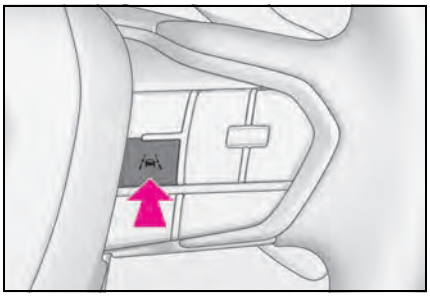
● Depending on the condition of the vehicle, handle control condition and road surface, the warning function may not operate.

Enabling/disabling the system

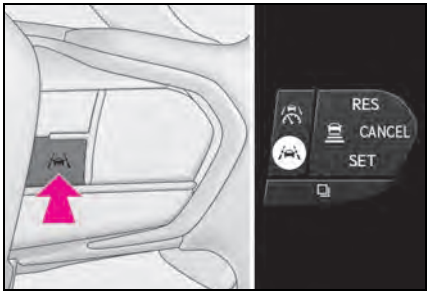
The LTA will change between ON/OFF each time the LTA switch is pressed.

When the LTA is ON, the LTA indicator will illuminate.

▶ Vehicles without a head-up display



▶ Vehicles with a head-up display



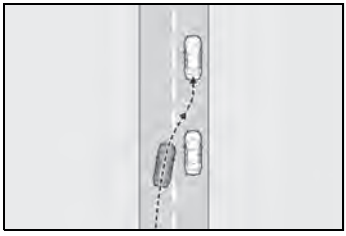
WARNING

■ **Situations in which the functions may not operate properly**

In the following situations, the functions may not operate properly and the vehicle may depart from its lane. Do not overly rely on these functions. The driver is solely responsible for paying attention to their surroundings and operating the steering wheel as necessary to ensure safety.

WARNING

- When a preceding or surrounding vehicle changes lanes (Your vehicle may follow the preceding or surrounding vehicle and also change lanes)



- When a preceding or surrounding vehicle is swaying (Your vehicle may sway accordingly and depart from the lane)
- When a preceding or surrounding vehicle departs from a lane (Your vehicle may follow the preceding or surrounding vehicle and also depart from the lane)
- When a preceding or surrounding vehicle is being driven extremely close to the left/right lane line (Your vehicle may follow the preceding or surrounding vehicle accordingly and depart from the lane)
- When there are moving objects or structures in the surrounding area (Depending on the position of the moving object or structure relative to your vehicle, your vehicle may sway)
- When the vehicle is struck by a crosswind or the turbulence of other nearby vehicles
- Situations in which the sensors may not operate properly: →P.209
- Situations in which the lane may not be detected: →P.210
- When it is necessary to disable the system: →P.205

Operation display of steering wheel operation support

The operating state of the LTA system is indicated.

Indicator	Lane display	Steering icon	Situation
 White	 Gray/White	 Gray	LTA is on standby
 Green	 Green	 Green	LTA is operating
 Yellow Flashing	 Yellow Flashing	 Green	The vehicle is departing the lane toward the side which the lane display is flashing

LDA (Lane Departure Alert)

Basic functions

The LDA system warns the driver if the vehicle may deviate from the current lane or course*, and also can slightly operate the steering wheel to help avoid deviation from the lane or course*.

The front camera is used to detect lane lines or a course*.

*: Boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc.

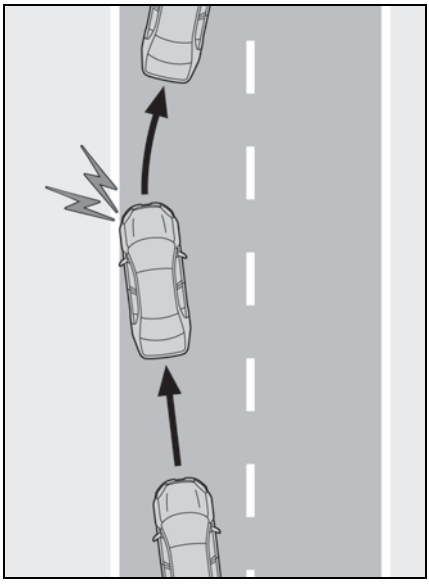
■ Lane departure alert function

When the system determines that the vehicle might depart from its lane or course*, a warning is displayed on a display, and either a warning buzzer will sound or the steering wheel will vibrate to alert the driver.

Check the area around your vehicle and carefully operate the steering wheel to move the vehicle back to the center of the lane or course*.

If the system determines that the vehicle may collide with a vehicle in an adjacent lane, the lane departure alert will operate even if the turn signals are operating.

*: Boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc.



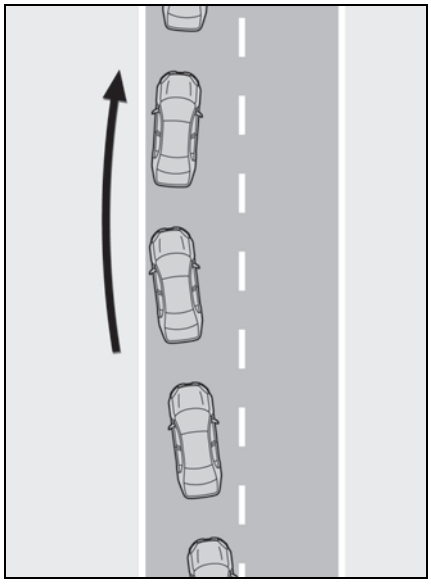
■ Lane departure prevention function

If the system determines that the vehicle is likely to depart from its lane or course*, it provides assistance through steering wheel operations to help avoid deviation from the lane or course.

If the system determines that the steering wheel has not been operated for a certain amount of time or the steering wheel is not being firmly gripped, a warning message may be displayed and a warning buzzer may sound to alert the driver.

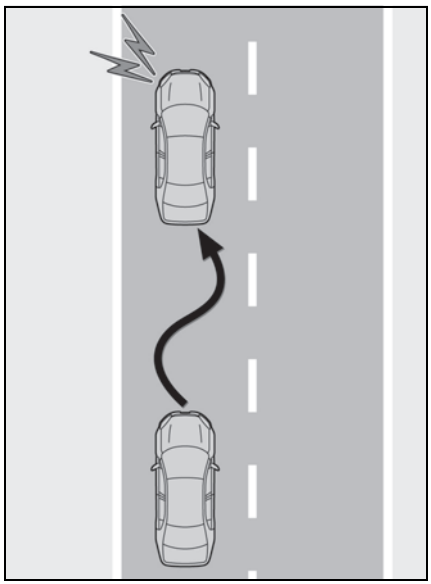
If the system determines that the vehicle may collide with a vehicle in an adjacent lane, the lane departure prevention function will operate even if the turn signals are operating.

*: Boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc.



■ Break suggestion function

If the vehicle is swaying, a message will be displayed and a buzzer will sound to urge the driver to take a break.



WARNING

■ Before using the LDA system

- Do not overly rely on the LDA system. The LDA system is not a system which provides automated assistance in driving and it is not a system which reduces the amount of attention necessary for safe driving. The driver is solely responsible for paying attention to their surroundings and operating the steering wheel as necessary to ensure safety. Also, the driver is responsible for taking adequate breaks when fatigued, such as when driving for a long time.
- Failure to perform appropriate driving operations and pay careful attention may lead to an accident.

■ Operating conditions of each function

● Lane departure alert/prevention function

This function is operable when all of the following conditions are met:

- The vehicle speed is approximately 50 km/h (30 mph) or more.

Operation may be possible when the vehicle speed is approximately 40 km/h (25 mph) or more if vehicles, motorcycles, bicycles, or pedestrians are detected near the lane.

- The system recognizes a lane or course*. (When recognized on only one side, the system will operate only for the recognized side.)
- The lane width is approximately 3 m (9.8 ft.) or more.
- The turn signal lever is not being operated.

(Except when a vehicle is detected in the direction that the turn signal lever is operated.)

- The vehicle is not being driven around a sharp curve.
- The vehicle is not accelerating or decelerating more than a certain amount.

- The steering wheel is not being turned sufficiently to perform a lane change.
- When the VSC or TRC system is not turned off

*: Boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc.

■ **Temporary cancellation of functions**

When the operating conditions are no longer met, a function may be temporarily canceled. However, when the operation conditions are met again, operation of the function will automatically be restored. (→P.230)

■ **Operation of the lane departure alert function/lane departure prevention function**

- Depending on the vehicle speed, road conditions, lane departure angle, etc., operation of the lane departure prevention function may not be felt or the function may not operate.
- Depending on the conditions, the warning buzzer may operate even if vibration is selected through a customize setting.
- If a course* is not clear or straight, the lane departure alert function or lane departure prevention function may not operate.
- The lane departure alert function or lane departure prevention function may not operate if the system judges that the vehicle is intentionally being steered to avoid a pedestrian or parked vehicle.
- It may not be possible for the system to judge if there is danger of a collision with a vehicle in an adjacent lane.
- Depending on the driver condition, the lane departure alert function or lane departure prevention function changes the timing of operation.
- The steering assist operation of the lane departure prevention function can be overridden by the steering wheel operation of the driver.

*: Boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc.

■ **Hands off steering wheel warning operation**

In the following situations, a message urging the driver to operate the steering wheel and an icon will be displayed and a buzzer will sound to warn the driver. When using the system, make sure to grip the steering wheel firmly, regardless of whether the warning is operating or not.



- When the system determines that the driver is not securely holding the steering wheel, or the steering wheel is not being operated when the steering assist operation of the lane departure prevention function is operating

The length of time that the warning buzzer operates will become longer as the frequency of the steering assist operating increases. Even if the system judges that the steering wheel has been operated, the warning buzzer will sound for a certain amount of time.

■ **Break suggestion function**

This function is operable when all of the following conditions are met:

- The vehicle speed is approximately 65 km/h (40 mph) or more.
- The lane width is approximately 3 m (9.8 ft.) or more.

Depending on the condition of the vehicle and road surface, the break suggestion function may not operate.



Vehicles without a head-up display: Press the ⮌ meter control switch to turn off the message.

Vehicles with a head-up display: Press the ⧉ steering switch to turn off the message.

Unless ⮌ or ⧉ is pressed, the message of the break suggestion function will remain displayed.

Changing LDA settings

- The LDA system can be enabled/disabled through a customize setting. (→P.484)
- The settings of the LDA can be changed on the customize settings. (→P.484)
- When the system determines that the driver is tired, the lane departure warning function will operate at the "Earlier" timing, regardless of the customized setting. Also, this setting will be kept until the power switch is turned off.

⚠ WARNING

■ Situations in which the system may not operate properly

In the following situations, the system may not operate properly and the vehicle may depart from its lane. Do not overly rely on these functions. The driver is solely responsible for paying attention to their surroundings and operating the steering wheel as necessary to ensure safety.

- When the boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc. is not clear or straight
- When the vehicle is struck by a crosswind or the turbulence of other nearby vehicles
- Situations in which the lane may not be detected: →P.210
- Situations in which the sensors may not operate properly: →P.209
- Situations in which some or all of the functions of the system cannot operate: →P.211
- When it is necessary to disable the system: →P.205

Displays and system operation

The operating state of the lane departure alert function and steering assist operation of the lane departure prevention function are indicated.

Indicator	Lane display	Steering icon	Situation
 Yellow Illuminated	Not illuminated	Not illuminated	System disabled
Not illuminated	 Gray	Not illuminated	Lane lines are not detected by the system
Not illuminated	 White	Not illuminated	Lane lines are detected by the system
 Yellow Flashing	 Yellow Flashing	Not illuminated	Lane departure alert function is operating for the side which the lane display is flashing
 Green	 Green	 Green	Lane departure prevention function is operating for the side which the lane display is illuminated
 Yellow Flashing	 Yellow Flashing	 Green	Lane departure alert function/lane departure prevention function is operating for the side which the lane display is flashing

RSA (Road Sign Assist)

The RSA system detects specific road signs using the front camera and warns the driver via displays and buzzers.

WARNING

■ **For safe use**

- Driving safely is solely the responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving.
- Do not rely solely upon the RSA. The RSA assists the driver by providing road sign information, but it is not a replacement for the driver's own vision and awareness. Driving safely is solely the responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving.

■ **Situations in which the RSA should not be used**

When it is necessary to disable the system: →P.205

■ **Situations in which the system may not operate properly**

Situations in which the sensors may not operate properly: →P.209

Display Function

- When the front camera detects a sign, the sign will be displayed on the display.
- Multiple signs can be displayed.

Depending on the specifications of the vehicle, the number of displayed signs may be limited.

■ **Operating conditions of sign display**

Signs will be displayed when the following conditions are met:

- The system has detected a sign

In the following situations, a displayed sign may stop being displayed:

- When a new sign has not been detected for a certain distance
- When the system determines that the road being driven on has changed, such as after a left or right turn

■ **Situations in which the display function may not operate properly**

In the following situations, the RSA system may not operate properly and may not detect signs or may display the incorrect sign. However, this does not indicate a malfunction.

- When a sign is dirty, faded, tilted or bent
- When the contrast of an electronic sign is low
- When all or part of a sign is hidden by a tree, utility pole, etc.
- When a sign is detected by the front camera for a short amount of time
- When the driving state (turning, changing lanes, etc.) is judged incorrectly
- When a sign is immediately after a freeway junction or in an adjacent lane just before merging
- When stickers are attached to the rear of a preceding vehicle
- When a sign similar to a system compatible sign is detected as a system compatible sign
- When a speed limit sign for a frontage road is within detection range of the front camera
- When driving around a roundabout
- When a sign intended for trucks, etc. is detected

Notification function

In the following situations, the RSA system will output a warning to notify the driver.

- If the vehicle speed exceeds the speed warning threshold of the speed limit sign displayed on the display, the sign display will be emphasized and a buzzer will sound.

Operating conditions of the notification functions

Excess speed notification function

This function will operate when the following condition is met:

- A speed limit road sign is recognized by the system.

Types of road signs supported

- The following types of road signs can be displayed.

However, non-standard or recently introduced traffic signs may not be displayed.

- Speed limit road signs*



Speed limit

*: No speed limit information (---) is displayed when a speed limit sign is not available.

- Speed limit with supplemental mark*



Time

*: Displayed simultaneously with a speed limit sign.

- Depending on the specifications of the vehicle, signs may be displayed overlapping.



Duplicate display example

Changing RSA settings

- The settings of the RSA can be changed through customize settings. (→P.485)

Dynamic radar cruise control

This dynamic radar cruise control detects the presence of vehicles ahead, determines the current vehicle-to-vehicle distance, and operates to maintain a suitable distance from the vehicle ahead. The desired vehicle-to-vehicle distance can be set by operating the vehicle-to-vehicle distance switch.

Use the dynamic radar cruise control only on highways and expressways.

⚠ WARNING

■ For safe use

- Driving safely is solely the responsibility of the driver. Do not overly rely on this system, and pay careful attention to the surrounding conditions in order to ensure safe driving.
- The dynamic radar cruise control provides driving assistance to reduce the driver's burden. However, there are limitations to the assistance provided.

Read the following items carefully. Do not overly rely on this system and always drive carefully.

Conditions under which the system may not operate correctly: →P.243

- Set the speed appropriately according to the speed limit, traffic flow, road conditions, weather conditions, etc. The driver is responsible for confirming the set speed.
- Even if the system is operating correctly, the condition of a preceding vehicle as recognized by the driver and detected by the system may differ. Therefore, it is necessary for the driver to pay attention, assess risks, and ensure safety. Over-reliance on this system to drive the vehicle safely may lead to an accident resulting in death or serious injury.

■ Precautions for the driving assist systems

Observe the following precautions, as there are limitations to the assistance provided by the system. Over-reliance on this system may lead to an accident resulting in death or serious injury.

- Details of support provided for the driver's vision

The dynamic radar cruise control is only intended to help the driver in determining the distance between the driver's own vehicle and a designated preceding vehicle. It is not a system which allows for careless or inattentive driving, and is not a system which assists in poor visibility conditions.

The driver must pay attention to their surroundings, even when the vehicle stops.

- Details of support provided for the driver's judgement

The dynamic radar cruise control determines whether the distance between the driver's own vehicle and a designated preceding vehicle is within a set range. It is not capable of making any other type of judgement. Therefore, it is absolutely necessary for the driver to remain vigilant and to determine whether or not there is a possibility of danger.

- Details of support provided for the driver's operation

WARNING

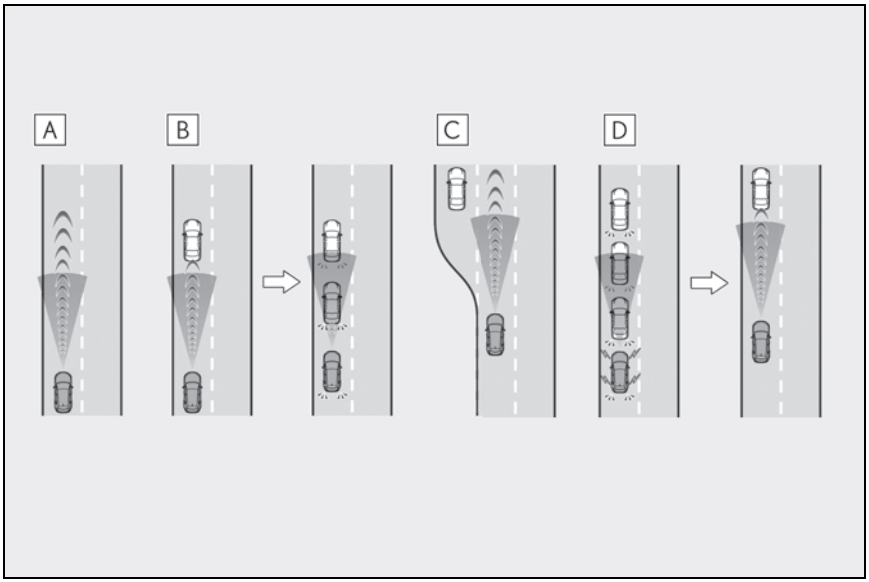
The dynamic radar cruise control does not include functions which will prevent or avoid collisions with vehicles ahead of your vehicle. Therefore, if there is ever any possibility of danger, the driver must take immediate and direct control of the vehicle and act appropriately in order to ensure safety.

■ **Situations in which the dynamic radar cruise control should not be used**

Do not use the dynamic radar cruise control in the following situations. As the system will not be able to provide appropriate control, using it may lead to an accident resulting in death or serious injury.

- Roads where there are pedestrians, cyclists, etc.
- When driving on a highway or expressway entrance or exit
- When the approach warning sounds frequently
- Situations in which the sensors may not operate properly: →P.209
- Situations in which the lane may not be detected: →P.210

Basic functions



A Constant speed cruising:
When there are no vehicles ahead

The vehicle drives at the speed set by the driver.

If the set vehicle speed is exceeded while driving down a hill, the set vehicle speed display will blink and a buzzer will sound.

B Deceleration and follow-up cruising
When a preceding vehicle driving slower than the set vehicle speed is detected

When a vehicle is detected driving ahead of your vehicle, the vehicle automatically decelerates and if a greater reduction in vehicle speed is necessary, the brakes are applied (the stop lights will come on at this time). The vehicle is controlled to maintain the vehicle-to-vehicle distance set by the driver, in accordance with changes in the speed of the preceding vehicle. If vehicle deceleration is not sufficient and the vehicle approaches the vehicle ahead, the approach warning will sound.

C Acceleration
When there are no longer any preceding vehicles driving slower than the set vehicle speed

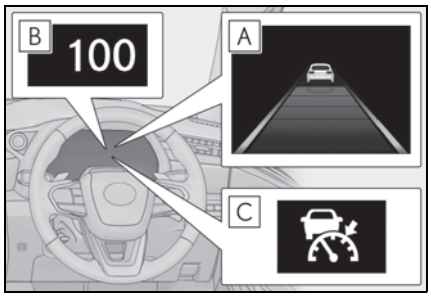
The vehicle accelerates until the set vehicle speed is reached and then resumes constant speed cruising.

D Starting off:

If a preceding vehicle stops, the vehicle will also stop (controlled stop). After the preceding vehicle starts off, pressing the "RES" switch or depressing the accelerator pedal will resume follow-up cruising (start off operation). If a start off operation is not performed, the controlled stop will continue.

System components

■ Meter display



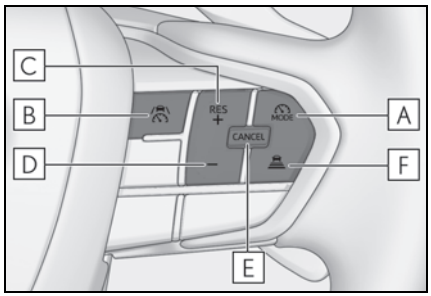
A Multi-information display

B Set vehicle speed

C Indicators

■ Switches

▶ Vehicles without a head-up display



A Driving assist mode select switch

B Driving assist switch

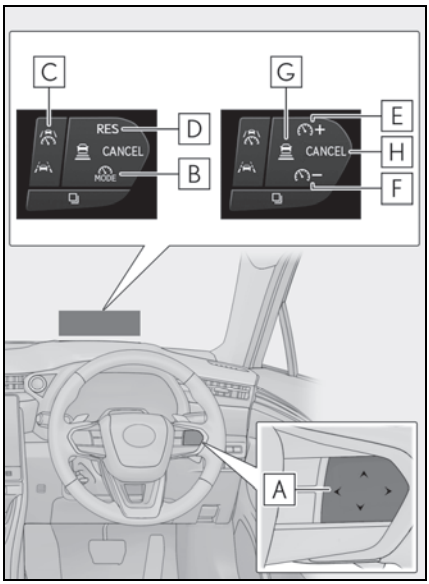
C "+" switch/"RES" switch

D "-" switch

E Cancel switch

F Vehicle-to-vehicle distance switch

▶ Vehicles with a head-up display



A The function of each switch differs depending on the conditions and settings.

When a switch is touched, the function of each switch is displayed on the head-up display. If the head-up display is off, the functions will be displayed on the multi-information display.

B Driving assist mode select switch

C Driving assist switch

D "RES" switch

E "+" switch

F "-" switch

G Vehicle-to-vehicle distance switch

H Cancel switch

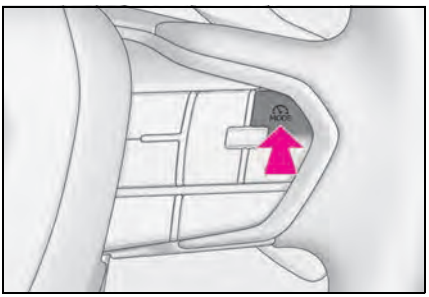
Using the dynamic radar cruise control

■ Setting the vehicle speed

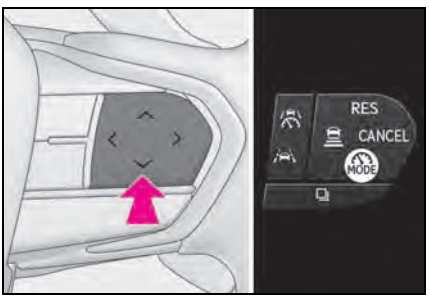
1 Press the driving assist mode select switch to select dynamic radar cruise control.

The dynamic radar cruise control indicator will illuminate.

▶ Vehicles without a head-up display



▶ Vehicles with a head-up display

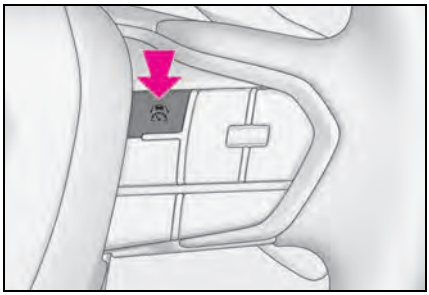


2 Using the accelerator pedal, accelerate or decelerate to the desired vehicle speed (approximately 30 km/h [20 mph] or more), and press the driving assist switch to set the set vehicle speed.

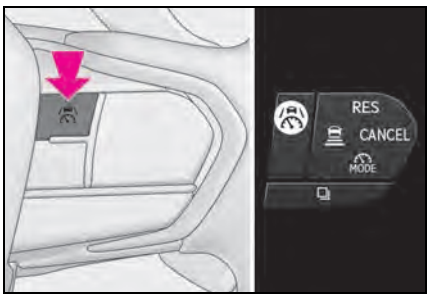
The set vehicle speed will be displayed on the multi-information display.

The vehicle speed at the moment the switch is released will be the set vehicle speed.

▶ Vehicles without a head-up display



▶ Vehicles with a head-up display

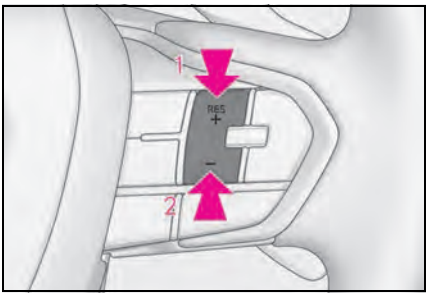


■ Adjusting the set vehicle speed

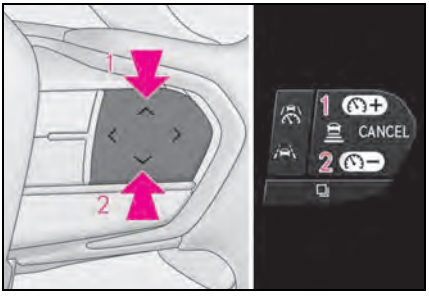
● Adjusting the set vehicle speed using the switches

To change the set vehicle speed, press the “+” switch or “-” switch until the desired speed is displayed.

▶ Vehicles without a head-up display



▶ Vehicles with a head-up display



1 Increase set vehicle speed

2 Decrease set vehicle speed

Short press adjustment: Press the switch

Long press adjustment: Press and hold the switch until the desired set vehicle speed is reached.

The set vehicle speed will increase or decrease as follows:

Short press adjustment: By 1 km/h (0.6 mph) or 1 mph (1.6 km/h) each time the switch is pressed

Long press adjustment: Increases or decreases in 5 km/h (3.1 mph) or 5 mph (8 km/h) increments continuously while the switch is pressed and held

The set vehicle speed adjustment increment can be changed through a customize setting.

● Increasing the set vehicle speed using the accelerator pedal

1 Depress the accelerator pedal to accelerate the vehicle to the desired vehicle speed.

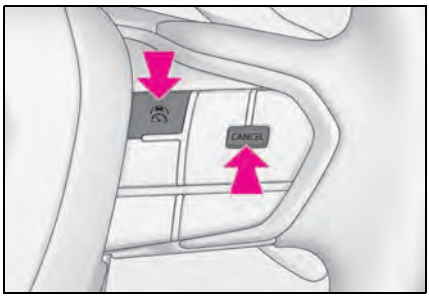
2 Press the "+" switch.

■ Canceling/resuming control

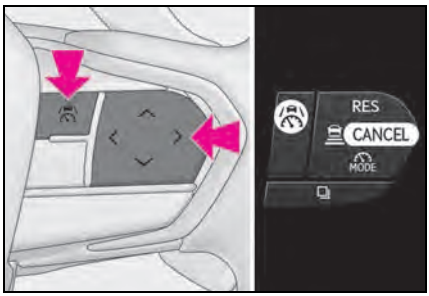
1 Press the cancel switch or driving assist switch to cancel control.

Control will also be canceled if the brake pedal is depressed.
(If the vehicle has been stopped by system control, depressing the brake pedal will not cancel control.)

▶ Vehicles without a head-up display



▶ Vehicles with a head-up display



2 Press the "RES" switch to resume control.

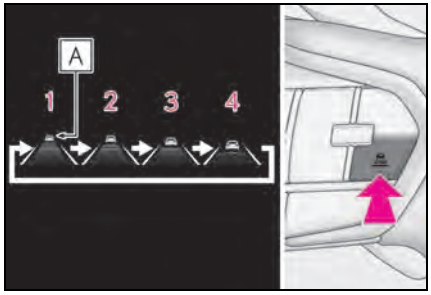
■ Changing the vehicle-to-vehicle distance

Each time the switch is pressed, the vehicle-to-vehicle distance setting will

change as follows:

If a preceding vehicle is detected, the preceding vehicle mark [A] will be displayed.

▶ Vehicles without a head-up display



▶ Vehicles with a head-up display

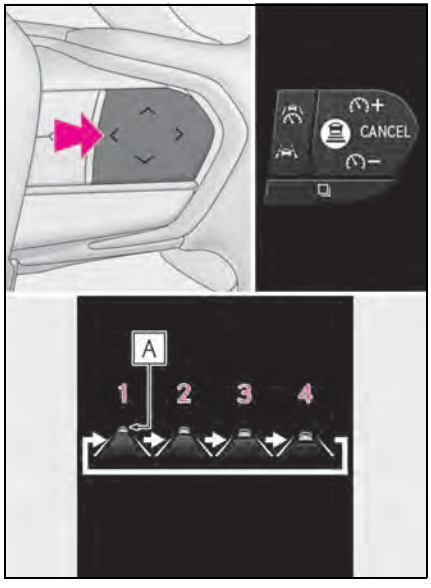


Illustration Number	Vehicle-to-vehicle distance	Approximate Distance (Vehicle Speed: 100 km/h [60 mph])
1	Extra long	Approximately 70 m (230 ft.)
2	Long	Approximately 60 m (200 ft.)
3	Medium	Approximately 45 m (145 ft.)
4	Short	Approximately 30 m (100 ft.)

The actual vehicle-to-vehicle distance varies in accordance with the vehicle speed. Also, when the vehicle is stopped by system control, it will be stopped at a certain distance from the preceding vehicle, depending on the situation, regardless of the setting.

■ Operating conditions

- The D shift position is selected.
- The desired set speed can be set when the vehicle speed is approximately 30 km/h (20 mph) or more.
  - If the vehicle speed is set while driving at below approximately 30 km/h (20 mph), the set vehicle speed will be approximately 30 km/h (20 mph).
  - If the vehicle speed is set while driving at a speed that exceeds the system's upper limit, the set vehicle speed will be the system's upper limit.

■ Accelerating after setting the vehicle speed

As with normal driving, acceleration can be performed by depressing the accelerator pedal. After accelerating, the vehicle will return to the set vehicle speed. However, while in vehicle-to-vehicle distance control mode, the vehicle speed may decrease to below the set vehicle speed in order to maintain the distance from the preceding

vehicle.

■ **When the vehicle is stopped by system control during follow-up cruising**

- When the "RES" switch is pressed while the vehicle is stopped by system control, if the preceding vehicle starts off within approximately 3 seconds, follow-up cruising will resume.
- If the preceding vehicle starts off within approximately 3 seconds of the vehicle being stopped by system control, follow-up cruising will resume.

■ **Automatic cancellation of vehicle-to-vehicle distance control mode**

In the following situations, vehicle-to-vehicle distance control mode will be canceled automatically:

- When the brake control or output restriction control of a driving support system operates
  (For example: Pre-Collision System, drive-start control)
- When the parking brake has been operated
- When the vehicle is stopped by system control on a steep incline
- When any of the following are detected while the vehicle is stopped by system control:
  - The driver's seat belt is unfastened
  - The driver's door is opened
  - Approximately 3 minutes have elapsed since the vehicle was stopped

The parking brake may be actived automatically.

- Situations in which some or all of the functions of the system cannot operate: →P.211

■ **Dynamic radar cruise control system warning messages and buzzers**

For safe use: →P.205

■ **Preceding vehicles that the sensor may not detect correctly**

In the following situations, depending on the conditions, if the system cannot provide sufficient deceleration or acceleration is necessary, operate the brake pedal or accelerator pedal.

As the sensor may not be able to correctly detect these types of vehicles, the approach warning (→P.243) may not operate.

- When a vehicle cuts in front of your vehicle or changes lanes away from your vehicle extremely slowly or quickly
- When changing lanes
- When a preceding vehicle is driving at a low speed
- When a vehicle is stopped in the same lane as the vehicle
- When a motorcycle is traveling in the same lane as the vehicle

■ **Conditions under which the system may not operate correctly**

In the following situations, operate the brake pedal (or accelerator pedal, depending on the situation) as necessary.

As the sensor may not be able to correctly detect a vehicle, the system may not operate properly.

- When a preceding vehicle brakes suddenly
- When changing lanes at low speeds, such as in a traffic jam

Approach warning

In situations where the vehicle approaches a preceding vehicle and the system cannot provide sufficient deceleration, such as if a vehicle cuts in front of the vehicle, a warning display will flash and a buzzer will sound to alert the driver. Depress the brake pedal to ensure appropriate vehicle-to-vehicle distance.

■ **Warnings may not occur when**

In the following situations, the warning may not operate even though the vehi-

cle-to-vehicle distance is short.

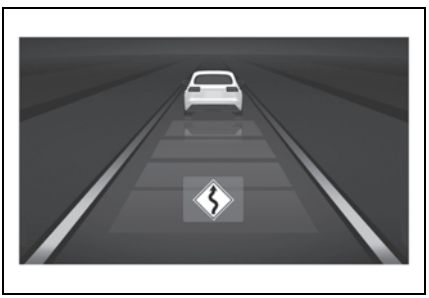
- When the preceding vehicle is traveling at the same speed or faster than your vehicle
- When the preceding vehicle is traveling at an extremely low speed
- Immediately after the vehicle speed has been set
- When the accelerator pedal is depressed

Curve speed reduction function

When a curve is detected, the vehicle speed will begin being reduced. When the curve ends, the vehicle speed reduction will end.

Depending on the situation, the vehicle speed will then return to the set vehicle speed.

In situations where vehicle-to-vehicle distance control needs to operate, such as when a preceding vehicle cuts in front of your vehicle, the curve speed reduction function will be canceled.



Situations in which the curve speed reduction function may not operate

In situations such as the following, the curve speed reduction function may not operate:

- When the vehicle is being driven around a gentle curve
- When the accelerator pedal is being depressed
- When the vehicle is being driven around an extremely short curve

Driver Monitor support function

While a warning of the driver monitor is being displayed, the vehicle acceleration will be restrained.

When the warning of the driver monitor disappears, the restrained acceleration control will end.

Support for lane change

If your vehicle is being driven at approximately 80 km/h (50 mph) or more and a lane change to the passing lane is performed, when the turn signal lever is operated and the lane is changed, the vehicle will accelerate up to the set speed to assist in overtaking.

The system's recognition of which lane is the passing lane may be based solely on the location of the steering wheel in the vehicle (left-hand drive/right-hand drive). If the vehicle is driven in a location where the passing lane is on the opposite side of that where the vehicle was originally sold, the vehicle may accelerate when the turn signal lever is operated away from the passing lane. (e.g. The vehicle was manufactured to be driven on roads for right-hand drive vehicles [that overtake on the right], but is being used on roads for left-hand drive vehicles [that overtake on the left]. In this case, the vehicle may accelerate when the turn signal lever is operated

to the right.)

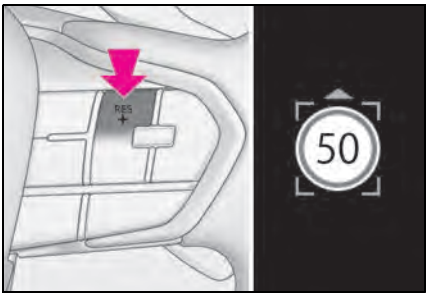
If your vehicle is being driven at approximately 80 km/h (50 mph) or more and the lane is changed to that with a vehicle traveling slower than your vehicle, when the turn signal lever is operated the vehicle will gradually decelerate to assist in changing lanes.

Dynamic Radar Cruise Control with Road Sign Assist

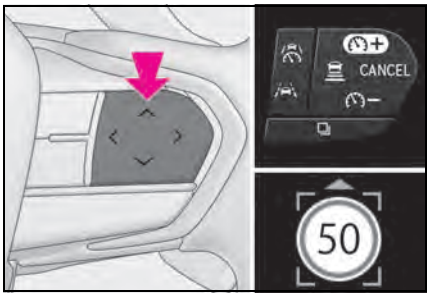
When RSA function is enabled and the dynamic radar cruise control system is operating, if a speed limit sign is detected, the detected speed limit will be displayed with an up/down arrow. The set speed can be increased/reduced to the detected speed limit by pressing and holding the "+" switch or "-" switch.

■ When the set speed is lower than the detected speed limit

▶ Vehicles without a head-up display



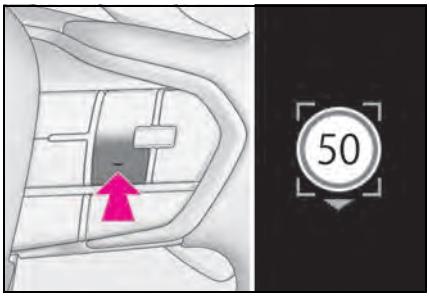
▶ Vehicles with a head-up display



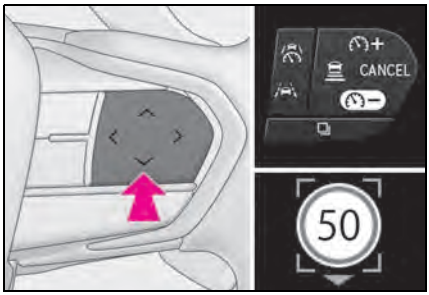
Press and hold the "+" switch.

■ When the set speed is higher than the detected speed limit

▶ Vehicles without a head-up display



▶ Vehicles with a head-up display



Press and hold the "-" switch.

■ The dynamic radar cruise control with road sign assist may not operate properly when

As the dynamic radar cruise control with road sign assist may not operate properly in

situations where the RSA may not operate or cannot detect signs correctly (→P.234), when using this function, make sure to confirm the actual speed limit.

In the following situations, the set speed may not change to the detected speed limit by pressing and holding the "+" switch or "-" switch:

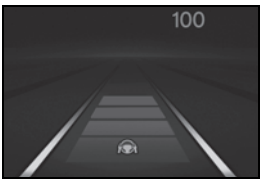
- When speed limit information is not available
- When the detected speed limit is the same as the set speed
- When the detected speed limit is outside of the speed range which the dynamic radar cruise control system can operate

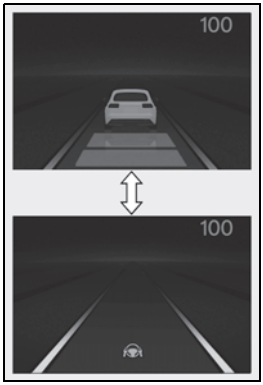
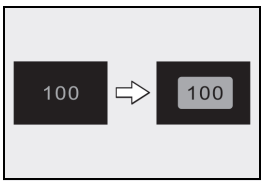
Changing Dynamic radar cruise control settings

The settings of Dynamic radar cruise control can be changed through customize settings. (→P.484)

Display and system operation state

The operating state of Dynamic radar cruise control is indicated.

Indicator	Multi-information display		Situation
 White		Vehicle-to-vehicle distance setting: Gray	Dynamic radar cruise control being OFF
 Green		Vehicle-to-vehicle distance setting: Blue Set vehicle speed: Green	Constant speed cruising
 Green		Vehicle-to-vehicle distance setting: Blue Set vehicle speed: Green Preceding vehicle: White	Follow-up cruising

Indicator	Multi-information display		Situation
Green		Vehicle-to-vehicle distance setting: Orange flashing Set vehicle speed: Green Preceding vehicle: Orange flashing	Approach warning
Green		Vehicle-to-vehicle distance setting: Gray Set vehicle speed: White Preceding vehicle: Gray	Accelerating with the accelerator pedal
Green		Set vehicle speed: Green in reverse display	Set vehicle speed being exceeded
Green		Vehicle-to-vehicle distance setting: Gray Set vehicle speed: White Preceding vehicle: Gray	Vehicle in controlled stop

Cruise control

The vehicle can be driven at a set speed even if the accelerator pedal is not depressed.

Use the cruise control only on highways and expressways.

WARNING

■ For safe use

- Driving safely is solely the responsibility of the driver. Therefore, do not overly rely on this system. The driver is solely responsible for paying attention to the vehicle's surroundings and driving safely.
- Set the speed appropriately according to the speed limit, traffic flow, road conditions, weather conditions, etc. The driver is responsible for confirming the set speed.

■ Situations in which cruise control should not be used

Do not use the cruise control in the following situations. As the system will not be able to provide appropriate control, using it may lead to an accident resulting in death or serious injury.

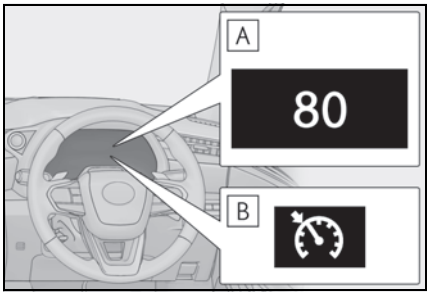
- On roads with sharp bends
- On winding roads
- On slippery roads, such as those covered with rain, ice or snow
- On steep downhills, or where there are sudden changes between sharp up and down gradients

Vehicle speed may exceed the set speed when driving down a steep hill.

- When it is necessary to disable the system: →P.205

System Components

■ Meter display

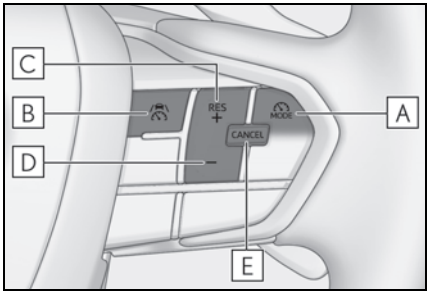


A Set vehicle speed

B Cruise control indicator

■ Switches

▶ Vehicles without a head-up display



A Driving assist mode select switch

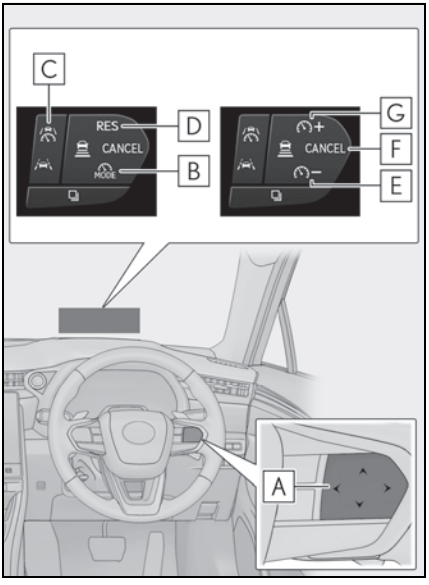
B Driving assist switch

C "+" switch / "RES" switch

D "-" switch

E Cancel switch

▶ Vehicles with a head-up display



A The function of each switch differs depending on the conditions and settings.

When a switch is touched, the function of each switch is displayed on the head-up display. If the head-up display is off, the functions will be displayed on the multi-information display.

B Driving assist mode select switch

C Driving assist switch

D "RES" switch

E "-" switch

F Cancel switch

G "+" switch

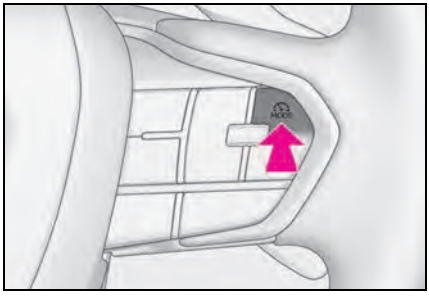
Using the cruise control

■ Setting the vehicle speed

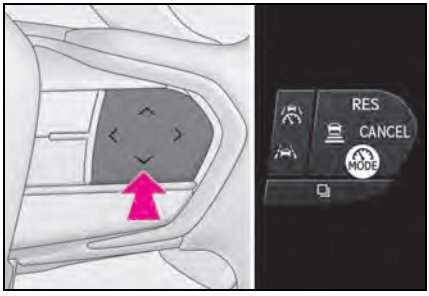
1 Press the driving assist mode select switch to select cruise control.

The cruise control indicator will illuminate.

▶ Vehicles without a head-up display



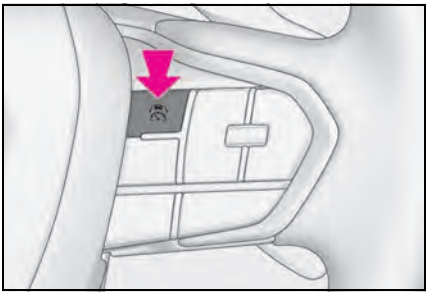
▶ Vehicles with a head-up display



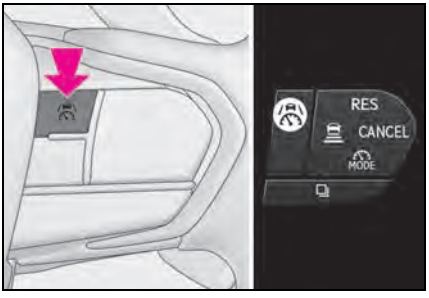
2 Using the accelerator pedal, accelerate to the desired vehicle speed (approximately 30 km/h [20 mph] or more), and press the driving assist switch to set the set vehicle speed.

The vehicle speed at the moment the switch is released will be the set vehicle speed.

▶ Vehicles without a head-up display



▶ Vehicles with a head-up display

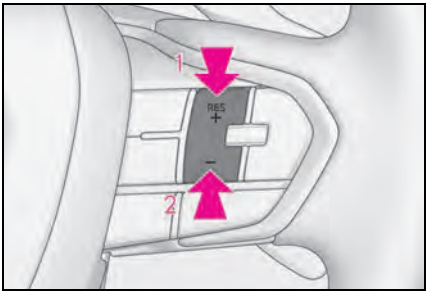


■ Adjusting the set vehicle speed

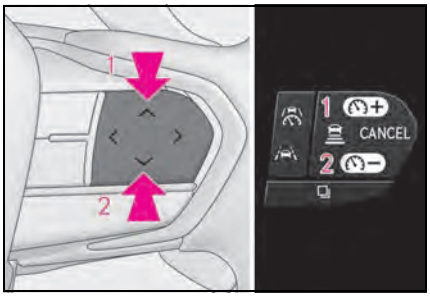
● Adjusting the set vehicle speed using the switches

To change the set vehicle speed, press the "+" or "-" switch until the desired speed is displayed.

▶ Vehicles without a head-up display



▶ Vehicles with a head-up display



1 Increase set vehicle speed

2 Decrease set vehicle speed

The set vehicle speed will increase or decrease as follows:

Fine adjustment: By 1 km/h (0.6 mph) or 1 mph (1.6 km/h) each time the switch is pressed

Large adjustment: Increases continuously while the switch is pressed and held

● Increasing the set vehicle speed using the accelerator pedal

1 Depress the accelerator pedal to accelerate the vehicle to the desired vehicle speed.

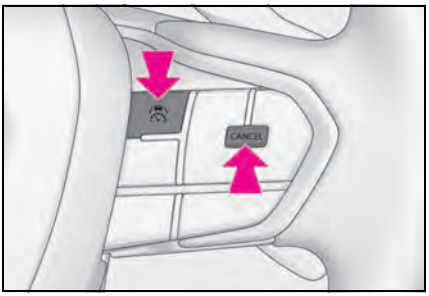
2 Press the "+" switch.

■ Canceling/resuming control

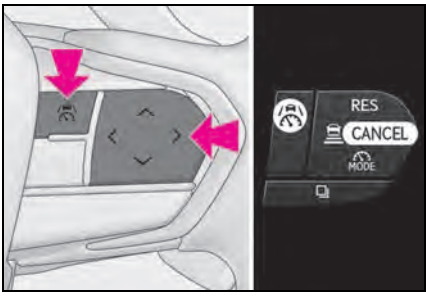
1 Press the cancel switch or driving assist switch to cancel control.

Control will also be canceled if the brake pedal is depressed.

▶ Vehicles without a head-up display



▶ Vehicles with a head-up display



2 Press the "RES" switch to resume control.

■ **Automatic cancellation of the cruise control**

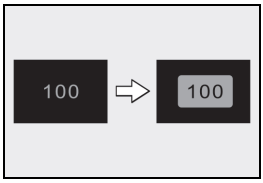
In the following situations, the cruise control will be canceled automatically:

- When the vehicle speed drops approximately 16 km/h (10 mph) or more below the set vehicle speed
- When the vehicle speed drops below approximately 30 km/h (20 mph)
- When the brake control or output restriction control of a driving support system operates (For example: PCS, drive-start control)
- When the parking brake has been operated
- Situations in which some or all of the functions of the system cannot operate: →P.211

Display and system operation state

The operating state of cruise control is indicated.

Indicator	Multi-information display		Situation
 White		Blank	Cruise control being OFF

Indicator	Multi-information display		Situation
Green		Set vehicle speed: Green	Constant speed cruising
Green		Set vehicle speed: Green in reverse display	Set vehicle speed being exceeded

Emergency Driving Stop System

The emergency driving stop system is a system which automatically decelerates and stops the vehicle within its lane if the driver becomes unable to continue driving the vehicle, such as if they have suffered a medical emergency, etc.

During LTA (Lane Tracing Assist) control, if the system does not detect driving operations, such as if the driver is not holding the steering wheel, and determines the driver is not responsive, the vehicle will be decelerated and stopped within its current lane to help avoid a collision or reduce the impact of a collision.

WARNING

■ For safe use

- Driving safely is solely the responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving. The emergency driving stop system is designed to provide support in an emergency where it is difficult for the driver to continue driving, such as if they have had a medical emergency. It is not designed to support driving while drowsy or in poor physical health, or inattentive driving.
- Although the emergency driving stop system is designed to decelerate the vehicle within its lane to help avoid or help reduce the impact of a collision if the system determines that it is difficult for the driver to continue driving, its effectiveness may change according to various conditions. Therefore, it may not always be able to achieve the same level of performance. Also, if the operating conditions are not met, this function will not operate.
- After the emergency driving stop system operates, if driving becomes possible again, immediately begin driving again or, if necessary, park the vehicle on the shoulder of the road and set a warning reflector and flare to warn other drivers of your stopped vehicle.
- After this system operates, passengers should attend to the driver as necessary and take appropriate hazard prevention measures, such as moving to a place where safety can be ensured, such as the shoulder of the road or behind a guardrail.
- This system detects the condition of the driver through the operation of the steering wheel. This system may operate if the driver is aware but intentionally and continuously does not operate the vehicle. Also, the system may not operate if it cannot determine that the driver is not responsive, such as if they are leaning on the steering wheel.
- Situations in which the driver monitor may not operate properly: →P.211

Summary of the system

Operation of this system is separated into 4 control states. Through control state “warning phase 1” and “warning phase 2”, the system determines if the driver is aware and responsive while outputting a warning and controlling

the vehicle speed. If the system determines the driver is not responsive, it will operate in control state "deceleration stop phase" and "stop hold phase" and decelerate and stop the vehicle. It will then operate continuously in "stop hold phase".

■ **Operating conditions**

This system operates when all of the following conditions are met:

- When the LTA is on
- When the vehicle speed is approximately 50 km/h (30 mph) or more

■ **Operation cancelation conditions**

In the following situations, system operation will be canceled:

- When LTA control has been canceled (the LTA switch has been pressed, etc.)
- When the dynamic radar cruise control has been canceled
- When driver operations are detected (the steering wheel is held, the brake pedal, accelerator pedal, parking brake, emergency flasher switch, or turn signal lever is operated)
- When the driving assist switch is pressed while in the stop and hold phase
- When the power switch has been turned from ON to off
- Situations in which some or all of the functions of the system cannot operate: →P.211

■ **LTA control when operation is canceled**

When emergency driving stop system operation is canceled, LTA control may also be canceled.

Warning phase 1

If driving operations are not detected after the hands off steering wheel warning operates, a buzzer will sound intermittently and a message will be displayed to warn the driver, and the system will judge if the driver is responsive or not. If driving operations, such as holding the steering wheel, are not performed within a certain amount of time, the system will enter warning phase 2.

Depending on the type of detection of the driver's unresponsiveness, the system may skip warning phase 1 and start the control of warning phase 2.

Warning phase 2

After entering warning phase 2, a buzzer will sound in short intervals and a message will be displayed to warn the driver, and the vehicle will slowly decelerate. If driving operations, such as holding the steering wheel, are not performed within a certain amount of time, the system will determine that the driver is not responsive and enter the deceleration stop phase.

The audio system will be muted until the driver becomes responsive.

When the vehicle is decelerating, the brake lights may illuminate, depending on the road conditions, etc.

After the vehicle has decelerated a certain amount, the emergency flashers (hazard lights) will flash.

Deceleration stop phase

After the driver is judged as being not responsive, a buzzer will sound continuously and a message will be displayed

to warn the driver, and the vehicle will slowly decelerate and stop. While the vehicle is decelerating, the emergency flashers (hazard lights) will flash to warn other drivers of the emergency.

Stop hold phase

After the vehicle is stopped, the parking brake will be applied automatically. After entering the stop and hold phase, the buzzer will continue sounding continuously, the emergency flashers (hazard lights) will flash to warn other drivers of the emergency, and the doors will unlock.

■ Restricted functions after the operation is canceled

After shifting to the deceleration stop phase, the following functions will not be available until the engine is re-started even though the emergency driving stop system is canceled:

- LTA

BSM (Blind Spot Monitor)

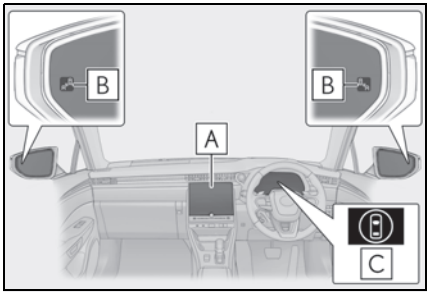
The Blind Spot Monitor is a system that uses rear side radar sensors installed on the inner side of the rear bumper on the left and right side to assist the driver in confirming safety when changing lanes.

WARNING

■ Cautions regarding the use of the system

- The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings.
- The Blind Spot Monitor is a supplementary function which alerts the driver that a vehicle is in a blind spot of the outside rear view mirrors or is approaching rapidly from behind into a blind spot. Do not overly rely on the Blind Spot Monitor. As the function cannot judge if it is safe to change lanes, over reliance could lead to an accident resulting in death or serious injury. As the system may not function correctly under certain conditions, the driver's own visual confirmation of safety is necessary.

System components



A Center Display

Turning the Blind Spot Monitor on/off.

B Outside rear view mirror indicators

When a vehicle is detected in a blind spot of the outside rear view mirrors or approaching rapidly from behind into a blind spot, the outside rear view mirror indicator (→P.74) on the detected side will illuminate. If the turn signal lever is operated toward the detected side, the outside rear view mirror indicator will flash and a buzzer will sound.

C Driving assist information indicator

Illuminates when the Blind Spot Monitor is turned off. At this time, a message will be displayed on the multi-information display.

■ Outside rear view mirror indicator visibility

In strong sunlight, the outside rear view mirror indicator may be difficult to see.

■ Buzzer

If the volume setting of the audio system is high or the surrounding area is loud, it may be difficult to hear the buzzer.

■ Customization

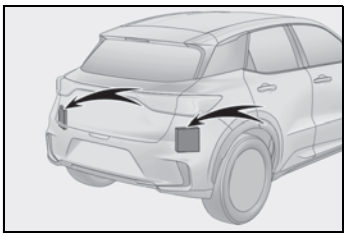
Some functions can be customized. (→P.476)

WARNING

■ To ensure the system can operate properly

Blind Spot Monitor sensors are installed behind the left and right sides of the rear bumper respectively. Observe the following to ensure the Blind Spot Monitor can operate correctly.

- Keep the sensors and the surrounding areas on the rear bumper clean at all times.
  If a sensor or its surrounding area on the rear bumper is dirty or covered with snow, the Blind Spot Monitor may not operate and a warning message will be displayed. In this situation, clear off the dirt or snow and drive the vehicle with the operation conditions of the BSM function (→P.258) satisfied for approximately 10 minutes. If the warning message does not disappear, have the vehicle inspected by your Lexus dealer.



- Do not attach accessories, stickers (including transparent stickers), aluminum tape, etc. to a sensor or its surrounding area on the rear bumper.
- Do not paint the surrounding area of a sensor on the rear bumper.
- Do not subject a sensor or its surrounding area on the rear bumper to a strong impact.
  If a sensor is moved even slightly off position, the system may malfunction and vehicles may not be detected correctly.
  In the following situations, have your vehicle inspected by your Lexus dealer.
  - A sensor or its surrounding area is subject to a strong impact.
  - If the surrounding area of a sensor is scratched or dented, or part of them has become disconnected.
- Do not disassemble the sensor.

WARNING

- Do not modify the sensor or surrounding area on the rear bumper.
- If a sensor or the rear bumper needs to be removed/installed or replaced, contact your Lexus dealer.
- The sensors are likely to be affected by paint on the rear bumper. If the rear bumper is not repaired correctly, the Blind Spot Monitor may not operate with a warning message displayed. If any paint repair is needed, contact your Lexus dealer.

Turning the Blind Spot Monitor on/off

The Blind Spot Monitor can be enabled/disabled through a customize setting. (→P.476)

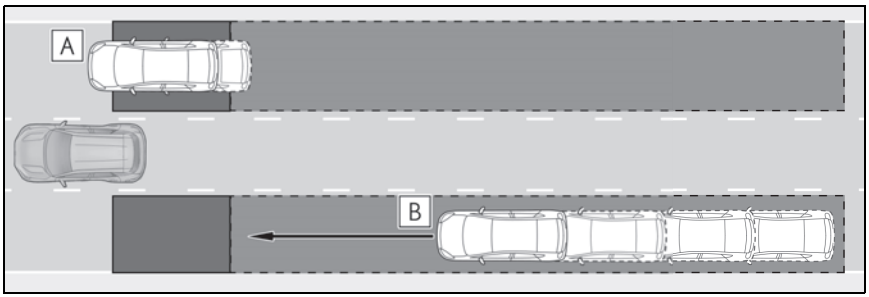
When the Blind Spot Monitor is off, the driving assist information indicator (→P.74) will illuminate and a message will be displayed on the multi-information display.

Each time the power switch is turned to ON, the Blind Spot Monitor is enabled.

Blind Spot Monitor operation

■ Objects that can be detected while driving

The Blind Spot Monitor uses rear side radar sensors to detect the following vehicles traveling in adjacent lanes and advises the driver of the presence of such vehicles via the indicators on the outside rear view mirrors.

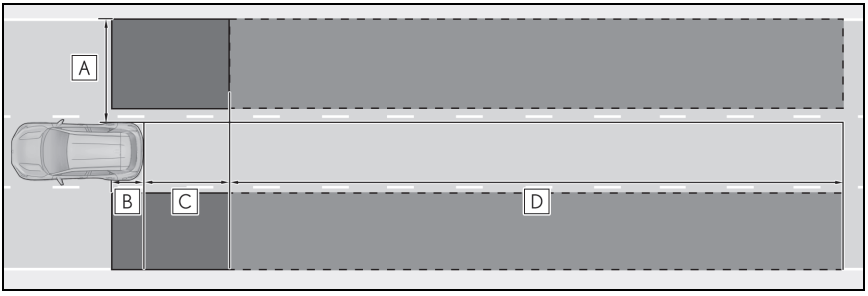


A Vehicles that are traveling in areas that are not visible using the outside rear view mirrors (the blind spots)

B Vehicles that are approaching rapidly from behind in areas that are not visible using the outside rear view mirrors (the blind spots)

■ Detection range while driving

The areas that vehicles can be detected in are outlined below.



The range of each detection area is:

A Approximately 0.5 m (1.6 ft.) to 3.5 m (11.5 ft.) from either side of the vehicle*1

B Approximately 1 m (3.3 ft.) forward of the rear bumper*2

C Approximately 3 m (9.8 ft.) from the rear bumper

D Approximately 3 m (9.8 ft.) to 70 m (230 ft.) from the rear bumper*3

*1: The area between the side of the vehicle and 0.5 m (1.6 ft.) from the side of the vehicle cannot be detected.

*2: While the vehicle is to being overtaken, up to approximately 3 m (9.8 ft.) forward of the rear bumper will be detected.

*3: The greater the difference in speed between your vehicle and the detected vehicle is, the farther away the vehicle will be detected, causing the outside rear view mirror indicator to illuminate or flash.

■ The Blind Spot Monitor linked function

The LDA (Lane Departure Alert) has a function that uses information of detected vehicles driving in an adjacent lane. For details about the function and its operating conditions, P.229.

■ The Blind Spot Monitor is operational when

The Blind Spot Monitor is operational when all of the following conditions are met:

- The power switch is in ON.
- The Blind Spot Monitor is on.
- The shift position is in a position other than R.
- The vehicle speed is approximately 10 km/h (7 mph) or more.

■ The Blind Spot Monitor will detect a vehicle when

The Blind Spot Monitor will detect a vehicle present in the detection area in the following situations:

- A vehicle in an adjacent lane overtakes your vehicle.
- You overtake a vehicle in an adjacent lane slowly.
- Another vehicle enters the detection area when it changes lanes.

■ Situations in which the Blind Spot Monitor cannot detect vehicles

The Blind Spot Monitor cannot detect the following vehicles and other objects:

- Small motorcycles, bicycles, pedestrians,

etc.*

- Vehicles traveling in the opposite direction
- Guardrails, walls, signs, parked vehicles and similar stationary objects*
- Following vehicles that are in the same lane*
- Vehicles traveling 2 lanes away from your vehicle*
- Vehicles which are being overtaken rapidly by your vehicle*

*: Depending on the conditions, detection of a vehicle and/or object may occur.

Conditions in which a buzzer may not sound

In situations such as the following, while the turn signal lever is being operated, the indicator will flash but a buzzer may not sound.

- When a second vehicle is detected while the turn signal lever is being held
- When overtaking a vehicle in the adjacent lane at a much higher speed than it*

*: Depending on the situations, a buzzer may sound.

Conditions under which the system may not function correctly

- The Blind Spot Monitor may not detect vehicles correctly in the following situations:
  - When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
  - When mud, snow, ice, a sticker, etc. is covering the sensor or surrounding area on the rear bumper
  - When driving on a wet road surface, such as in a puddle, while in inclement weather, such as heavy rain, snow, fog, etc.
  - When multiple vehicles are approaching with only a small gap between each vehicle
  - When the distance between your vehicle and a following vehicle is short
  - When there is a significant difference in speed between your vehicle and the vehicle that enters the detection area
  - When the difference in speed between your vehicle and another vehicle is changing
  - When a vehicle enters a detection area traveling at about the same speed as your vehicle
  - As your vehicle starts from a stop, a vehicle remains in the detection area
  - When driving up and down consecutive steep inclines, such as hills, dips in the road, etc.
  - When driving on roads with sharp bends, consecutive curves, or uneven surfaces
  - When vehicle lanes are wide, or when driving on the edge of a lane, and the vehicle in an adjacent lane is far away from your vehicle
  - When an accessory (such as a bicycle carrier) is installed to the rear of the vehicle
  - When there is a significant difference in height between your vehicle and the vehicle that enters the detection area
  - Immediately after the Blind Spot Monitor is turned on
  - When towing with the vehicle
- Instances of the Blind Spot Monitor unnecessarily detecting a vehicle and/or object may increase in the following situations:
  - When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
  - When the distance between your vehicle and a guardrail, wall, etc. that enters the detection area is short
  - When driving up and down consecutive steep inclines, such as hills, dips in the road, etc.
  - When vehicle lanes are narrow, or when driving on the edge of a lane, and a vehicle traveling in a lane other than the adjacent lanes enters the detection area
  - When driving on roads with sharp bends, consecutive curves, or uneven surfaces
  - When the tires are slipping or spinning
  - When the distance between your vehicle and a following vehicle is short
  - When an accessory (such as a bicycle carrier) is installed to the rear of the vehi-

cle
- When towing with the vehicle

Safe Exit Assist

The safe exit assist (with door opening control) is a system that uses rear side radar sensors installed on the inner side of the rear bumper to help occupants judge if an approaching vehicle or bicycle may collide with a door when exiting or cancel opening of a door, to help reduce the possibility of a collision.

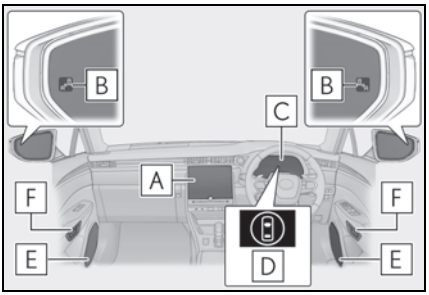
WARNING

■ Cautions regarding the use of the system

- The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings.
- The safe exit assist is a supplementary system that, when the vehicle is stopped, informs occupants of the existence of approaching vehicles and bicycles. As this system alone cannot be used to judge safety, over-reliance on this system may lead to an accident resulting in death or serious injury.

In certain situations, this system may not function to its fullest extent. Therefore it is necessary for the occupants to visually check for safety directly and using the mirrors.

System components



A Center Display

Turning the safe exit assist on/off.

B Outside rear view mirror indicators

When a vehicle or bicycle which may collide with a door (other than the back door) when opened is detected, the outside rear view mirror indicator (→P.74) on the detected side will illuminate. If the door on the detected side is open, or opening of the door is canceled, the outside rear view mirror indicator will blink.

C Multi-information display

If collision with a door is likely and the door is opened or opening of the door is canceled, the door will be displayed on the multi-information display. Also, if a door is opened when an outside rear view mirror indicator is illuminated, a buzzer will sound as a warning.

D Driving assist information indicator

Illuminates when the safe exit assist is turned off. At this time, a message will be displayed on the multi-information display.

E Speakers

When the outside rear view mirror indicator blinks, the driver is informed through voice guidance that the system has operated. After the notification through voice guidance is made, no more voice guidance notifications will be made again until the door is fully closed.

F Door opener switch (manual release handle)

If a door opener switch is operated to open a door while the outside rear view mirror indicator on that side is illuminated and the system determines that the possibility of the door or an exiting occupant colliding with a vehicle or bicycle is high, opening of the door will be canceled.

Outside rear view mirror indicator visibility

In strong sunlight, the outside rear view mirror indicator may be difficult to see.

Buzzer

If the volume setting of the audio system is high or the surrounding area is loud, it may be difficult to hear the buzzer.

Voice notifications

In the following situations, voice notifications will not be output:

- When it is estimated that no occupants are on board*
- After opening a door and entering the vehicle, until the hybrid system is started
- When 3 minutes or more have elapsed since the hybrid system was stopped
- When the language setting of the Center Display has been set to a language that does not support voice notifications
- When all of the doors have been locked from outside the vehicle
- When a door remains open for 1 minute or more after the hybrid system is stopped
- When the ACC mode (→P.476) has been enabled through a customize setting on the Center Display and the hybrid system has been stopped
- When the parking assist volume setting on the Center Display has been set to off

*: For each seating position, judgment is made based on the opening and closing of a door, before driving for ingress and after driving for egress.

■ **Opening of a door can be canceled when**

Opening of a door can be canceled only when the inside door opener switch is pushed in. Opening of a door will not be able to be canceled when the outside door opener switch is used.

■ **Customization**

Some functions can be customized. (→P.476)

WARNING

■ **To ensure the system can operate properly**

→P.256

Turning the safe exit assist system ON/OFF

The safe exit assist system can be enabled/disabled through a customize setting. (→P.476)

When the safe exit assist is off, the driving assist information indicator will illuminate and a message will be displayed on the multi-information display.

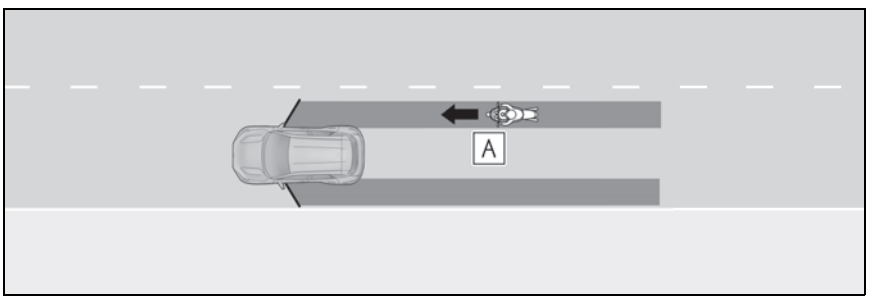
Each time the power switch is turned to ON, the safe exit assist is enabled.*

*: When the power switch is turned off and then to ON immediately after that, the safe exit assist may not be enabled.

Safe exit assist operation

■ **Objects that can be detected by the safe exit assist**

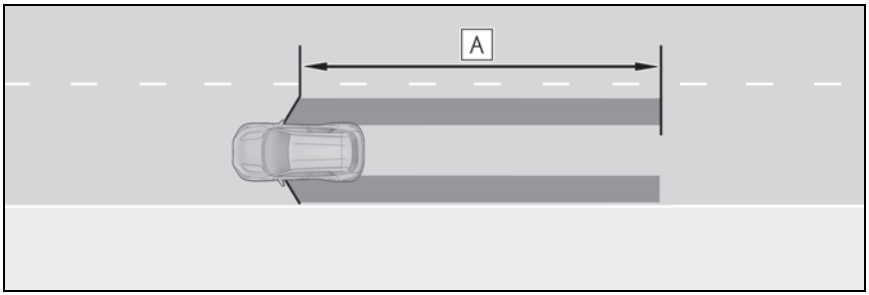
When the safe exit assist detects the following vehicles or bicycles behind your vehicle using a rear side radar sensor, the occupants of the vehicle are informed through an outside rear view mirror indicator, buzzer, multi-information display, and voice notification.



A Vehicle or bicycle which has a high possibility of colliding with a door (other than the back door) when opened

■ The safe exit assist detection areas

The areas that vehicles can be detected in are outlined below.



A Approximately 45 m (145 ft.) rearward from the front door*

*: The faster a vehicle or bicycle is approaching, the distance at which an outside rear view mirror indicator will illuminate or blink will become further.

■ The safe exit assist is operational when

The safe exit assist is operational when all of the following conditions are met:

- When the power switch is ON, less than 3 minutes have elapsed since the hybrid system was off, or less than 3 minutes have elapsed since a door was opened and someone has entered the vehicle (the time which operation is possible may be extended if a door is opened and closed)
- Safe exit assist is on
- The vehicle is stopped.
- The shift position is in a position other than R.

■ The safe exit assist will detect a vehicle when

The safe exit assist will detect a vehicle present in the detection area in the following situations:

- When the vehicle is stopped and a vehicle or bicycle, which is traveling parallel to the vehicle, is approaching within the area that a door opens (other than the back door)

■ Conditions under which the system will not detect a vehicle

- Safe exit assist does not detect the following objects, vehicles, and bicycles:
  - Vehicles or bicycles which are approaching slowly*
  - Vehicles or bicycles which are determined to have a low possibility of colliding with a door (other than the back door) when opened*
  - Vehicles or bicycles which are approaching from directly behind*
  - Vehicles or bicycles which are approaching from the front*
  - Guardrails, walls, signs, parked vehicles, and other stationary objects*
  - Pedestrians, animals, etc.*

*: Depending on the conditions, detection of a vehicle and/or object may occur.

- In situations such as the following, safe exit assist will not operate:
  - When 3 minutes or more have elapsed since the hybrid system off (the time which operation is possible may be extended if a door is opened and closed)
  - When your vehicle is not completely stopped

■ Opening the doors when opening is canceled by the system

Perform the following operation to open a door.

After the approaching vehicle or bicycle passes or changes direction, check the surrounding area and press the inside door opener switch again. Perform the following only in an emergency, etc., to open a door while the warning is operating, after checking the safety of the area around your vehicle.

- Press and hold an inside door opener switch for approximately 3 seconds or more
- Press an inside door opener switch quickly 3 times or more
- Pull a manual release handle

Conditions under which the system may not function correctly

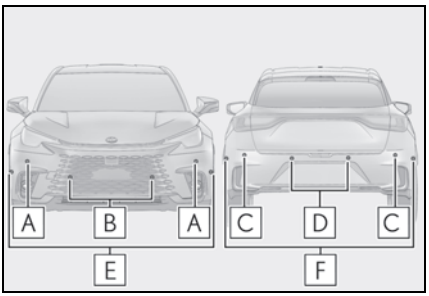
- The safe exit assist may not detect vehicles correctly in the following situations:
  - When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
  - When mud, snow, ice, a sticker, etc., is covering the sensor or surrounding area on the rear bumper
  - When the vehicle is stopped on a wet road surface, such as in a puddle, while in inclement weather, such as heavy rain, snow, fog, etc.
  - When a vehicle or bicycle approaches from behind a nearby parked vehicle
  - When an approaching vehicle or bicycle suddenly changes direction
  - Immediately after a vehicle or bicycle starts moving
  - When the back door is open
  - When a bicycle carrier, ramp, or other accessory is installed to the back of the vehicle
  - When a parked vehicle, wall, sign, person or other stationary object is behind the vehicle
  - When the vehicle is stopped at an angle to the road
  - When a vehicle is traveling near an approaching vehicle or bicycle
  - When an approaching vehicle or bicycle is traveling along a stationary object, such a wall or sign
  - When a vehicle or bicycle is approaching at high speed
  - When towing with the vehicle
  - When stopped on a steep slope
  - When stopped on a curve or at the exit of a curve
- Instances of the safe exit assist unnecessarily detecting a vehicle and/or object may increase in the following situations:
  - When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
  - When a vehicle or bicycle approaches your vehicle from directly behind in an offset position
  - When the vehicle is stopped at an angle to the road
  - When a vehicle or bicycle approaches from behind a parked vehicle at an angle
  - When a parked vehicle, wall, sign, person or other stationary object is behind the vehicle
  - When an approaching vehicle or bicycle suddenly changes direction
  - When an approaching vehicle or bicycle is traveling along a stationary object, such a wall or sign
  - When the back door is open
  - When a bicycle carrier, ramp, or other accessory is installed to the back of the vehicle
  - When a vehicle or bicycle is approaching at high speed
  - When towing with the vehicle
  - When stopped on a steep slope
  - When stopped on a curve or at the exit of a curve
  - When a vehicle or bicycle approaches from behind a vehicle stopped in an adjacent lane

Lexus parking assist-sensor

The Lexus parking assist-sensor function detects the approximate distance from the vehicle and an object such as a wall using ultrasonic sensors and informs the driver with the Center Display distance display and buzzer.

System components

■ Type of sensors



A Front corner sensors

B Front center sensors

C Rear corner sensors

D Rear center sensors

E Front side sensors (vehicles with Advanced Park)

F Rear side sensors (vehicles with Advanced Park)

■ Display

When the sensors detect an object, such as a wall, a graphic is shown on the Center Display depending on the position and distance to the object.

The illustration is an example for explanation and may differ depending on the specifications.

▶ Center Display



■ Lexus parking assist-sensor detection indicator*

When the sensors detect an object, Lexus parking assist-sensor detection indicator illuminates.

*: If equipped

■ How to check the presence of Lexus parking assist-sensor detection indicator

On vehicles with the Lexus parking assist-sensor detection indicator, the Lexus parking assist-sensor OFF indicator (→P.265) will turn off when the shift position is changed to R while the Lexus parking assist-sensor is disabled.

Turning the Lexus parking assist-sensor function ON/OFF

The Lexus parking assist-sensor function can be enabled/disabled through a customize setting. (→P.476)

When the Lexus parking assist-sensor function is disabled, the Lexus parking assist-sensor OFF indicator (→P.74) illuminates on the multi-information

display.

If the system switches to OFF (disabled) and the Lexus parking assist-sensor is stopped, the Lexus parking assist-sensor will not be re-enabled until ON (enabled) is selected again from the customize setting (→P.476). (It remains off even if the power switch is turned to ON again after the power switch has been turned off.)

Vehicles with the Lexus parking assist-sensor detection indicator: The system will automatically turn on (enabled) and the Lexus parking assist-sensor OFF indicator will turn off if the shift position is changed to R.
When the shift position is R, the Lexus parking assist-sensor cannot be turned on or off.
The setting of Lexus parking assist-sensor itself will not change.

WARNING

■ Cautions regarding the use of the system

There is a limit to the degree of recognition accuracy and control performance that this system can provide, do not overly rely on this system. The driver is always responsible for paying attention to the vehicle's surroundings and driving safely.

■ To ensure the system can operate properly

Make sure to observe the following precautions. The system may not operate properly and may lead to an unexpected accident. When these precautions cannot be observed, turn the system off.

- Do not damage the sensors, and always keep them clean.
- Do not attach a sticker or install a component, such as a backlit license plate (especially fluorescent type), fog lights, fender pole or wireless antenna near a radar sensor.
- Do not subject the surrounding area of the sensor to a strong impact. If subjected to an impact, have the vehicle inspected by your Lexus dealer. If the front or rear bumper needs to be removed/installed or replaced, contact your Lexus dealer.
- Do not modify, disassemble or paint the sensors.
- Do not attach a license plate cover.
- Keep your tires properly inflated.
- Do not install a suspension other than a genuine suspension.

■ Notes when washing the vehicle

- When using a high pressure washer to wash the vehicle, do not spray the sensors directly, as doing so may cause a sensor to malfunction.
- When using steam to clean the vehicle, do not direct steam too close to the sensors, as doing so may cause a sensor to malfunction.

■ The system can be operated when

- The power switch is in ON.
- The Lexus parking assist-sensor is on.
- The vehicle speed is less than about 10 km/h (6 mph).
- Front corner sensors:
  - The shift position is in a position other than P.
- Front center sensors:
  - The shift position is in a position other than P or R.
- Rear corner and rear center sensors:
  - The shift position is in R.
- Side sensors: (vehicles with Advanced

Park)
- The vehicle is moving about 7 m (23.0 ft.) after the hybrid system was started.
- The vehicle is moving about 7 m (23.0 ft.) after the shift position was changed from R to D.
- The shift position is in R.
- VIEW switch has been pressed and the Center Display is displayed.
- The front or rear sensor detects a stationary object.

Vehicles with the Lexus parking assist-sensor detection indicator: Even when the Lexus parking assist-sensor is turned off (disabled), if the shift position is changed to R, the system will automatically turn on (enabled) and the Lexus parking assist-sensor OFF indicator will turn off.
The setting of the Lexus parking assist-sensor itself will not change.

■ **Sensor detection information**

- The sensor's detection areas are limited to the areas around the vehicle's front and rear bumpers.
- Certain vehicle conditions and the surrounding environment may affect the ability of a sensor to correctly detect an object.
- Objects may not be detected if they are too close to the sensor.
- There will be a short delay between object detection and display. Even at low speeds, there is a possibility that the object will come within the sensor's detection areas before the display is shown and the warning beep sounds.
- It might be difficult to hear the buzzer due to the volume of the audio system or air flow noise of the air conditioning system.
- It may be difficult to hear the sound of this system due to the buzzers of other systems.
- If the meter malfunctions, the buzzer may not sound.

■ **Objects which the system may not be properly detected**

The shape of the object may prevent the sensor from detecting it. Pay particular attention to the following objects:

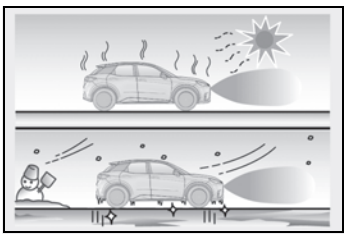
- Wires, fences, ropes, etc.
- Cotton, snow and other materials that absorb sound waves
- Sharply-angled objects
- Low objects
- Tall objects with upper sections projecting outwards in the direction of your vehicle

People may not be detected if they are wearing certain types of clothing.

■ **Situations in which the system may not operate properly**

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

- There is dirt, snow, water drops or ice on a sensor. (Cleaning the sensors will resolve this problem.)
- A sensor is frozen. (Thawing the area will resolve this problem.) In especially cold weather, if a sensor is frozen the sensor display may be displayed abnormally, or objects, such as a wall, may not be detected.
- When a sensor or the area around a sensor is extremely hot or cold.



- On an extremely bumpy road, on an incline, on gravel, or on grass.
- When vehicle horns, vehicle detectors, motorcycle engines, air brakes of large vehicles, the clearance sonar of other vehicles or other devices which produce ultrasonic waves are near the vehicle.
- A sensor is coated with a sheet of spray

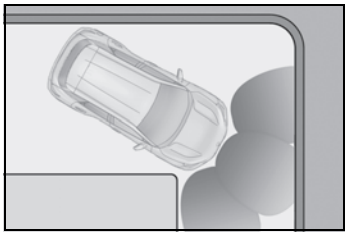
or heavy rain.

- If objects draw too close to the sensor.
- When a pedestrian is wearing clothing that does not reflect ultrasonic waves (ex. skirts with gathers or frills).
- When objects that are not perpendicular to the ground, not perpendicular to the vehicle traveling direction, uneven, or waving are in the detection range.
- When strong winds are blowing.
- When driving in inclement weather such as fog, snow or a sandstorm.
- When an object that cannot be detected is between the vehicle and a detected object.
- If an object such as a vehicle, motorcycle, bicycle or pedestrian cuts in front of the vehicle or runs out from the side of the vehicle.
- If the orientation of a sensor has been changed due to a collision or other impact.
- When equipment such as a towing eyelet, transport hook, bumper protector, bumper trim, bicycle carrier or snow-removal device (snow plow) is installed near the sensor.
- If the front of the vehicle is raised or lowered due to the carried load.
- If the vehicle cannot be driven in a stable manner, such as when the vehicle has been in an accident or is malfunctioning.
- When tire chains, compact spare tire or an emergency tire puncture repair kit are used.
- When towing with the vehicle.

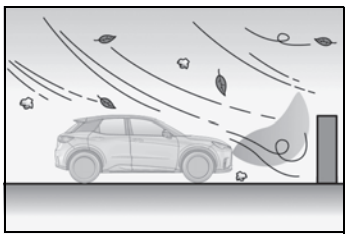
■ **Situations in which the system may operate even if there is no possibility of a collision**

In some situations, such as the following, the system may operate even though there is no possibility of a collision.

- When driving on a narrow road.

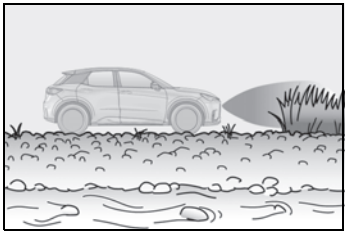


- When driving toward a banner, flag, low-hanging branch or boom barrier (such as those used at railroad crossings, toll gates and parking lots).
- When there is a rut or hole in the surface of the road.
- When driving on a metal cover (grating), such as those used for drainage ditches.
- When driving up or down a steep slope.
- If a sensor is hit by a large amount of water, such as when driving on a flooded road.
- There is dirt, snow, water drops or ice on a sensor. (Cleaning the sensors will resolve this problem.)
- A sensor is coated with a sheet of spray or heavy rain.
- When driving in inclement weather such as fog, snow or a sandstorm.
- When strong winds are blowing.



- When vehicle horns, vehicle detectors, motorcycle engines, air brakes of large vehicles, the clearance sonar of other vehicles or other devices which produce ultrasonic waves are near the vehicle.
- If the front of the vehicle is raised or lowered due to the carried load.
- If the orientation of a sensor has been changed due to a collision or other impact.

- The vehicle is approaching a tall or curved curb.
- Driving close to columns (H-shaped steel beams, etc.) in multi-story parking garages, construction sites, etc.
- If the vehicle cannot be driven in a stable manner, such as when the vehicle has been in an accident or is malfunctioning.
- On an extremely bumpy road, on an incline, on gravel, or on grass.

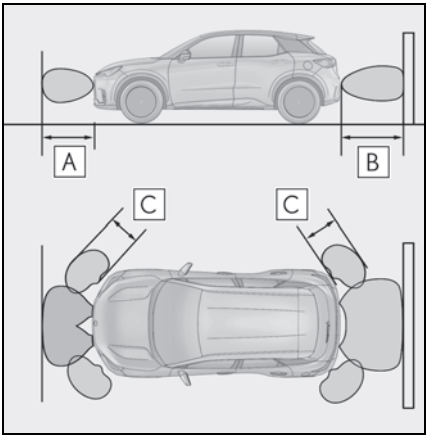


- When tire chains, compact spare tire or an emergency tire puncture repair kit are used.
- When towing with the vehicle.

Sensor detection display, object distance

■ Detection range of the sensors

▶ Vehicles without Advanced Park



A Approximately 100 cm (3.3 ft.)

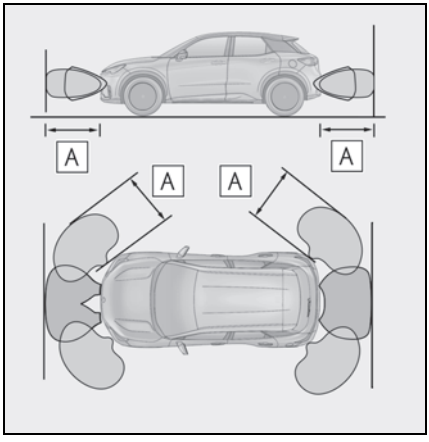
B Approximately 150 cm (4.9 ft.)

C Approximately 60 cm (2.0 ft.)

The diagram shows the detection range of the sensors. Note that the sensors cannot detect objects that are extremely close to the vehicle.

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

▶ Vehicles with Advanced Park



A Approximately 200 cm (6.6 ft.)

The diagram shows the detection range of the sensors. Note that the sensors cannot detect objects that are extremely close to the vehicle.

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

■ The distance and buzzer

▶ Vehicles without Advanced Park

Approximate distance to object	Buzzer
Front center sensor: Approximately 100 cm (3.3 ft.) to 60 cm (2.0 ft.)* Rear center sensor: Approximately 150 cm (4.9 ft.) to 60 cm (2.0 ft.)*	Slow
Approximately 60 cm (2.0 ft.) to 45 cm (1.5 ft.)*	Medium
Approximately 45 cm (1.5 ft.) to 30 cm (1.0 ft.)*	Fast
Approximately less than 30 cm (1.0 ft.)	Continuous

*: Automatic buzzer mute function is enabled. (→P.271)

▶ Vehicles with Advanced Park

Approximate distance to object	Buzzer
Front center sensor: Approximately 200 cm (6.6 ft.) to 100 cm (3.3 ft.) Rear center sensor: Approximately 200 cm (6.6 ft.) to 150 cm (4.9 ft.) Corner sensor: Approximately 200 cm (6.6 ft.) to 60 cm (2.0 ft.)	Does not sound (Display only)
Front center sensor: Approximately 100 cm (3.3 ft.) to 60 cm (2.0 ft.)* Rear center sensor: Approximately 150 cm (4.9 ft.) to 60 cm (2.0 ft.)*	Slow
Front/Rear center sensor and Corner sensor: Approximately 60 cm (2.0 ft.) to 45 cm (1.5 ft.)*	Medium
Front/Rear center sensor and Corner sensor: Approximately 45 cm (1.5 ft.) to 30 cm (1.0 ft.)*	Fast
Approximately less than 30 cm (1.0 ft.)	Continuous

*: Automatic buzzer mute function is enabled. (→P.271)

Lexus parking assist-sensor buzzer

A buzzer sounds when the sensors are operating.

- The buzzer beeps faster as the vehicle approaches a static object. When the vehicle comes within the approximately 30 cm (1.0 ft.) of the object, the buzzer will sound continuously.
- When 2 or more sensors simultaneously detect a static object, the buzzer sounds for the nearest object.
- After an intermittent buzzer begins sounding, if the distance between the vehicle and the detected static object does not become shorter, the buzzer will be muted automatically. (automatic buzzer mute function)

Adjusting the buzzer volume

The buzzer volume of the Lexus parking assist-sensor, RCTA and RCD can all be changed at once from the customize settings. (→P.476)

Muting a buzzer

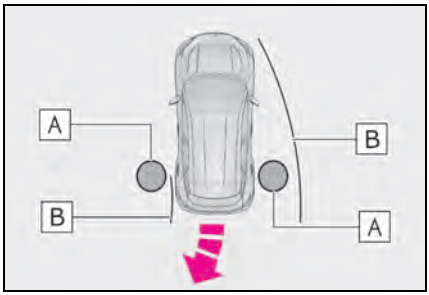
When the temporary mute switch is displayed on the Center Display, this switch can be pressed to temporarily mute the buzzer.

Select the switch to mute a buzzer of the Lexus parking assist-sensor, RCTA and RCD all together.

- Mute will be automatically canceled in the following situations:
  - When the shift position is changed.
  - When the vehicle speed exceeds a certain speed.
  - When there is a malfunction in a sensor or the system is temporarily unavailable.
  - When the operating function is disabled manually.
  - When the power switch is turned off.

Lexus parking assist-sensor object warning function (vehicles with Advanced Park)

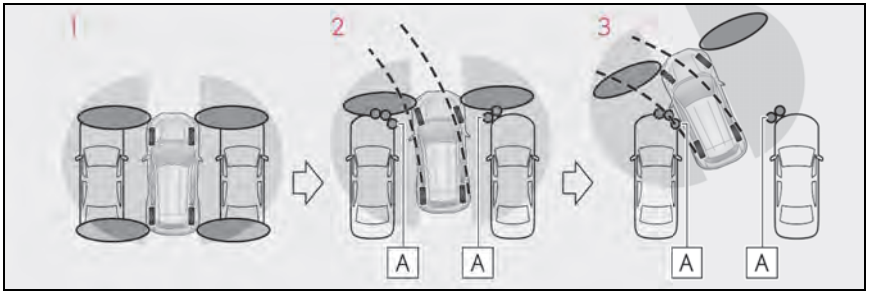
The object warning function informs the driver of the existence of objects along the side of the vehicle, using a display and buzzer, if the objects are within the estimated path of the vehicle.



A Object

B Calculated vehicle route

When the vehicle is moving, the side sensors or side cameras can detect objects. While the vehicle is moving, if a detected object can no longer be detected by the side sensors or side cameras, the location of the object relative to the vehicle is estimated. If the object is determined to be in the estimated path of the vehicle, the object warning function will operate.



A Object detected by side sensors or side cameras

1 The vehicle is stopped and objects along the sides of the vehicle are not detected.

2 Objects are detected as the vehicle is moving.

3 Even though the objects are outside of the detection area of the side sensors or side cameras, a warning is displayed and a buzzer sounds.

■ **Object warning function operating conditions**

- The vehicle moves about 7 m (23.0 ft.) after the hybrid system is started.
- After the D shift position has been selected, the vehicle has moved 7 m (23.0 ft.) or less.
- The R shift position is selected.
- VIEW switch has been pressed and the Center Display is displayed.
- The front or rear sensor detects a stationary object.

■ **Detection of objects along the sides of the vehicle**

- Objects along the sides of the vehicle are not instantaneously detected. The location of objects in relation to the vehicle is estimated after they are first detected by the front or rear side sensors, or side cameras. Therefore, after the power switch is changed to ON, even if an object is along the side of the vehicle, it may not be detected until the vehicle has been driven a small amount and the side sensors or side cameras completely scan the areas along the sides of the vehicle.
- If a vehicle, person, animal, etc., is detected by a side sensors or side cameras, but then leaves the detection area of the side sensors or side cameras, the system will assume the object has not moved.

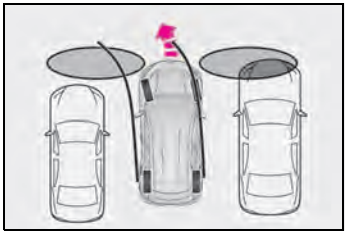
WARNING

■ **Side sensors and side cameras**

In situations such as the following, the function may not operate correctly, possibly leading to an accident. Proceed carefully.

WARNING

- When starting off shortly after the power switch is turned to ON and a small vehicle or other object which cannot be detected by a front side sensor is next to the vehicle.
  In the situation shown in the following illustration, even if the vehicle starts off, the vehicle on the left will not be detected and the object warning function will not operate.



- When an object or person is in a position which cannot be detected by the side sensors or side cameras.
- When a vehicle, person, or other object approaches the side of the vehicle after the side sensors have completed scanning the areas along the sides of the vehicle.
- When the outside rear view mirror is folded.
- If the 12-volt battery was discharged or has been removed and installed, fold and extend the outside rear view mirrors.

RCTA (Rear Cross Traffic Alert) function

The RCTA function uses the BSM rear side radar sensors installed behind the rear bumper. This function is intended to assist the driver in checking areas that are not easily visible when backing up.

WARNING

■ **Cautions regarding the use of the system**

The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings.

The RCTA function is only a supplementary function which alerts the driver that a vehicle is approaching from the right or left at the rear of the vehicle.

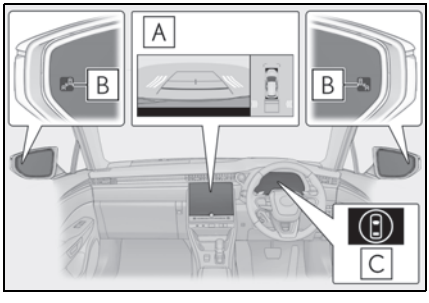
As the RCTA function may not function correctly under certain conditions, the driver's own visual confirmation of safety is necessary.

Over reliance on this function may lead to an accident resulting death or serious injury.

■ **To ensure the system can operate properly**

→P.256

System components



A Center Display

Turning the RCTA function on/off in Center Display.

If a vehicle approaching from the right or left at the rear of the vehicle is detected, the RCTA icon (→P.274) for the detected side will be displayed on the Center Display. This illustration* shows an example of a vehicle approaching from both sides of the vehicle.

*: Depending on the vehicle grade and equipped options, the actual screen may be different from this illustration.

B Outside rear view mirror indicators

If a vehicle is detected as approaching from the left or right behind the vehicle, both outside rear view mirror indicators (→P.74) will blink and a buzzer will sound.

C Driving assist information indicator

Illuminates when the RCTA is turned off. At this time, a message will be displayed on the multi-information display.

Turning the RCTA function on/off

The RCTA can be enabled/disabled through a customize setting. (→P.476)

When the RCTA function is off, the driving assist information indicator (→P.74) will illuminate and a message will be displayed on the multi-information display. Each time the power switch is turned to ON, the RCTA function is enabled.

Outside rear view mirror indicator visibility

In strong sunlight, the outside rear view mirror indicator may be difficult to see.

Hearing the RCTA buzzer

The RCTA buzzer may be difficult to hear over loud noises, such as if the audio system volume is high.

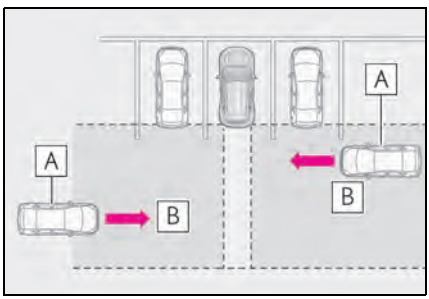
Rear side radar sensors

→P.256

RCTA function

Operation of the RCTA function

The RCTA function uses rear side radar sensors to detect vehicles approaching from the right or left at the rear of the vehicle and alerts the driver of the presence of such vehicles by flashing the outside rear view mirror indicators and sounding a buzzer.



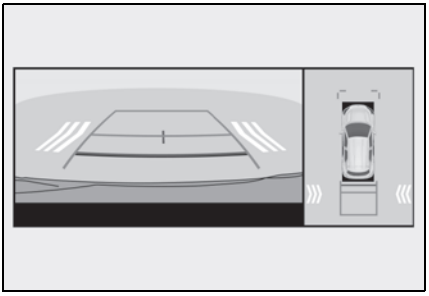
A Approaching vehicles

B Detection areas of approaching vehicles

RCTA icon display

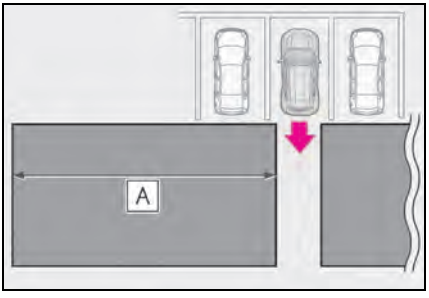
When a vehicle approaching from the right or left at the rear of the vehicle is detected, the following will be displayed on the Center Display.

Example: Vehicles are approaching from both sides of the vehicle



■ RCTA function detection areas

The areas that vehicles can be detected in are outlined below.



The buzzer can alert the driver of faster vehicles approaching from farther away.

Example:

Approaching vehicle speed	A Approximate alert distance
56 km/h (34 mph) (fast)	30 m (98 ft.)
8 km/h (5 mph) (slow)	4 m (13 ft.)

■ The RCTA function is operational when

The RCTA function operates when all of the following conditions are met:

- The power switch is in ON.
- The RCTA function is on.
- The shift position is in R.
- The vehicle speed is less than approximately 15 km/h (9 mph).
- The approaching vehicle speed is between approximately 8 km/h (5 mph) and 56 km/h (34 mph).

■ Setting the buzzer volume

The buzzer volume of the RCTA, Lexus parking assist-sensor and RCD can be adjusted all together through a customize setting. (→P.476)

■ Muting a buzzer temporarily

When an object is detected, the temporary mute switch is displayed on the Center Display.

Select the switch to mute the buzzer of the Lexus parking assist-sensor, RCTA and RCD all together.

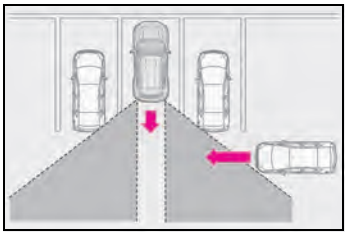
Mute will be canceled automatically in the following situations:

- When the shift position is changed.
- When the vehicle speed exceeds a certain speed.
- When there is a malfunction in a sensor or the system is temporarily unavailable.
- When the operating function is disabled manually.
- When the power switch is turned off.

■ Conditions under which the system will not detect a vehicle

The RCTA function is not designed to detect the following types of vehicles and/or objects:

- Vehicles approaching from directly behind
- Vehicles backing up in a parking space next to your vehicle
- Vehicles that the sensors cannot detect due to obstructions



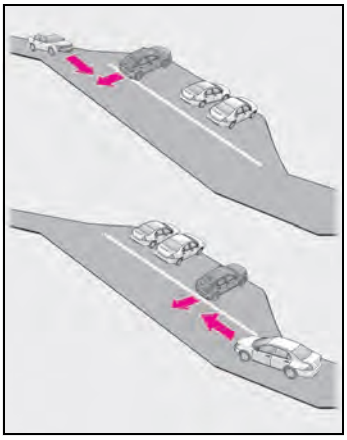
- Guardrails, walls, signs, parked vehicles and similar stationary objects*
- Small motorcycles, bicycles, pedestrians, etc.*
- Vehicles moving away from your vehicle
- Vehicles approaching from the parking spaces next to your vehicle*
- The distance between the sensor and approaching vehicle gets too close

*: Depending on the conditions, detection of a vehicle and/or object may occur.

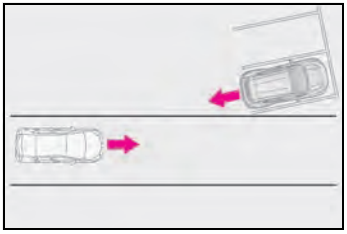
■ Situations in which the system may not operate properly

The RCTA function may not detect vehicles correctly in the following situations:

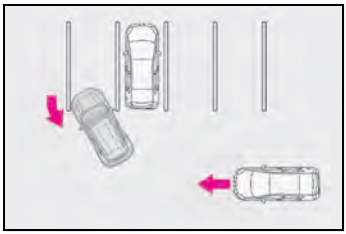
- When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
- When mud, snow, ice, a sticker, etc. is covering the sensor or surrounding area on the rear bumper
- When driving on a wet road surface, such as in a puddle, while in inclement weather, such as heavy rain, snow, fog, etc.
- When multiple vehicles are approaching with only a small gap between each vehicle
- When a vehicle is approaching at high speed
- When equipment that may obstruct a sensor is installed, such as a towing eyelet, bumper protector (an additional trim strip, etc.), bicycle carrier, or snow plow
- When backing up on a slope with a sharp change in grade



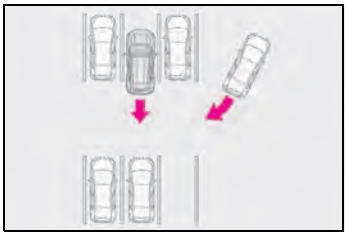
- When backing out of a sharp angle parking spot



- Immediately after the RCTA function is turned on
- Immediately after the hybrid system is started with the RCTA function on
- When the sensors cannot detect a vehicle due to obstructions
- When towing with the vehicle
- When there is a significant difference in height between your vehicle and the vehicle that enters the detection area
- When a sensor or the area around a sensor is extremely hot or cold
- If the suspension has been modified or tires of a size other than specified are installed
- If the front of the vehicle is raised or lowered due to the carried load
- When turning while backing up



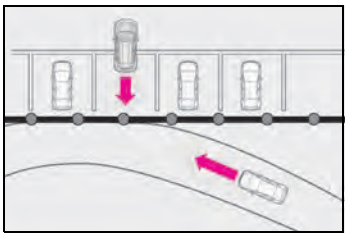
● When a vehicle turns into the detection area



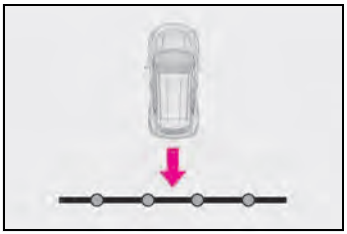
■ **Situations in which the system may operate even if there is no possibility of a collision**

Instances of the RCTA function unnecessarily detecting a vehicle and/or object may increase in the following situations:

● When the parking space faces a street and vehicles are being driven on the street



● When the distance between your vehicle and metal objects, such as a guardrail, wall, sign, or parked vehicle, which may reflect electrical waves toward the rear of the vehicle, is short

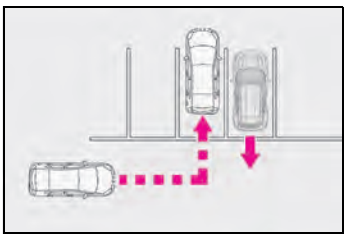


● When equipment that may obstruct a sensor is installed, such as a towing eyelet, bumper protector (an additional trim strip, etc.), bicycle carrier, or snow plow

● When a vehicle passes by the side of your vehicle



● When a detected vehicle turns while approaching the vehicle



● When there are spinning objects near your vehicle such as the fan of an air conditioning unit

● When water is splashed or sprayed toward the rear bumper, such as from a sprinkler

● Moving objects (flags, exhaust fumes, large rain droplets or snowflakes, rain water on the road surface, etc.)

● When the distance between your vehicle and a guardrail, wall, etc., that enters the detection area is short

● Gratings and gutters

● When a sensor or the area around a sen-

sor is extremely hot or cold

- If the suspension has been modified or tires of a size other than specified are installed
- If the front of the vehicle is raised or lowered due to the carried load
- When towing with the vehicle

RCD (Rear Camera Detection)

When the vehicle is backing up, the rear camera detection function can detect pedestrians in the detection area behind the vehicle. If a pedestrian is detected, a buzzer will sound and an icon will be displayed on the Center Display to inform the driver of the pedestrian.

WARNING

■ Cautions regarding the use of the system

The recognition and control capabilities for this system are limited.

The driver should always drive safely by always being responsible without over relying on the system and have an understanding of the surrounding situations.

■ To ensure the system can operate properly

Observe the following, otherwise there is the danger that could lead to an accident.

- Always clean the camera without damaging it.
- Do not install market parts (such as Illuminated license plate, fog lamps, etc.) in the camera vicinity.
- Do not subject the camera vicinity to strong impacts. If the vicinity is subjected to a strong impact, have the vehicle inspected by your Lexus dealer.
- Do not disassemble, remodel or paint the camera.
- Do not attach accessories or stickers to the camera.

WARNING

- Do not install market protection parts (bumper trim, etc.) to the rear bumper.
- Maintain suitable tire air pressure.
- Make sure the back door is completely closed.

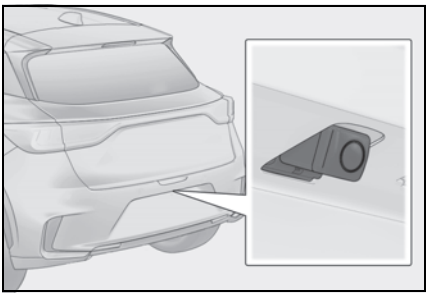
■ When to disable the RCD function

In the following situations, disable the system. The RCD function may not operate properly, possibly leading to an accident.

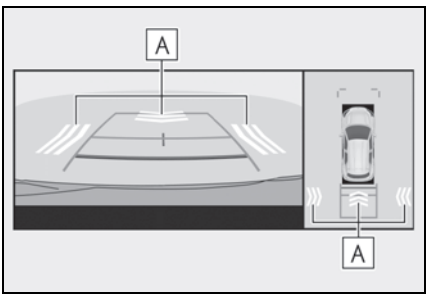
- The contents mentioned above are not observed.
- Suspensions other than the genuine parts are installed.

System component

Location of the rear camera



RCD display



A Pedestrian detection icon

Displayed automatically when a pedestrian is detected behind the vehicle.

Turning the RCD function on/off

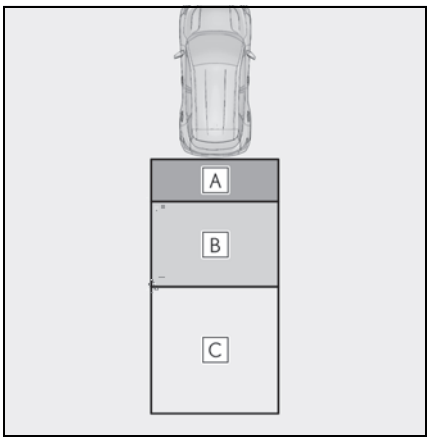
The RCD function can be enabled/disabled through a customize setting. (→P.476)

When the RCD function is disabled, the driving assist information indicator (→P.74) illuminates, and a message is displayed on the multi-information display.

Each time the power switch is turned off then changed to ON, the RCD function will be enabled automatically.

When a pedestrian is detected

If a pedestrian is in the area behind the vehicle or if the rear camera detected that a pedestrian is approaching the vehicle from behind, the system urges caution from the driver by sounding the buzzer and displaying the detection of a pedestrian on the Center Display as follows:



A If a pedestrian is detected in area A
Buzzer: Sounds repeatedly
Pedestrian detection icon: Blinks

B If a pedestrian is detected in area B
Buzzer (When the vehicle is stationary): Sounds 3 times
Buzzer (When the vehicle is backing up, when a pedestrian approaches the rear of the vehicle): Sounds repeatedly
Pedestrian detection icon: Blinks

C If the system determines that your vehicle may collide with a pedestrian in area C
Buzzer: Sounds repeatedly
Pedestrian detection icon: Blinks

■ **The rear camera detection function is operational when**

- The power switch is in ON.
- RCD function is on.
- The shift position is in R.
- Advanced Park* is not operating.

*: If equipped

■ **Setting the buzzer volume**

The buzzer volume of the Lexus parking assist-sensor, RCTA, and RCD can all be changed at once from the customize settings. (→P.476)

■ **Muting a buzzer temporarily**

When an object is detected, the temporary mute switch is displayed on the Center Display.

Select the switch to mute a buzzer of the Lexus parking assist-sensor, RCTA, and RCD all together.

Mute will be automatically canceled in the following situations:

- When the shift position is changed.
- When the vehicle speed exceeds a certain speed.
- When there is a malfunction in a sensor or the system is temporarily unavailable.
- When the operating function is disabled manually.
- When the power switch is turned off.

■ **Situations in which the system may not operate properly**

- Some pedestrians, such as the following, may not be detected by the rear camera detection function, preventing the function from operating properly:
  - Pedestrians who are bending forward or squatting
  - Pedestrians who are lying down
  - Pedestrians who are running
  - Pedestrians who suddenly appear from the shadow of the vehicle or a building
  - Pedestrians who are riding moving objects such as a bicycle or skateboard
  - Pedestrians wearing oversized clothing such as a rain coat, long skirt, etc., making their silhouette obscure
  - Pedestrians whose body is partially hidden by an object, such as a cart or umbrella
  - Pedestrians which are obscured by darkness, such as at night
- In some situations, such as the following, pedestrians may not be detected by the rear camera detection function, preventing the function from operating properly:
  - When backing up in inclement weather (rain, snow, fog, etc.)
  - The lens is dirty (by dirt or snow-melting agent, etc.) or scratched
  - When a very bright light, such as the sun, or the headlights of another vehicle, shines directly into the rear camera
  - When backing up in a place where the surrounding brightness changes suddenly, such as at the entrance or exit of a garage or underground parking lot
  - When backing up in a dim environment such as during dusk or in an underground

parking lot
- When the camera position and direction are deviated
- When a towing hook is attached
- When water droplets are flowing on the camera lens
- When the vehicle height is extremely changed (nose up, nose down, etc.)
- When tire chains or an emergency tire puncture repair kit are used
- When the suspension has been lowered or tires that have a different size than the genuine tires are installed
- When an aftermarket part (backlit license plate, fog light, etc.) is installed near the rear camera
- If a bumper protector, such as an additional trim strip, is installed to the rear bumper
- When towing with the vehicle

Situations in which the system may operate unexpectedly

● Even though there are no pedestrians in the detection area, some objects, such as the following, may be detected, possibly causing the rear camera detection function to operate.
- Three dimensional objects, such as a pole, traffic cone, fence, or parked vehicle
- Moving objects, such as a car or motorcycle
- Objects moving toward your vehicle when backing up, such as flags or puddles (or airborne matter, such as smoke, steam, rain, or snow)
- Cobblestone or gravel roads, tram rails, road repairs, white lines, pedestrian crossings or fallen leaves on the road
- Metal covers (gratings), such as those used for drainage ditches
- Objects reflected in a puddle or on a wet road surface
- Shadows on the road

● In some situations, such as the following, the rear camera detection function may operate even though there are no pedestrians in the detection area.
- When backing up toward the roadside or a bump on the road
- When backing up toward an incline/decline
- When the vehicle height is extremely changed (nose up, nose down, etc.)
- When an aftermarket part (backlit license plate, fog light, etc.) is installed near the rear camera
- If a bumper protector, such as an additional trim strip, is installed to the rear bumper
- If the orientation of the rear camera has been changed due to a collision or other impact, or removal and installation
- If a towing eyelet is installed to the rear of the vehicle
- When water is flowing over the rear camera lens
- The lens is dirty (by dirt or snow-melting agent, etc.)
- If there is a flashing light in the detection area, such as the emergency flashers of another vehicle
- When tire chains or an emergency tire puncture repair kit are used
- When towing with the vehicle

● Situations in which the rear camera detection function may be difficult to notice
- The buzzer may be difficult to hear if the surrounding area is noisy or the audio system volume is high.
- If the temperature in the cabin is extremely high or low, the Center Display may not operate correctly.

PKSB (Parking Support Brake)

The PKSB (Parking Support Brake) is a system that issues warnings and automatically performs braking to help reduce collision damage with operation targets that were detected when traveling at a low speed such as when parking.

PKSB (Parking Support Brake) system

The system has detected the following as operation targets. (The operation targets vary depending on the function.)

- Parking Support Brake function (static objects front and rear of the vehicle):→P.286
- Parking Support Brake function (moving vehicles rear of the vehicle):→P.290
- Parking Support Brake function (pedestrians rear of the vehicle):→P.291
- Parking Support Brake function (static objects around the vehicle) (vehicles with Advanced Park):→P.286

WARNING

■ Cautions regarding the use of the system

Do not overly rely on the system, as doing so may lead to an accident.

Always drive while checking the safety of the surroundings of the vehicle.

Depending on the vehicle and road conditions, weather, etc., the system may not operate.

The detection capabilities of sensors and radars are limited. Always drive while checking the safety of the surroundings of the vehicle.

- The driver is solely responsible for safe driving. Always drive carefully, taking care to observe your surroundings. The Parking Support Brake system is designed to provide support to lessen the severity of collisions. However, it may not operate in some situations.
- The Parking Support Brake system is not designed to stop the vehicle completely. Additionally, even if the system has stopped the vehicle, it is necessary to depress the brake pedal immediately as brake control will be canceled after approximately 2 seconds.
- It is extremely dangerous to check the system operations by intentionally driving the vehicle into the direction of a wall, etc. Never attempt such actions.

■ When to disable the Parking Support Brake

In the following situations, disable the Parking Support Brake as the system may operate even though there is no possibility of a collision.

- When inspecting the vehicle using a chassis roller, chassis dynamo or free roller
- When loading the vehicle onto a boat, truck or other transport vessel

WARNING

- If the suspension has been modified or tires of a size other than specified are installed
- If the front of the vehicle is raised or lowered due to the carried load
- When equipment such as a towing hook, transport hook, bumper protector, bumper trim, bicycle carrier or snow-removal device (snow plow) is installed near the sensor
- When using automatic car washing devices
- If the vehicle cannot be driven in a stable manner, such as when the vehicle has been in an accident or is malfunctioning
- When the vehicle is driven in a sporty manner or off-road
- When the tires are not properly inflated
- When the tires are very worn
- When tire chains, a compact spare tire or an emergency tire puncture repair kit are used
- When towing with the vehicle

■ Precautions for the suspension

Do not modify the suspension of the vehicle. If the height or tilt of the vehicle is changed, the sensors may not be able to detect detectable objects and the system may not operate correctly, possibly leading to an accident.

Enabling/Disabling the Parking Support Brake

The Parking Support Brake function can be enabled/disabled through a customize setting. (→P.476)

When the PKSB (Parking Support Brake) is disabled, the driving assist information indicator (→P.74) illuminates, and a message is displayed on the multi-information display.

If the PKSB (Parking Support Brake) is switched to OFF (disabled), the system will not be re-enabled until ON (enabled) is selected again from the customize setting (→P.476).
(It remains off even if the power switch is turned to ON again after the power switch has been turned off.)

Display and buzzer for hybrid system output restriction control and brake control

If the hybrid system output restriction control or brake control operates, a buzzer will sound and a message that indicates limited acceleration or prompts the driver to brake will be displayed on the Center Display and multi-information display, to alert the driver.

Depending on the situation, output restriction control operates to either limit acceleration or restrict output as much as possible.

- Hybrid system output restriction control is operating (acceleration restriction)

Acceleration greater than a certain amount is restricted by the system.

Center Display: No warning displayed

Message example on the multi-information display: “Object Detected Acceleration Reduced”

Driving assist information indicator: Not

illuminated

Buzzer: Does not sound

- Hybrid system output restriction control is operating (output restricted as much as possible)

The system has determined that stronger-than-normal brake operation is necessary.

Message example on the Center Display (vehicles with a panoramic view monitor or parking assist monitor with RCD [Rear Camera Detection]): "BRAKE!"

Message example on the multi-information display: "BRAKE!"

Driving assist information indicator: Not illuminated

Buzzer: Short beep

- Brake control is operating

The system determined that emergency braking is necessary.

Message example on the Center Display (vehicles with a panoramic view monitor or parking assist monitor with RCD [Rear Camera Detection]): "BRAKE!"

Message example on the multi-information display: "BRAKE!"

Driving assist information indicator: Not illuminated

Buzzer: Short beep

- Vehicle stopped by system operation

The vehicle has been stopped by brake control operation.

Message example on the Center Display (vehicles with a panoramic view monitor or parking assist monitor with RCD [Rear Camera Detection]): "Switch to Brake"

Message example on the multi-information display: "Accelerator Pedal is Pressed Press Brake Pedal", "Press Brake Pedal"

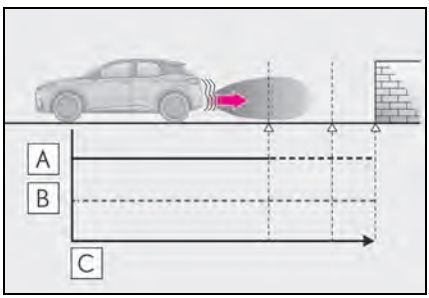
Driving assist information indicator: Illuminated

Buzzer: Sounds repeatedly

System overview

If the Parking Support Brake determines that a collision with a detected object or pedestrian is possible, the hybrid system output will be restricted to restrain any increase in the vehicle speed. (Hybrid system output restriction control: See figure 2 below.) Additionally, if the accelerator pedal continues to be depressed, the brakes will be applied automatically to reduce the vehicle speed. (Brake control: See figure 3.)

- Figure 1: When the PKSB (Parking Support Brake) is not operating

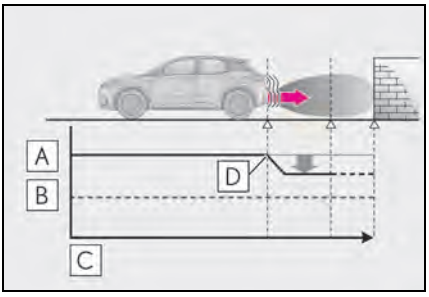


A Hybrid system output

B Braking force

C Time

- Figure 2: When hybrid system output restriction control operates



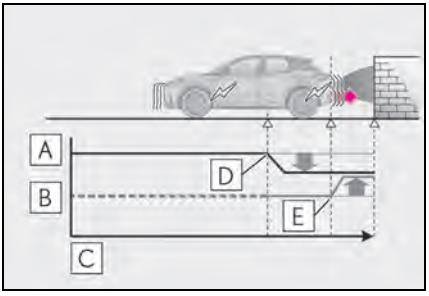
A Hybrid system output

B Braking force

C Time

D Hybrid system output restriction control begins operating (System determines that possibility of collision with detected object is high)

● Figure 3: When hybrid system output restriction control and brake control operates



A Hybrid system output

B Braking force

C Time

D Hybrid system output restriction control begins operating (System determines that possibility of collision with detected object is high)

E Brake control begins operating

■ If the Parking Support Brake has operated

If the vehicle is stopped due to operation of the Parking Support Brake, the Parking Support Brake will be disabled and the driving assist information indicator will illuminate. In addition, even when the PKSB (Parking Support Brake) operates, the brake control is canceled after approximately 2 seconds to start off. Furthermore, the brake control also can be canceled by depressing the brake pedal. Depressing the accelerator pedal again after that allows the vehicle to start off.

■ Re-enabling the Parking Support Brake

To re-enable the Parking Support Brake when it is disabled due to operation of the PKSB (Parking Support Brake), either enable the system again, or turn the power switch off and then back to ON.

Additionally, if any of the following conditions are met, the system will be re-enabled automatically and the driving assist information indicator will turn off (→P.74):

- The P shift position is selected
- Drive with no operation targets in the traveling direction of the vehicle
- Change the traveling direction of the vehicle

■ Buzzer

Regardless of whether the Lexus parking assist sensor is enabled or not (→P.265), if the PKSB (Parking Support Brake) system is enabled (→P.283), the buzzer will sound to notify the driver of the approximate distance to the object when the brake control and the hybrid system output restriction control are operated.

Parking Support Brake function (static objects front and rear of the vehicle/static objects around the vehicle*)

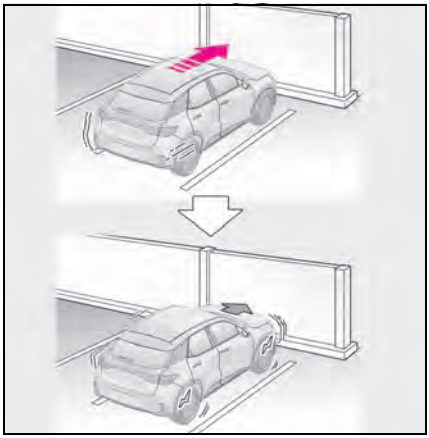
*: If equipped

If the sensors detect a static object, such as a wall, in the traveling direction of the vehicle and the system determines that a collision may occur due to the vehicle suddenly moving forward due to an accidental accelerator pedal operation, the vehicle moving the unintended direction due to the wrong shift position being selected, or while parking or traveling at low speeds, the system will operate to lessen the impact with the detected static object and reduce the resulting damage.

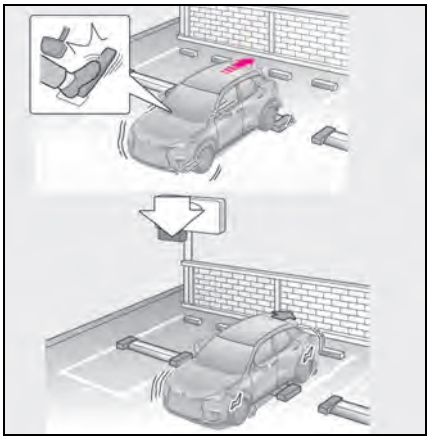
Examples of function operation (static objects front and rear of the vehicle)

This function will operate in situations such as the following if an object is detected in the traveling direction of the vehicle.

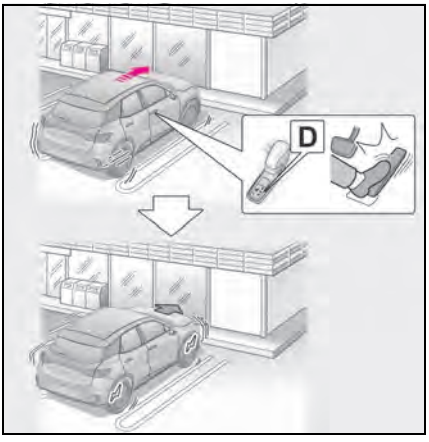
■ When traveling at a low speed and the brake pedal is not depressed, or is depressed late



■ When the accelerator pedal is depressed excessively



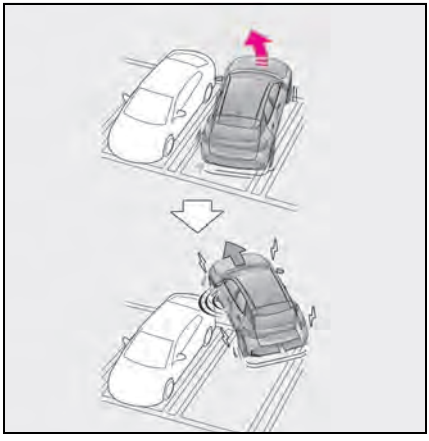
■ When the vehicle moves forward due to the incorrect shift position being selected



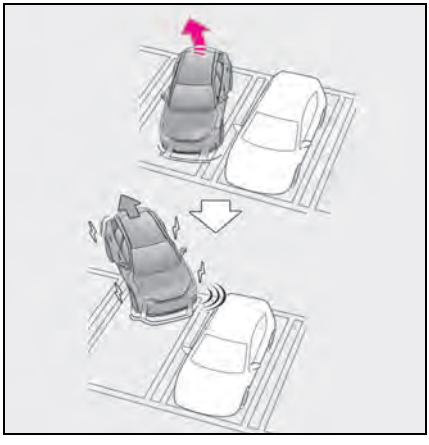
Examples of function operation (static objects around the vehicle) (vehicles with Advanced Park)

The system will operate in the following situations when a stationary object is detected in the surrounding area.

■ When moving forward and a collision with a stationary object on the inner side of a turn is likely



■ When reversing and a collision with a stationary object on the outer side of a turn is likely



Types of sensors

→P.265

WARNING

■ To ensure the system can operate properly

→P.266

■ If the Parking Support Brake function operates unnecessarily, such as at a railroad crossing

→P.285

■ Notes when washing the vehicle

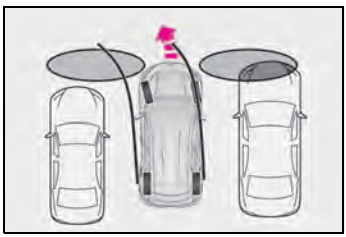
→P.266

■ Side sensors and side cameras (vehicles with Advanced Park)

In situations such as the following, Parking Support Brake function (static objects around the vehicle) may not operate correctly, possibly leading to an accident. Proceed carefully.

- When starting off shortly after the power switch is turned to ON and a small vehicle or other object which cannot be detected by a front side sensor is next to the vehicle.

In the situation shown in the following illustration, even if the vehicle starts off, the vehicle on the left will not be detected and the object warning function will not operate.



- When an object or person is in a position which cannot be detected by the side sensors or side cameras.
- When a vehicle, person, or other object approaches the side of the vehicle after the side sensors have completed scanning the areas along the sides of the vehicle.
- When the outside rear view mirror is folded.
- If the 12-volt battery was discharged or has been removed and installed, fold and extend the outside rear view mirrors.

■ The Parking Support Brake function (static objects front and rear of the vehicle) will operate when

The function will operate when the driving assist information indicator is not illuminated (→P.72) and all of the following conditions are met:

- Hybrid system output restriction control
  - The Parking Support Brake is enabled.
  - The vehicle speed is approximately 15 km/h (9 mph) or less.
  - There is a static object in the traveling direction of the vehicle and approximately 2 to 4 m (6 to 13 ft.) away.
  - The Parking Support Brake determines that a stronger-than-normal brake operation is necessary to avoid a collision.
- Brake control
  - Hybrid system output restriction control is operating.
  - The Parking Support Brake determines that an immediate brake operation is necessary to avoid a collision.

■ The Parking Support Brake function (static objects around the vehicle) will operate when (vehicles with Advanced Park)

This function is operable when any of the following conditions is met in addition to the operating conditions for static objects in front and rear of the vehicle.

- After the hybrid system has been started, the vehicle has moved approximately 7 m (23.0 ft.) or less

● The R shift position is selected

● After the shift position has been changed from R to D, the vehicle has moved approximately 7 m (23.0 ft.) or less

■ **The Parking Support Brake function (static objects front and rear of the vehicle/static objects around the vehicle*) will stop operating when**

*: Vehicles with Advanced Park

The function will stop operating if any of the following conditions are met:

● Hybrid system output restriction control
- The Parking Support Brake is disabled.
- The system determines that the collision has become avoidable with normal brake operation.
- The static object is no longer approximately 2 to 4 m (6 to 13 ft.) away from the vehicle or in the traveling direction of the vehicle.

● Brake control
- The Parking Support Brake is disabled.
- Approximately 2 seconds have elapsed since the vehicle was stopped by brake control.
- The brake pedal is depressed after the vehicle is stopped by brake control.
- The static object is no longer approximately 2 to 4 m (6 to 13 ft.) away from the vehicle or in the traveling direction of the vehicle.

■ **Detection range of the Parking Support Brake function (static objects front and rear of the vehicle/static objects around the vehicle*)**

*: Vehicles with Advanced Park

The detection range of the Parking Support Brake function (static objects front and rear of the vehicle/static objects around the vehicle) differs from the detection range of the Lexus parking assist-sensor (→P.269). Therefore, even if the Lexus parking assist-sensor detects an object and provides a warning, the Parking Support Brake function (static objects front and rear of the vehicle/static objects around the vehicle) may not start operating.

■ **Situations in which the system may not operate properly**

→P.267

■ **Situations in which the system may operate even if there is no possibility of a collision**

→P.268

■ **Situations in which the system may operate even though there is no possibility of a collision (static objects around the vehicle) (vehicles with Advanced Park)**

In addition to the situations in which static objects in front and rear of the vehicle (→P.288) may not be detected, objects may not be detected by the sensors in the following situations:

● When moving sideways, such as when parallel parking (→P.305)

■ **Detection of objects along the sides of the vehicle (static objects around the vehicle) (vehicles with Advanced Park)**

● Objects along the sides of the vehicle are not instantaneously detected. The location of objects in relation to the vehicle is estimated after they are first detected by the front or rear side sensors, or side cameras. Therefore, after the power switch is changed to ON, even if an object is along the side of the vehicle, it may not be detected until the vehicle has been driven a small amount and the side sensors or side cameras completely scan the areas along the sides of the vehicle.

● If a vehicle, person, animal, etc., is detected by a side sensors or side cameras, but then leaves the detection area of the side sensors or side cameras, the system will assume the object has not moved.

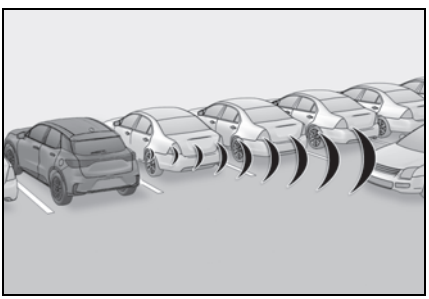
Parking Support Brake function (moving vehicles rear of the vehicle)

If a rear radar sensor detects a vehicle approaching from the right or left at the rear of the vehicle and the system determines that the possibility of a collision is high, this function will perform brake control to reduce the likelihood of an impact with the approaching vehicle.

Examples of the function operation

This function will operate in situations such as the following if a vehicle is detected in the traveling direction of the vehicle.

■ **When reversing, a vehicle is approaching and the brake pedal is not depressed, or is depressed late**



Types of sensors

→P.256

WARNING

■ **To ensure the system can operate properly**

→P.256

■ **The Parking Support Brake function (moving vehicles rear of the vehicle) will operate when**

The function will operate when the driving assist information indicator is not illuminated (→P.72) and all of the following conditions are met:

● Hybrid system output restriction control
- The Parking Support Brake is enabled.
- The vehicle speed is approximately 15 km/h (9 mph) or less.
- Vehicles are approaching from the right or left at the rear of the vehicle at a traveling speed of approximately 8 km/h (5 mph) or more.
- The shift position is in R.
- The Parking Support Brake determines that a stronger than normal brake operation is necessary to avoid a collision with an approaching vehicle.

● Brake control
- Hybrid system output restriction control is operating.
- The Parking Support Brake determined that an emergency brake operation was necessary to avoid a collision with a vehicle approaching from the rear.

■ **The Parking Support Brake function (moving vehicles rear of the vehicle) will stop operating when**

The function will stop operating if any of the following conditions are met:

● Hybrid system output restriction control
- The Parking Support Brake is disabled.
- The collision becomes avoidable with normal brake operation.
- A vehicle is no longer approaching from the right or left at the rear of the vehicle.

● Brake control
- The Parking Support Brake is disabled.
- Approximately 2 seconds have elapsed since the vehicle was stopped by brake

control.
- The brake pedal is depressed after the vehicle is stopped by brake control.

■ **Situations in which the system may not operate properly**

→P.276

■ **Situations in which the system may operate even if there is no possibility of a collision**

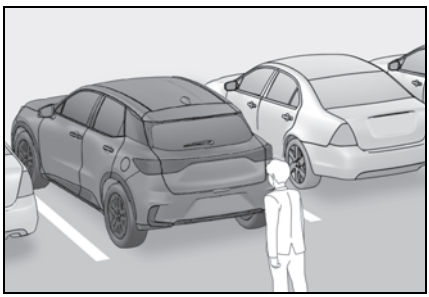
→P.277

Parking Support Brake function (pedestrians rear of the vehicle)

If the rear camera sensor detects a pedestrian behind the vehicle while backing up and the system determines that the possibility of colliding with the detected pedestrian is high, a buzzer will sound. If the system determines that the possibility of colliding with the detected pedestrian is extremely high, the brakes will be applied automatically to help reduce the impact of the collision.

Examples of system operation

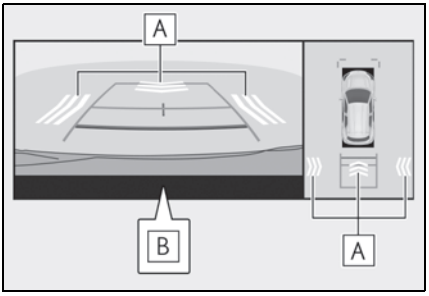
The system operates when an approaching pedestrian is detected behind the vehicle while backing up, and when the brake pedal is not depressed or is depressed late.



Screen display of pedestrians rear of the vehicle

Displays a message to prompt the driver to brake when a pedestrian is

detected in the detection area behind the vehicle.



A Pedestrian detection icon

B Example: "BRAKE!"

WARNING

■ If the Parking Support Brake function (pedestrians rear of the vehicle) operates unnecessarily

Depress the brake pedal immediately after the Parking Support Brake function (pedestrians rear of the vehicle) operates. (Operation of the function is canceled by depressing the brake pedal.)

■ Correct use of the Parking Support Brake function (pedestrians rear of the vehicle)

→P.278

■ The Parking Support Brake function (pedestrians rear of the vehicle) will operate when

The function will operate when the driving assist information indicator is not illuminated (→P.72) and all of the following conditions are met:

● Hybrid system output restriction control
- The Parking Support Brake is enabled.
- The vehicle speed is 15 km/h (9 mph) or less.
- The shift position is in R.
- When a pedestrian is to the rear of the vehicle
- The PKSB (Parking Support Brake) determines that a stronger-than-normal-brake operation is necessary to avoid a collision.

● Brake control
- Hybrid system output restriction control is operating.
- The Parking Support Brake determines that an emergency brake operation is necessary to avoid a collision with a pedestrian.

■ The Parking Support Brake function (pedestrians rear of the vehicle) will stop operating when

The function will stop operating if any of the following conditions are met:

● Hybrid system output restriction control
- The Parking Support Brake is disabled.
- The collision becomes avoidable with normal brake operation.
- The pedestrian is no longer detected behind your vehicle.

● Brake control
- The Parking Support Brake is disabled.
- Approximately 2 seconds have elapsed since the vehicle was stopped by brake control.
- The brake pedal is depressed after the vehicle is stopped by brake control.

■ Re-enabling the Parking Support Brake function (pedestrians rear of the vehicle)

→P.285

■ Detection area of the Parking Support Brake function (pedestrians rear of the vehicle)

The detection area of the Parking Support Brake function (pedestrians rear of the vehicle) differs from the detection area of the RCD function (→P.279). Therefore, even if the RCD function detects a pedestrian and provides an alert, the Parking Support Brake function (pedestrians rear of the vehicle) may not start operating.

■ Situations in which the system may not operate properly

→P.280

■ Situations in which the system may operate unexpectedly

→P.281

Lexus Teammate Advanced Park*

*: If equipped

Function description

The Advanced Park is a system which assists in a safe and smooth parking or exiting from a parking space by displaying the blind spots around the vehicle and the target parking spot through a bird's eye view, delivering operation guidance through displays and buzzer operation, and changing the shift position, operating the steering wheel, accelerator pedal, and brake pedal.

Additionally, the panoramic view monitor* can display the area in front, behind, and from above the vehicle, helping confirm the condition of the area around the vehicle.

The turn signal lights will blink automatically when the parking assistance starts until the vehicle reaches the target parking spot, to notify people around the vehicle that parking is being performed.

Depending on the condition of the road surface or the vehicle, the distance between the vehicle and a parking space, etc., it may not be possible to assist in parking in the target space.

Only use Advanced Park in accordance with all local road traffic laws and regulations.

*: For details on the panoramic view moni-

tor refer to “Multimedia Owner’s Manual”.

Functions

■ Perpendicular parking (forward/reverse) function

Assistance is provided from the position the vehicle is stopped near the target parking space until the vehicle is in the parking space. (→P.301)

■ Perpendicular exiting (forward/reverse) function

Assistance is provided from the parked position until the vehicle is in a position where you can easily exit from the parking space. (→P.304)

■ Parallel parking function

Assistance is provided from the position the vehicle is stopped near the target parking space until the vehicle is in the parking space. (→P.305)

■ Parallel exiting function

Assistance is provided from the parked position until the vehicle is in a position where you can easily exit from the parking space. (→P.308)

■ Memory function

Assistance is provided until the vehicle is guided into a previously registered parking space. (→P.310)

WARNING

■ Cautions regarding the use of the system

The recognition and control capabilities for this system are limited. The driver should always drive safety by always being responsible without over relying on the system and have an understanding of the surrounding situations.

- As with a normal vehicle, take care to observe your surroundings while the vehicle is moving.
- Always pay attention to the vehicle’s surroundings while the system is operating and depress the brake pedal as necessary to slow or stop the vehicle.
- When parking, make sure that the vehicle can be parked in the target parking space before beginning operation.
- Depending on the condition of the road surface or the vehicle, the distance between the vehicle and a parking space, etc., it may not be possible to detect a parking space or the system may not be able to provide assistance to the point the vehicle is fully parked.
- This system will guide the vehicle to appropriate positions for changing the direction of travel, however, if you feel that the vehicle is approaching too close to an adjacent parked vehicle at any time, depress the brake pedal and change the shift position. However, if this is performed, the number of times the vehicle changes direction may increase, and the vehicle may be parked at an angle.
- As certain objects or materials, such as the following, may not be detected, make sure to check the safety of the area around your vehicle and depress the brake pedal to stop the vehicle if it may collide with an object.

WARNING

- Thin objects (wires, fences, ropes, poles, etc.) or objects that appear like thin from a certain angle of approach (signs, bicycles, etc.)
- Materials that absorb sound waves (cotton, snow, etc.)
- Sharp-edged objects (block walls/columns, wall corners, etc.)
- Objects in lower places (curb stones/blocks, stairs, parking blocks, etc.)
- Tall objects with upper sections that protrude outward (beams, etc.)
- Objects which are not perpendicular to the ground
- Objects to which the vehicle is approaching diagonally

● Even if there is an object in the target parking space, it may not be detected and assistance may be performed.

● If it is likely that your vehicle will collide with a nearby vehicle, object, or person, or go over the top of a parking block, depress the brake pedal to stop the vehicle and press the Advanced Park main switch to disable the system.

● Never use only the Center Display to view the area behind the vehicle. The image displayed may differ than the actual situation. Using only the screen when backing up may lead to an accident, such as a collision with another vehicle. When backing up, make sure to look directly or use the mirrors to check the safety of the area around your vehicle, especially behind the vehicle.

● When the ambient temperature is extremely low, the screen may appear dark or the displayed image may become unclear. Also, as moving objects may appear distorted or may not be able to be seen on the screen, make sure to directly check the safety of the area around your vehicle.

● In the following situations, while the vehicle is stopped and held by Advanced Park, it may be canceled and the vehicle may start moving. Immediately depress the brake pedal. Failure to do so may lead to an accident.

- When the driver's door is opened
- When operations instructed by the system are not performed within a certain amount of time
- When the brake pedal is depressed and the vehicle is stopped for a certain amount of time
- When the system malfunctions

● As the steering wheel will turn while this system is operating, pay attention to the following.

- Be careful so that a necktie, scarf, or arm does not get caught. Keep your upper body away from the steering wheel. Also, keep children away from the steering wheel.
- Long fingernails may be caught and when the steering wheel is rotating, leading to injury.
- In an emergency, depress the brake pedal to stop the vehicle, and then press the Advanced Park main switch to disable the system.

● Do not allow anyone to put their hands outside of a window while this system is operating.

WARNING

■ To ensure correct operation of the Advanced Park

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

● Do not use this system in situations such as the following:

- When in areas other than common parking spaces
- When the surface of the parking space is sand or gravel and is not clearly defined with parking space lines
- When the parking space is not level, such as on a slope, or having differences in height, holes, or gutters
- Mechanical parking system
- Parking lot with a device which raises to contact the bottom of the vehicle
- When the road surface is frozen, slick, or covered with snow
- When it is extremely hot and the asphalt is melting
- When there are objects around the vehicle
- When there is an object between your vehicle and the target parking spot or within the target parking spot (within the displayed blue box)
- When in high pedestrian or vehicle traffic areas
- When the parking space is in a location that is difficult to park in (too narrow for your vehicle, etc.)
- When images are unclear due to dirt or snow attached to the camera lens, light being shined into the camera or shadows
- When tire chains or a compact spare tire is installed to the vehicle
- When the doors or back door are not completely closed
- When an arm is held outside of a window
- In inclement weather such as heavy rain or snow

● Make sure to use only standard sized tires, such as those that were installed to the vehicle when it was shipped from the factory. Otherwise, Advanced Park may not operate properly. Also, when the tires have been replaced, the displayed position of the lines or box displayed on the screen may become incorrect. When replacing the tires, contact your Lexus dealer.

● In situations such as the following, it may not be possible for the system to provide assistance to a registered parking spot or to operate correctly:

- When the tires are extremely worn or the tire inflation pressure is low
- When carrying a heavy load
- When the vehicle is tilted due to the carried load
- When a heater is installed in the surface of the parking space (road surface freeze prevention heater)
- When the wheels are misaligned, such after a wheel has been subjected to a strong impact
- When a pedestrian or passing vehicle is detected during assistance
- When a device, such as a towing hook, bumper protector, bumper trim, bicycle carrier, snow plow, etc., is installed

WARNING

- When something is incorrectly detected as a parking line (light, reflections from a building, difference in height on the parking surface, a gutter, painted road lines, redrawn lines, etc.)

If the vehicle deviates greatly from the set parking space in any situation other than the above, have the vehicle inspected by your Lexus dealer.

NOTICE

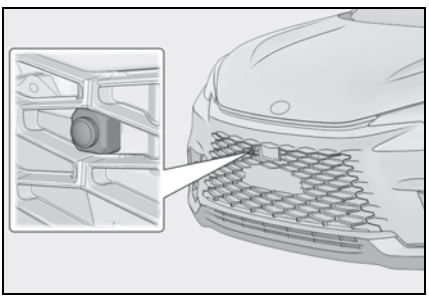
■ Precautions for use Advanced Park

If the 12-volt battery was discharged or has been removed and installed, fold and extend the outside rear view mirrors.

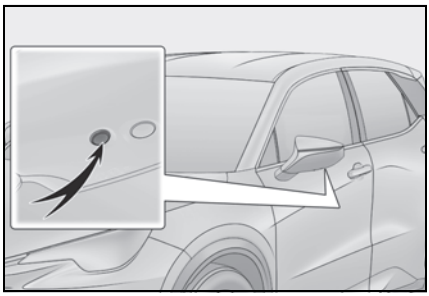
Types of cameras and sensors used for the Advanced Park

Cameras and sensors are used to detect parked vehicles, making it easier to identify parking spaces.

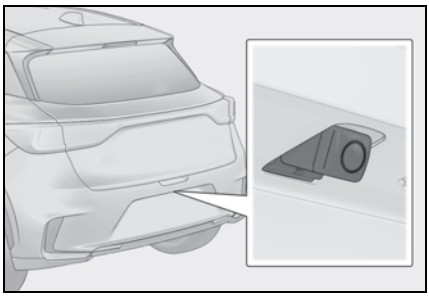
▶ Front camera



▶ Side cameras



▶ Rear camera



▶ Sensors

→P.265

■ Camera images

As special cameras are used, the colors in displayed images may differ from the actual color.

■ Precautions for use

For details on the following, refer to "Panoramic view monitor" in the "Multimedia Owner's Manual".

- Displayable range of the screens
- Cameras
- Differences between displayed images and the actual road
- Differences between displayed images and the actual objects

■ Detection range of the cameras and sensors

- If a parked vehicle is behind the target parking space and the distance between

it and the vehicle becomes far, it may no longer be able to be detected. Depending on shape or condition of a parked vehicle, the detection range may become short or the vehicle may not be detected.

● Objects other than parked vehicles, such as columns, walls, etc., may not be detected. Also, if they are detected, they may cause the target parking space to be misaligned.

■ **Situations in which parking space lines may not be recognized properly**

● In situations such as the following, parking space lines on the road surface may not be detected:

- When the parking space does not use lines (parking space boundaries are marked with rope, blocks, etc.)
- When the parking space lines are faded or dirty, making them unclear
- When the road surface is bright, such as concrete, and the contrast between it and the white parking space lines is small
- When the parking space lines are any color other than yellow or white
- When the area surrounding the parking space is dark, such as at night, in an underground parking lot, parking garage, etc.
- When it is raining or has rained and the road surface is wet and reflective or there are puddles
- When the sun is shining directly into a camera, such as in the early morning or evening
- When the parking space is covered with snow or de-icing agent
- When there marks from repairs or other marks on the road surface, or there is a traffic bollard, or other object on the road surface
- When the color or brightness of the road surface is uneven
- When a camera has been splashed by hot or cold water and the lens has fogged up
- When the appearance of the parking space is affected by the shadow of the vehicle or trees
- When a camera lens is dirty or covered with water droplets

● In situations such as the following, the target parking space may not be recognized correctly:

- When there marks from repairs or other marks on the road surface, or there is a parking block, traffic bollard, or other object on the road surface
- When it is raining or has rained and the road surface is wet and reflective or there are puddles
- When the area around the vehicle is dark or backlit
- When the color or brightness of the road surface is uneven
- When the parking space is on a slope
- When there are diagonal lines (access aisle) near the parking space
- When the appearance of the parking space is affected by the shadow of a parked vehicle (such as shadows from the grille, side step, etc.)
- When accessories which obstruct the view of the camera are installed
- When the parking space lines are faded or dirty, making them unclear
- When the appearance of the parking space is affected by the shadow of the vehicle or trees

■ **Sensor detection information**

→P.267

■ **Objects which the sensor may not be properly detected**

→P.267

■ **Situations in which the sensor may not operate properly**

→P.267

■ **Situations in which parking assistance may not operate even if there is no possibility of a collision**

→P.268

WARNING

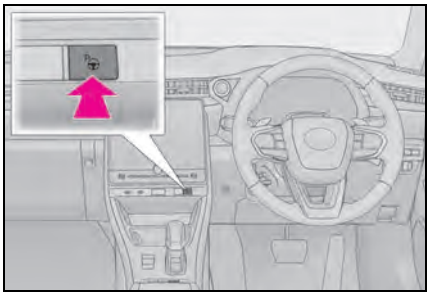
■ Precautions for the cameras and sensors

- Due to the characteristics of the camera lens, the position of and distance to people and objects displayed on the screen may differ from the actual situation. For details, refer to "Multimedia Owner's Manual".
- Make sure to observe the precautions for using the Lexus parking assist-sensor, otherwise a sensor may not operate correctly, possibly leading to an accident. (→P.266)
- In situations such as the following, the sensors may not operate correctly, possibly leading to an accident. Proceed carefully.
  - When there is a parked vehicle next to the target parking space, if the displayed target parking space is far from the actual target parking space, a sensor may be misaligned. Have the vehicle inspected by your Lexus dealer.
  - Do not install any accessories near the detection area of the sensors.

Turning the Advanced Park system on/off

Press the Advanced Park main switch.

If the switch is pressed while assistance is being performed, the assistance will be canceled.



■ Operating conditions of the Advanced Park

Assistance will begin when all of the following conditions are met:

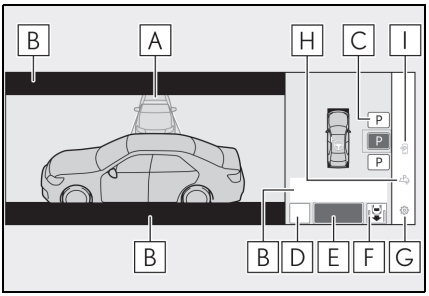
- The brake pedal is depressed
- The vehicle is stopped
- The driver's seat belt is fastened
- The steering wheel is not being operated
- The accelerator pedal is not depressed
- All of the doors and the back door are closed
- The outside rear view mirrors are not folded
- The parking brake is not engaged
- The dynamic radar cruise control are not operating
- ABS, VSC, TRC, PCS and PKSB are not operating
- The vehicle is not towing a trailer or another vehicle
- The vehicle is not on a steep slope
- The VSC and TRC are not turned off

If assistance cannot be started, check the message displayed on the Center Display. (→P.317)

Advanced Park guidance screens

Guidance screens are displayed on the Center Display.

▶ Guidance screen (When assistance starts)



A Target parking space box (blue)

B Advice display

C Parking type change button

If multiple buttons are displayed, depending on the condition of the button its function differs as follows.

P or P : Change the target to another parking space.

P or P : Select the current target parking space.

: Select to change to the parallel parking function

: Change the perpendicular parking (forward/reverse) function

D "MODE" button

Select to change between the memory function and the perpendicular parking (forward/reverse) function and parallel parking function. (→P.312)

E "Start" button

Select to start parking assistance.

F Perpendicular parking direction change button

Select to change between the parking (forward) function and parking (reverse) function

: Change the perpendicular parking (forward) function

: Change the perpendicular parking (reverse) function

G Customize setting button

Select to display the Advanced Park setting screen. (→P.316)

H Registration button

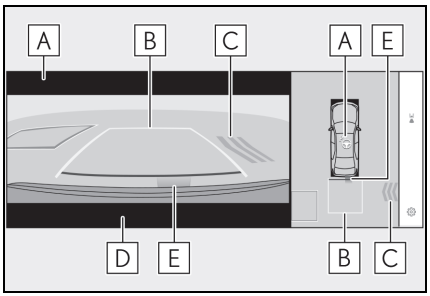
Select to begin registering a parking space.

I Remote control function start button*

Select to start parking assistance operation on the smartphone display.

*: If equipped

▶ Guidance screen (When reversing)



A Operation icon

Displayed when the Advanced Park is operating.

B Guide lines (yellow and red)

Display points from the center of the edge of the front or rear bumper to the target stopping position (yellow)* and approximately 0.3 m (1 ft.) (red) from the vehicle.

C Moving object warning icon

D Emergency support brake control operation display

"BRAKE!" is displayed.

E Lexus parking assist-sensor display →P.265

*: The yellow lateral line is not displayed when the target stopping position is approximately 2.5 m (8.2 ft.) or more away from the vehicle.

■ **Lexus parking assist-sensor pop-up display**

Regardless of whether the Lexus parking assist-sensor is off or on (→P.265), if an object is detected by the Lexus parking assist-sensor when the Advanced Park is operating, the Lexus parking assist-sensor pop up display will automatically be displayed over the guidance display.

■ **Brake control operation when Advanced Park is operating**

While the Advanced Park is operating, if the system determines that the possibility of collision with detected moving or stationary object is high, the hybrid system output restriction control and brake control will operate.

If brake control operates, Advanced Park operation will be suspended and a message will be displayed on the multi-information display.

■ **Buzzer**

Depending on surrounding sounds or sounds from other systems, it may be difficult to hear the buzzer of this system.

■ **If a black screen is displayed on the Center Display when the Advanced Park is operating**

The system is being affected by radio waves or may be malfunctioning. If a radio antenna is installed near a camera, move it to a location as far from the cameras as possible. If a radio antenna is not installed near a camera, and the screen does not return to normal after turning the power switch off and then starting the hybrid system again, have the vehicle inspected by your Lexus dealer.

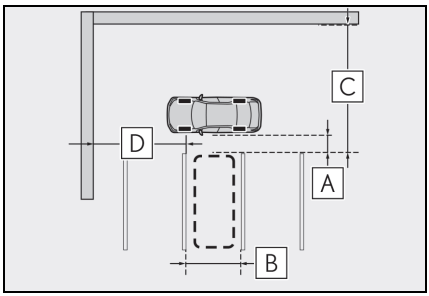
Perpendicular parking (forward/reverse) function

The perpendicular parking (forward/reverse) function can be used if the target parking space can be detected when the vehicle is stopped close and perpendicular to the center of the parking space. Also, depending on the condition of the parking space, etc., if it is necessary to change the direction of travel of the vehicle, the shift position can be changed by assistance control.

Parking using the perpendicular parking (forward/reverse) function

1 Stop the vehicle at a position close and perpendicular to the center of the target parking space.

▶ If there are parking space lines



A Approximately 1 m (3.3 ft.)*

B Approximately 2.5 m (8.2 ft.)*

C Approximately 5 m (16.4 ft.) or more*

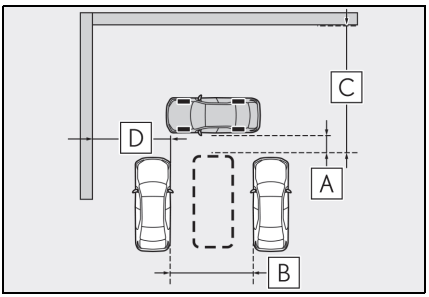
D Approximately 5.5 m (18.0 ft.) or

more*

The system can operate even if there is a parking space line on only one side of the target parking space.

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

▶ If there is an adjacent parked vehicle



A Approximately 1 m (3.3 ft.)*

B Approximately 3 m (9.8 ft.) or more*

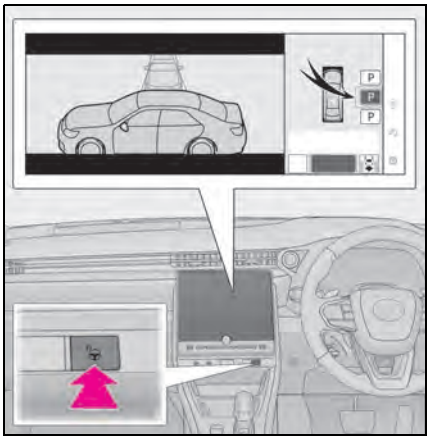
C Approximately 5 m (16.4 ft.) or more*

D Approximately 5.5 m (18.0 ft.) or more*

The system can operate even if there is a vehicle on only one side of the target parking space.

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

2 Press the Advanced Park main switch and check that a possible parking space is displayed on the Center Display.

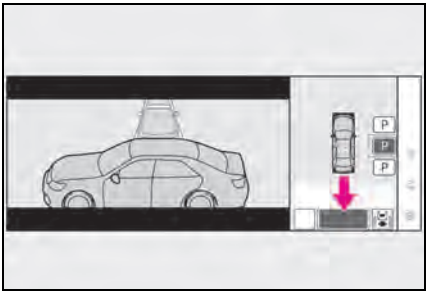


- If a space which your vehicle can be parked is detected, a target parking space box will be displayed.
- If it is possible to parallel park in the space, select the parking space, and then select to change to the parallel parking function.
- If it is possible to change the direction which a parking space is entered, select the parking space, and then select or change the direction.
- Depending on the surrounding environment, it may not be possible to use this function. According to the information displayed on the Center Display, use the function on another parking space.

3 Select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operat-

ing.



- When the brake pedal is released, "Moving Forward...", "Backing Up..." will be displayed and the vehicle will begin moving forward/reverse.
- To cancel assistance, press the Advanced Park main switch.

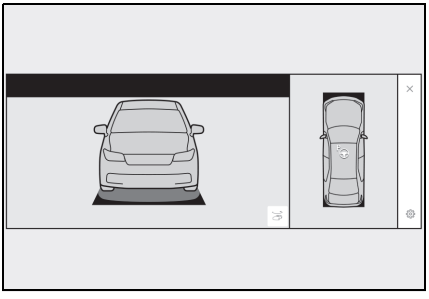
If assistance is canceled, "Advanced Park Canceled" will be displayed.

If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: →P.303

4 Perform operations as indicated by the advice displays until the vehicle stops in the target parking space.

When the vehicle stops, "Advanced Park Finished" will be displayed and parking assistance will end.

If you select on the Center Display, the vehicle displayed on the parking assist completion screen will rotate.



■ If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter

Depress the brake pedal to stop the vehicle and then change the shift position to change the direction of travel of the vehicle. At this time, assist will be suspended. However, if the "Start" button is selected, assist will resume and the vehicle will move in the direction corresponding to the selected shift position.

■ When the brakes have been operated

When the brakes have been operated, brake operation sound may be heard. This does not indicate a malfunction.

NOTICE

■ When using the perpendicular parking (forward/reverse) function

- Make sure that there are no obstructions within the yellow guide lines and between the vehicle and target parking spot. If there are any obstructions between the vehicle and the target parking space, or between the yellow guide lines, cancel the function.
- As the target parking space will not be able to be set correctly if the surface of the parking space is on a slope or has differences in height, the vehicle may stray from the target parking space or be slanted. Therefore, do not use the function for this kind of parking spot.
- When parking in a narrow parking space, the vehicle may closely approach an adjacent parked vehicle. If a collision seems likely, depress the brake pedal to stop the vehicle.

NOTICE

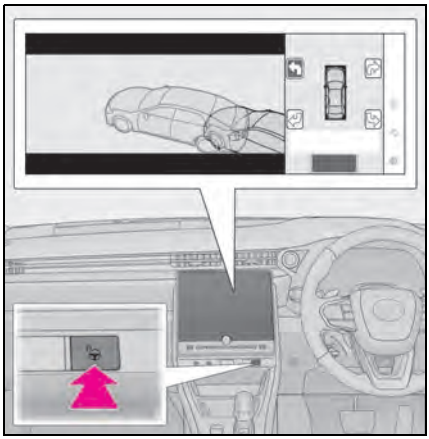
- If a detected parked vehicle is narrow or parked extremely close to the curb, the position at which assistance will park the vehicle will also be close to the curb. If it seems likely the vehicle will collide with something or drive off of the road, depress the brake pedal to stop the vehicle, and then press the Advance Park main switch to disable the system.

Advanced Park perpendicular exiting (forward/reverse) function

When exiting from a perpendicular parking space, if the system determines that exit is possible the perpendicular exiting (forward/reverse) function can be used. Also, depending on the surrounding environment, if it is necessary to change the direction of travel of the vehicle, the shift position can be changed by assistance control.

Leaving a parking space using the perpendicular exiting (forward/reverse) function

1 With the brake pedal depressed and P shift position selected, press the Advanced Park main switch and check that the exit direction selection screen is displayed on the Center Display.

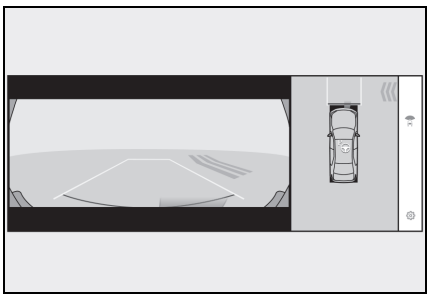


2 Select an arrow on the Center Display to select the direction you wish to exit.

If the turn signal lever is operated, only exit to the left or right can be selected.

3 Depress the brake pedal and select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operating.



To cancel assistance, press the Advanced Park main switch. If assistance is canceled, "Advanced Park Canceled" will be displayed.

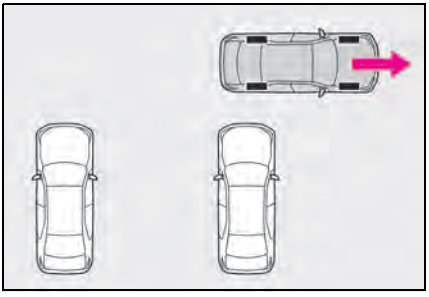
If you feel that the vehicle is approaching close to a surrounding vehicle, object, per-

son, or gutter: →P.303

4 Perform operations as indicated by the advice displays until the vehicle is in a position where exit is possible.

When the vehicle reaches a position where exit is possible, "You can exit by moving the steering wheel" will be displayed. If the steering wheel is operated, "Advanced Park Finished" will be displayed and assistance will end. As assistance will end while the vehicle is moving, grip the steering wheel and drive forward.

If the steering wheel is not operated, the vehicle will stop at the exit position. Assistance can be ended by depressing the accelerator pedal or brake pedal.



■ **If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter**

→P.303

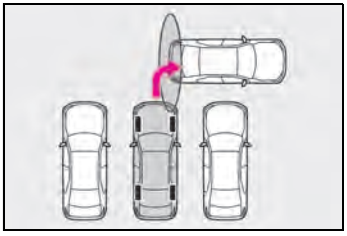
■ **Perpendicular exiting (forward/reverse) function**

Do not use perpendicular exiting (forward/reverse) function in any situation other than when exiting a perpendicular parking spot. If assistance is started unintentionally, depress the brake pedal and stop the vehicle, then press the Advanced Park main switch to cancel assistance.

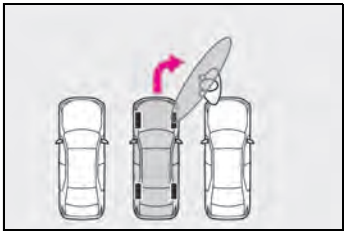
■ **Situations in which the perpendicular exiting (forward/reverse) function will not operate**

In situations such as the following, the perpendicular exiting (forward/reverse) function will not operate:

- When a vehicle which is waiting to park is in the exit direction



- When a wall, column, or person is detected as near a front or rear center or corner sensor



■ **When the brakes have been operated**

→P.303

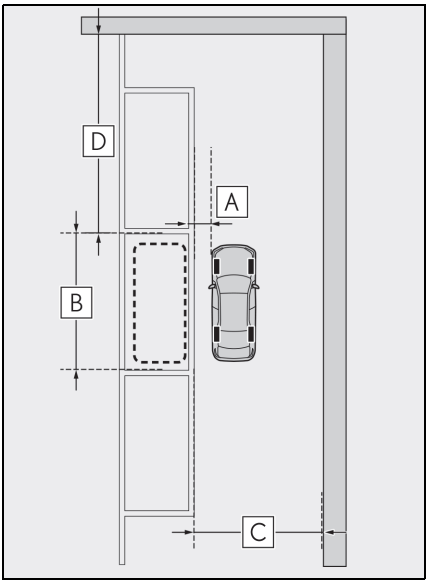
Advanced Park parallel parking function

The parallel parking function can be used if the target parking space can be detected when the vehicle is stopped close and aligned with the center of the parking space. Also, depending on the condition of the parking space, etc., if it is necessary to change the direction of travel of the vehicle, the shift position can be changed by assistance control.

Parking using the parallel parking function

1 Stop the vehicle with it aligned near the center of the target parking space.

▶ If there are parking space lines



A Approximately 1 m (3.3 ft.)*

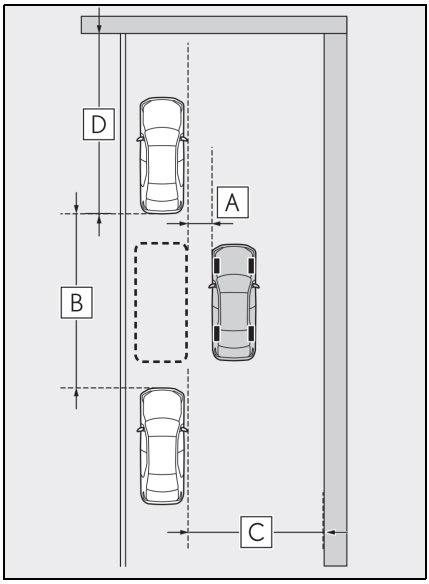
B Approximately 5 m (16.4 ft.)*

C Approximately 4.5 m (14.8 ft.) or more*

D Approximately 8 m (26.2 ft.) or more*

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

▶ If there is an adjacent parked vehicle



A Approximately 1 m (3.3 ft.)*

B Approximately 6 m (19.7 ft.) or more*

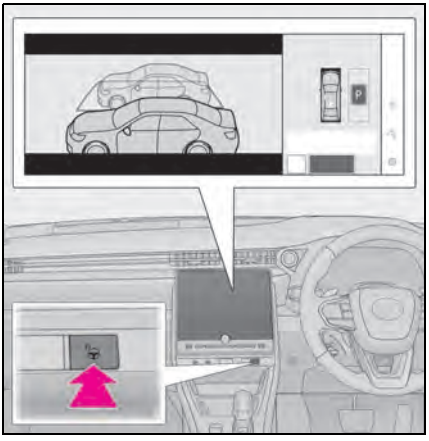
C Approximately 4.5 m (14.8 ft.) or more*

D Approximately 8 m (26.2 ft.) or more*

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

2 Press the Advanced Park main switch and check that a possible

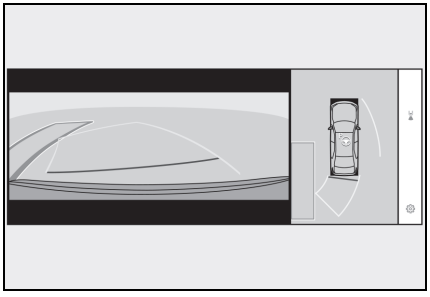
parking space is displayed on the Center Display.



- If a space which your vehicle can be parked is detected, a target parking space box will be displayed.
- If it is possible to perpendicular parking (forward/reverse) in the space, select the parking space, and then select to change to the perpendicular parking (forward/reverse) function.
- Depending on the surrounding environment, it may not be possible to use this function. According to the information displayed on the Center Display, use the function on another parking space.

3 Select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operating.



- When the brake pedal is released, "Moving Forward..." will be displayed and the vehicle will begin moving forward.
- To cancel assistance, press the Advanced Park main switch.

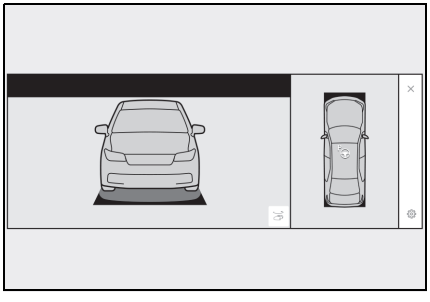
If assistance is canceled, "Advanced Park Canceled" will be displayed.

If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: →P.303

4 Perform operations as indicated by the advice displays until the vehicle stops in the target parking space.

When the vehicle stops, "Advanced Park Finished" will be displayed and parking assistance will end.

If you select on the Center Display, the vehicle displayed on the parking assist completion screen will rotate.

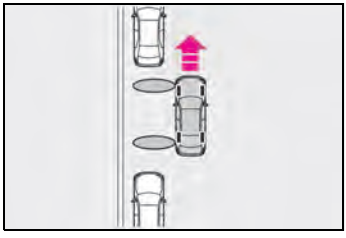


■ **If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter**

→P.303

■ **If "No available parking space" is displayed**

Even if the vehicle is stopped parallel to a parking space, an adjacent parked vehicle may not be detected. In this case, if the vehicle is moved to a position that a parked vehicle can be detected, assistance can be started.



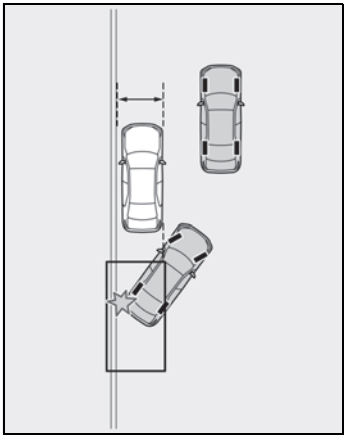
■ **When the brakes have been operated**

→P.303

NOTICE

■ **When using the parallel parking function**

- Make sure that there are no obstructions within the yellow guide lines and between the vehicle and target parking spot. If any obstructions are detected within the yellow guide lines or between the vehicle and the target parking space, the parallel parking function will be cancelled or suspended.
- As the target parking space will not be able to be set correctly if the surface of the parking space is on a slope or has differences in height, the vehicle may stray from the target parking space or be slanted. Therefore, do not use the parallel parking function for this kind of parking spot.
- If an adjacent parked vehicle is narrow or parked extremely close to the curb, the position at which assistance will park the vehicle will also be close to the curb. If it seems likely the vehicle will collide with the curb or drive off of the road, depress the brake pedal to stop the vehicle, and then press the Advanced Park main switch to disable the system.



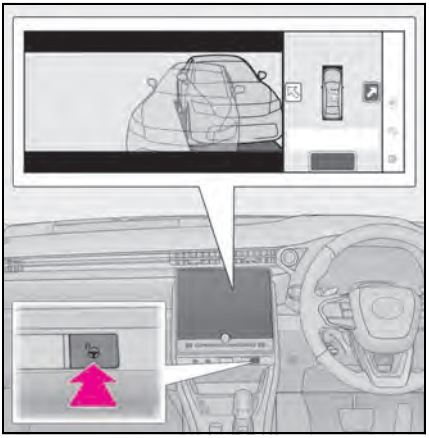
- If there is a wall or other barrier on the inner side of the parking space, the vehicle may stop at a position slightly outside of the set target parking space.

Advanced Park parallel exiting function

When exiting from a parallel parking space, if the system determines that exit is possible the parallel exiting function can be used. Also, depending on the surrounding environment, if it is necessary to change the direction of travel of the vehicle, the shift position can be changed by assistance control.

Leaving a parking space using the parallel exiting function

1 With the brake pedal depressed and P shift position selected, press the Advanced Park main switch and check that the exit direction selection screen is displayed on the Center Display.



2 Select an arrow on the Center Display to select the direction you wish to exit.

If the turn signal lever is operated, only exit to the left or right can be selected.

3 Depress the brake pedal and select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operating.

To cancel assistance, press the Advanced Park main switch.

If assistance is canceled, "Advanced Park Canceled" will be displayed.

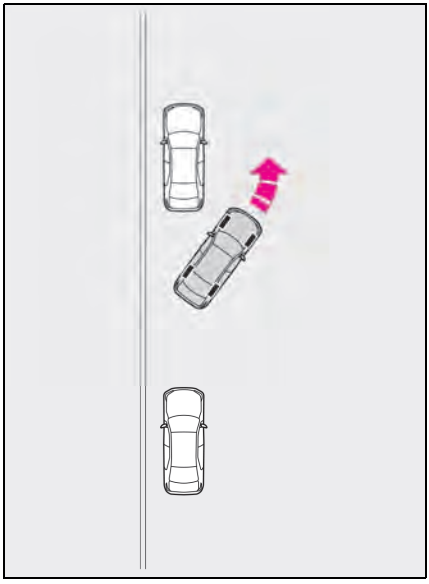
If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: →P.303

4 Perform operations as indicated by the advice displays until the vehicle is in a position where exit is possible.

When the vehicle reaches a position where exit is possible, "You can exit by moving the steering wheel" will be displayed. If the steering wheel is operated, "Advanced Park Finished" will be displayed and assistance will end.

As assistance will end while the vehicle is moving, grip the steering wheel and drive forward.

If the steering wheel is not operated, the vehicle will stop at the exit position. Assistance can be ended by depressing the accelerator pedal or brake pedal.



■ **If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter**

→P.303

■ **Parallel exiting function**

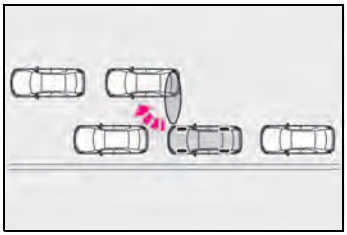
Do not use parallel exiting function in any situation other than when exiting a parallel parking spot. If assistance is started unin-

tentionally, depress the brake pedal and stop the vehicle, then press the Advanced Park main switch to cancel assistance.

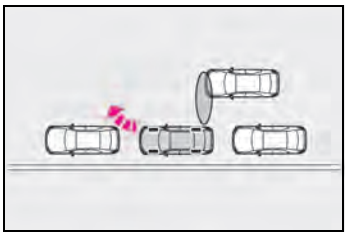
■ **Situations in which the parallel exiting function will not operate**

In situations such as the following, the parallel exiting function will not operate:

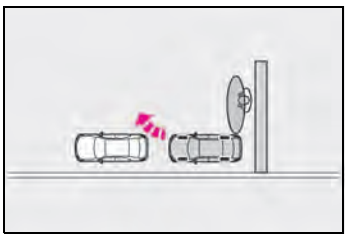
- When vehicles waiting at a traffic signal in the exit direction



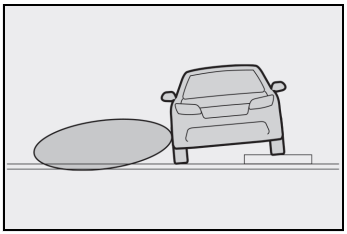
- When a vehicle is stopped in the area behind where the vehicle will exit



- When a wall, column, or person is detected as near a front or rear side sensor



- When the vehicle has been parked on a curb and a side sensor detects the road surface



- When a vehicle is not parked in front of the vehicle
- When there is excessive space between the front of the vehicle and a parked vehicle

■ **When the brakes have been operated**

→P.303

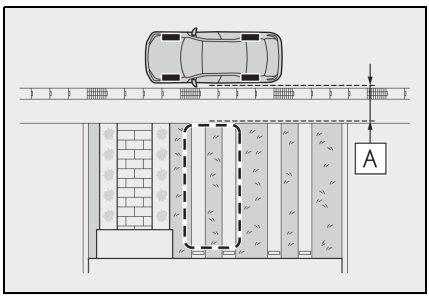
Advanced Park memory function

The memory function can be used to park in a previously registered parking space, even if there are no parking space lines or adjacent parked vehicles.

Up to 3 parking spaces can be registered.

Registering a parking space

1 Stop the vehicle with it aligned near the center of the target parking space.

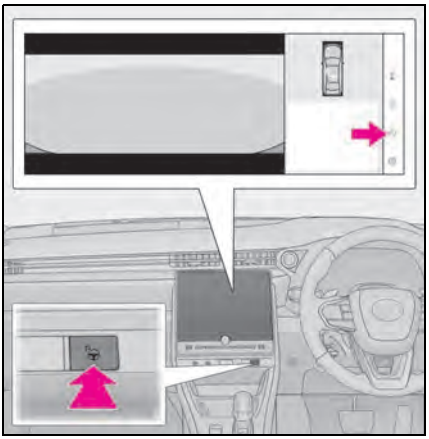


A Approximately 1 m (3.3 ft.)

2 Press the Advanced Park main switch and then select .

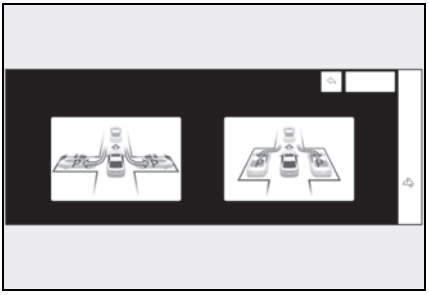
If the Advanced Park main switch is pressed at a parking space without parking lines or any adjacent parked vehicles, "No available parking space" may be displayed.

Continuously select and hold .



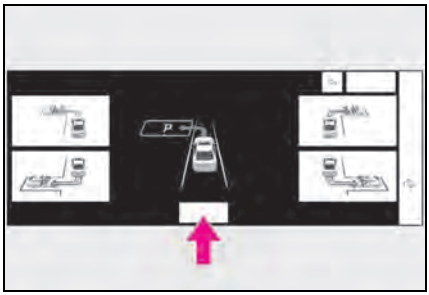
3 Select perpendicular parking (forward/reverse) function or parallel parking function.

Only parking spaces for which assist can be performed are displayed.

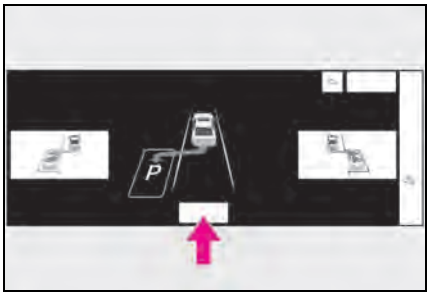


4 Select the parking direction, and then select "OK" button.

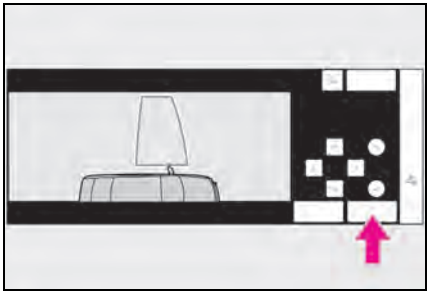
When perpendicular parking (forward/reverse) was selected in step 3:



When parallel parking was selected in step 3:



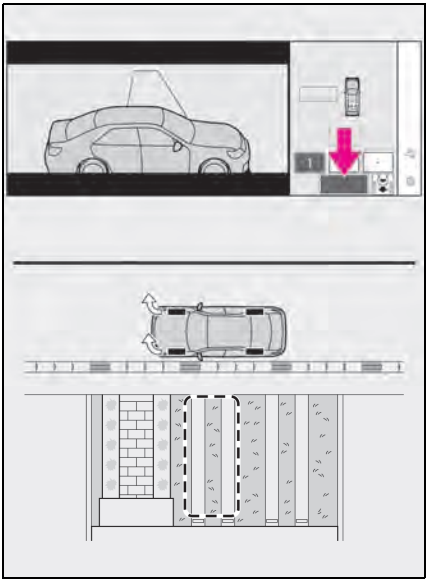
5 Using the arrow buttons, adjust the position of the parking space to be registered, and then select "OK" button.



6 Select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operating. When the brake pedal is released, "Moving Forward..." will be displayed and the vehicle will begin moving forward.

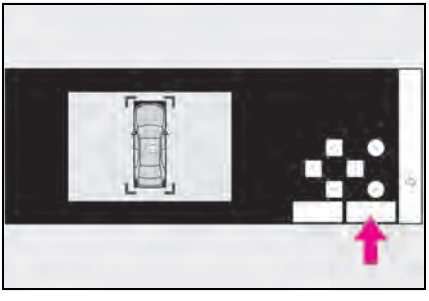
If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: →P.303



7 Perform operations as indicated by the advice displays until the vehicle stops in the target parking space.

8 Check the position that the vehicle has stopped. If necessary, adjust the position of the parking spot to be registered using the arrow buttons, and then select "Reg." button.

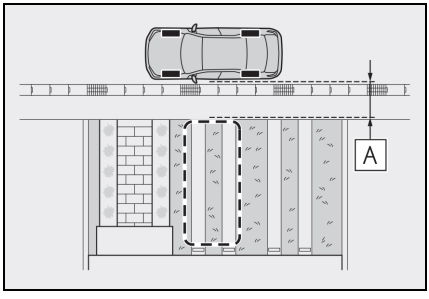
"Registration Completed" will be displayed on the Center Display.



- Register the parking space only if there are no obstructions within the area shown by the thick lines.
- The amount that the position of the parking spot to be registered can be adjusted is limited.

When parking in a parking space registered to the memory function

1 Stop the vehicle with it aligned near the center of the target parking space.

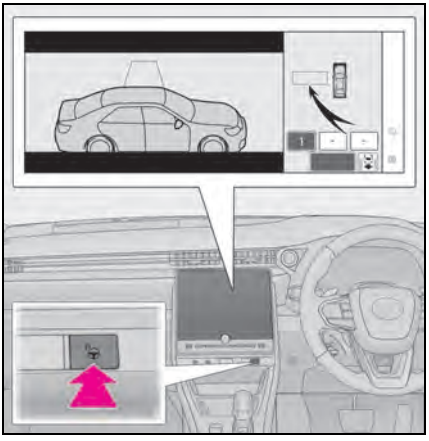


A Approximately 1 m (3.3 ft.)

2 Press the Advanced Park main switch and check that a possible parking space is displayed on the Center Display.

If the "MODE" button is displayed, the button can be touched to change between the memory function, perpendicular parking (forward/reverse) function and parallel

parking function.



3 Select the desired parking space, and then select "Start" button.

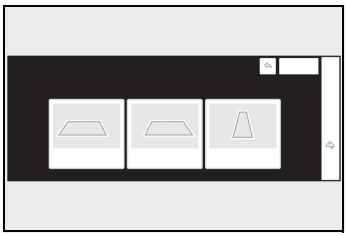
Perform the procedure for the perpendicular parking (forward/reverse) function from step 3. (→P.301)

■ If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter

→P.303

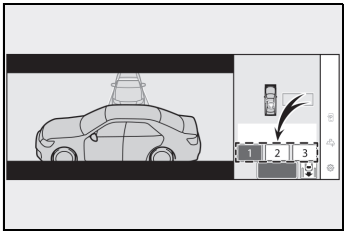
■ When overwriting a registered parking space

If the maximum number of parking spaces have been registered and P is selected, a registered parking space can be selected and then overwritten with a new parking space.



■ When multiple parking spaces are registered

Select the desired parking space, and then select "Start" button.



■ When the brakes have been operated

→P.303

NOTICE

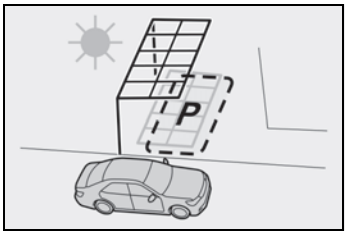
■ When using the memory function (→P.303, 308)

- The memory function is a function which provides assistance in parking in a previously registered parking space. If the condition of the road surface, vehicle, or surrounding area differs from when registration was performed, the parking space may not be able to be detected correctly or assistance may not be provided to the point that the vehicle is fully parked.
- Do not register a parking space in situations such as the following, as the set parking space may not be able to be registered or assistance may not be possible later.
  - When a camera lens is dirty or covered with water droplets
  - When it is raining or snowing
  - When the surrounding area is dark (at night, etc.)
- In situations such as the following, it may not be possible to register a parking space.
  - When there is insufficient space between the road and parking space
  - When the road surface around the parking space does not have any differences the system can recognize

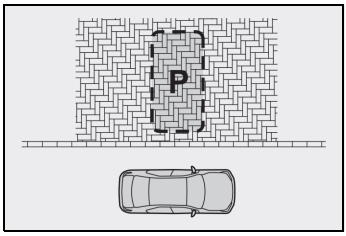
NOTICE

● If a parking space has been registered in situations such as the following, assistance may not be able to be started later or assistance to the registered position may not be possible.

- When shadows are cast on the parking space (there is a carport over the parking space, etc.)



- When there are leaves, garbage, or other objects which will likely move, in the parking space
- When the road surface around the parking space has the same repeating pattern (brick, etc.)



● In situations such as the following, it may not be possible for the system to provide assistance to a registered parking spot:

- When the appearance of the parking space is affected by the shadow of the vehicle or trees
- When an object is detected in the registered parking space
- When a pedestrian or passing vehicle is detected during assistance
- When the position the vehicle is stopped when assistance is started differs from the position when registration was performed
- When the registered parking space cannot be reached due to the existence of parking blocks, etc.
- When the road surface around the parking space has changed (road surface has degraded or been resurfaced)
- When the sunlight conditions differ from when registration was performed (due to weather or time of day)
- When the sun is shining directly into a camera, such as in the early morning or evening
- When the color or brightness of the road surface is uneven
- When a light is temporarily shined on the parking space (lights of another vehicle, security light, etc.)
- When the road surface around the parking space has the same repeating pattern
- When there is a low protrusion on the road surface near the parking space
- When the parking space is on a slope
- When a camera has been splashed by hot or cold water and the lens has fogged up
- When a camera lens is dirty or covered with water droplets
- When accessories which obstruct the view of the camera are installed

If assistance is ended during registration, perform registration again.

NOTICE

- When registering a parking space to the memory function, if the road surface cannot be detected "No available parking space to register" will be displayed.
- When using the memory function, make sure to stop immediately in front of the stop position. Otherwise the parking space may not be able to be detected correctly or assistance may not be provided to the point that the vehicle is fully parked.
- Do not use the memory function if a camera has been subjected to a strong impact or images of the panoramic view monitor are misaligned.
- If a camera has been replaced, as the installation angle of the camera will have changed, it will be necessary to reregister parking spaces of the memory function.

Advanced Park cancelation/suspension

Assistance will be canceled when

In situations such as the following, Advanced Park operation will be canceled. Firmly hold the steering wheel and depress the brake pedal to stop the vehicle.

As system operation has been canceled, begin the operation again or continue parking manually, using the steering wheel.

- The Advanced Park main switch is pushed
- The shift position has been changed to P
- The parking brake is engaged
- A door or the back door is opened
- The driver's seat belt is unfastened
- The outside rear view mirrors are folded
- The TRC or VSC is turned off
- The TRC, VSC or ABS operates
- The vehicle is towing a trailer or another vehicle
- The power switch is pressed
- The system determines assistance cannot be continued in the current parking environment
- The system malfunctions
- While the vehicle was stopped, "Cancel" was selected on the Center Display

Assistance will be suspended when

In situations such as the following, Advanced Park operation will be suspended.

Assistance can be started again by following the directions displayed on the Center Display.

Also, when assistance is suspended, if the shift position is changed twice with the brake pedal depressed, assistance will be canceled in that shift position. However, if assistance is suspended by changing the shift position, assistance will be canceled if the shift position is changed once.

- The steering wheel is operated
- The accelerator pedal is depressed

- The shift position has been changed
- A moving object or stationary object that may collide with your vehicle has been detected, resulting in the operation of the hybrid system output control/braking control.
- Camera switch is pressed

Changing the Advanced Park settings

Press the Advanced Park main switch, and select on the Center Display, and then select "Advanced Park".

Speed profile

The vehicle speed for when assistance is performed can be set.

This setting cannot be changed when registering a parking space to the memory function.

Obstacle detection range

The distance from which obstacles will be avoided while assistance is being performed can be set.

Preferred parking method

The preferred parking method displayed when at a parking space which perpendicular (forward/reverse) or parallel parking is possible can be set.

Preferred parking direction

The preferred parking direction displayed when it is possible to pull perpendicular forward or reverse into a parking space can be selected.

Preferred exit direction (perpendicular)

The preferred exit direction displayed when it is possible to pull forward or reverse to the left or right out of a parking space can be selected.

Preferred exit direction (parallel)

The preferred exit direction displayed when it is possible to exit to the left or right from a parallel parking space can be selected.

Camera view when parking

The display angle of the camera image when using the perpendicular parking (forward/reverse) function or parallel parking function can be set.

Camera view when exiting

The display angle of the camera image when using the perpendicular exiting (forward/reverse) function or parallel parking exit function can be set.

Parking path adjustment

The course for when parking assistance is operating can be adjusted inward or outward.

If the tires are worn, the path of vehicle may be offset from the center of the parking space. In this case, use this setting to adjust the parking course.

Road width adjustment

When parking assistance is started, the amount of lateral movement while the vehicle is moving forward can be adjusted.

■ Park position adjustment (forward)

The position at which perpendicular parking (forward) is completed can be adjusted. (Except when using the memory function.)

■ Park position adjustment (reverse)

The position at which perpendicular parking (reverse) is completed can be adjusted. (Except when using the memory function.)

■ Rear accessory setting

If an accessory, such as a trailer hitch, has been installed to the rear of the vehicle, the length of the rear of the vehicle can be adjusted to help avoid colliding with objects to the rear of the vehicle.

■ Clear registered parking space

The parking spaces registered to the memory function can be deleted. Parking space information cannot be deleted when assistance is being performed or when registering parking space information to the memory function.

NOTICE

- Take care when using the park position adjustment (forward) or park position adjustment (reverse) for adjusting because the vehicle may collide with parking blocks, curb stones, or other low objects.
- If it is likely that your vehicle will collide with a nearby vehicle/object, parking block, curb stone, etc., depress the brake pedal to stop the vehicle and press the Advanced Park main switch to disable the system.

Advanced Park displayed messages

The operating state, assistance operation, etc. of the Advanced Park is displayed on the Center Display. If a message is displayed, respond according to the content displayed.

■ If "No available parking space" is displayed

Move the vehicle to a location where a parking space or parking lines can be detected.

■ If "Unavailable in current condition" is displayed

Move the vehicle to another location and use the system.

■ If "Not enough space to exit" is displayed

The parallel parking exit function cannot be used due to a situation such as the distance between your vehicle and vehicles parked in front of and behind your vehicle being short, the existence of an object in the exit direction, etc.

Check the conditions of the area around your vehicle and exit from the parking space manually.

■ If "Cannot control speed" is displayed

The system judged that it cannot adjust the speed of the vehicle when using the system in an area with a slope or step and assistance was canceled.

Use the system in a level location.

■ If "Obstacle detected" is displayed

As a moving object or stationary object that may collide with your vehicle has been detected, the hybrid system output control/braking control operates to suspend Advanced Park assistance.

Check the condition of the surrounding area. To resume assistance, select the "Start" button on the Center Display.

■ If "No available parking space to register" is displayed

This message is displayed when is selected at a parking space that cannot be detected.

Operate the system at a parking space where differences in the road surface can be recognized. (→P.310)

Driving assist systems

To keep driving safety and performance, the following systems operate automatically in response to various driving situations. Be aware, however, that these systems are supplementary and should not be relied upon too heavily when operating the vehicle.

Summary of the driving assist systems

■ ECB (Electronically Controlled Brake System)

The electronically controlled system generates braking force corresponding to the brake operation

■ ABS (Anti-lock Brake System)

Helps to prevent wheel lock when the brakes are applied suddenly, or if the brakes are applied while driving on a slippery road surface

■ Brake assist

Generates an increased level of braking force after the brake pedal is depressed when the system detects a panic stop situation

■ VSC (Vehicle Stability Control)

Helps the driver to control skidding when swerving suddenly or turning on slippery road surfaces

Provides cooperative control of the ABS, TRC, VSC and EPS.

Helps to maintain directional stability

when swerving on slippery road surfaces by controlling steering performance.

■ Trailer Sway Control (vehicles with towing package)

Helps the driver to control trailer sway by selectively applying brake pressure for individual wheels and reducing driving torque when trailer sway is detected.

■ TRC (Traction Control)

Helps to maintain drive power and prevent the drive wheels from spinning when starting the vehicle or accelerating on slippery roads

■ Active Cornering Assist (ACA)

Helps to prevent the vehicle from drifting to the outer side by performing inner wheel brake control when attempting to accelerate during cornering

■ Hill-start assist control

Helps to reduce the backward movement of the vehicle when starting on an uphill

■ EPS (Electric Power Steering)

Employs an electric motor to reduce the amount of effort needed to turn the steering wheel

■ E-Four (Electronic On-Demand AWD system) (AWD models)

Automatically controls the drive system such as to front-wheel drive or AWD (all wheel drive) according to various running conditions including normal driving, during cornering, on a uphill, when starting off, during acceleration, on a slippery roads due to snow or rain, thus contributing to stable operability and driving stability.

■ Emergency brake signal

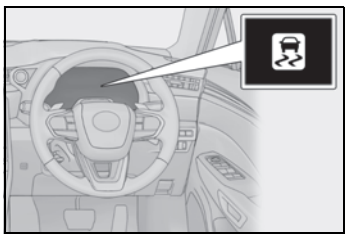
When the brakes are applied suddenly, the stop lights automatically flash to alert the vehicle behind.

■ The Secondary Collision Brake

When the airbag sensor detects a collision, the brakes and brake lights are automatically controlled to reduce the vehicle speed and that helps reduce the possibility of further damage due to a secondary collision.

■ When the TRC/VSC/ABS/Trailer Sway Control (vehicles with towing package) systems are operating

The slip indicator light will flash while the TRC/VSC/ABS/Trailer Sway Control systems are operating.



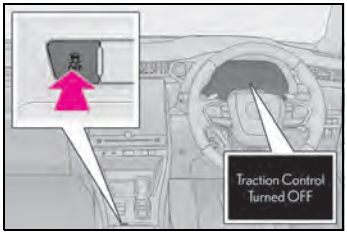
■ Disabling the TRC system

If the vehicle gets stuck in mud, dirt or snow, the TRC system may reduce power from the hybrid system to the wheels. Pressing the OFF switch to turn the system off may make it easier for you to rock the vehicle in order to free it.

To turn the TRC system off, quickly press and release the OFF switch.

The "Traction Control Turned OFF" will be shown on the multi-information display.

Press the OFF switch again to turn the system back on.



■ **Turning off both TRC, VSC and Trailer Sway Control (vehicles with towing package) systems**

To turn the TRC, VSC and Trailer Sway Control systems off, press and hold the OFF switch for more than 3 seconds while the vehicle is stopped.

The VSC OFF indicator light will come on and the "Traction Control Turned OFF" will be shown on the multi-information display.*

Press the OFF switch again to turn the systems back on.

*: PCS (Pre-Collision System) will also be disabled (only Pre-Collision warning is available). The PCS warning light will come on and a message will be displayed on the multi-information display. (→P.217)

■ **When the message is displayed on the multi-information display showing that TRC has been disabled even if the OFF switch has not been pressed**

TRC is temporary deactivated. If the information continues to show, contact your Lexus dealer.

■ **Operating conditions of hill-start assist control**

When all of the following conditions are met, the hill-start assist control will operate:

- The shift lever is in a position other than P or N (when starting off forward/backward on an upward incline)
- The vehicle is stopped
- The accelerator pedal is not depressed
- The parking brake is not engaged
- The power switch is in ON

■ **Automatic system cancelation of hill-start assist control**

The hill-start assist control will turn off in any of the following situations:

- The shift lever is shifted to P or N
- The accelerator pedal is depressed
- The brake pedal is depressed and the parking brake is engaged
- A maximum of 2 seconds have elapsed after the brake pedal is released
- The power switch is turned to OFF.

■ **Sounds and vibrations caused by the ABS, brake assist, VSC, TRC, Trailer Sway Control (vehicles with towing package) and hill-start assist control systems**

- A sound may be heard from the engine compartment when the brake pedal is depressed repeatedly, 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 also after the vehicle comes to a stop.

■ **ECB operating sound**

ECB operating sound may be heard in the following cases, but it does not indicate that a malfunction has occurred.

- Operating sound heard from the engine compartment when the brake pedal is operated.

- Motor sound of the brake system heard from the front part of the vehicle when the driver's door is opened.
- Operating sound heard from the engine compartment when one or two minutes passed after the stop of the hybrid system.

Active Cornering Assist operation sounds and vibrations

When Active Cornering Assist is operated, operation sounds and vibrations may be generated from the brake system, but this is not a malfunction.

Automatic reactivation of TRC, Trailer Sway Control (vehicles with towing package) and VSC systems

After turning the TRC, Trailer Sway Control and VSC systems off, the systems will be automatically re-enabled in the following situations:

- When the power switch is turned off
- If only the TRC system is turned off, the TRC will turn on when vehicle speed increases. If both the TRC and VSC systems are turned off, automatic re-enabling will not occur when vehicle speed increases.

Operating conditions of Active Cornering Assist

The system operates when the following occurs.

- TRC/VSC can operate
- The driver is attempting to accelerate while turning
- The system detects that the vehicle is drifting to the outer side
- The brake pedal is released

Reduced effectiveness of the EPS system

The effectiveness of the EPS system is reduced to prevent the system from overheating when there is frequent steering input over an extended period of time. The steering wheel may feel heavy as a result. Should this occur, refrain from excessive steering input or stop the vehicle and turn the hybrid system off. The EPS system should return to normal within 10 minutes.

Operating conditions of emergency brake signal

When the following conditions are met, the emergency brake signal will operate:

- The emergency flashers are off
- Actual vehicle speed is over 55 km/h (35 mph)
- The system judges from the vehicle deceleration that it is a sudden braking operation

Automatic system cancelation of emergency brake signal

The emergency brake signal will be canceled in any of the following situations:

- The emergency flashers are turned on
- The system judges from the vehicle deceleration that is not a sudden braking operation

Secondary Collision Brake operating conditions

The system operates when the SRS airbag sensor detects a collision while the vehicle is in motion. However, the system does not operate when the components are damaged.

Secondary Collision Brake automatic cancellation

The system is automatically canceled in any of the following situations.

- The vehicle speed drops to approximately 0 km/h (0 mph).
- A certain amount of time elapses during operation
- The accelerator pedal is depressed a large amount

If a message about AWD is shown on the multi-information display (AWD models)

Perform the following actions.

- "AWD System Over-heated Switching to 2WD Mode"

AWD system is overheated. Stop the vehi-

cle in a safe place with the hybrid system operating.*

If the message disappears after a while, there is no problem. If the message remains, have the vehicle inspected by your Lexus dealer immediately.

- "AWD System Over-heated 2WD Mode Engaged"

AWD system has been temporarily released and switched to front-wheel drive due to overheating. Stop the vehicle in a safe place with the hybrid system operating.*

If the message disappears after a while, AWD system will automatically recover. If the message remains, have the vehicle inspected by your Lexus dealer immediately.

- "AWD System Malfunction 2WD Mode Engaged Visit Your Dealer"

A malfunction occurs in the AWD system. Have the vehicle inspected by your Lexus dealer immediately.

*: When stopping the vehicle, do not stop the hybrid system until the display message has turned off.

WARNING

■ The ABS does not operate effectively when

- The limits of tire gripping performance have been exceeded (such as excessively worn tires on a snow covered road).
- The vehicle hydroplanes while driving at high speed on wet or slick roads.

■ Stopping distance when the ABS is operating may exceed that of normal conditions

The ABS is not designed to shorten the vehicle's stopping distance. Always maintain a safe distance from the vehicle in front of you, especially in the following situations:

- When driving on dirt, gravel or snow-covered roads
- When driving with tire chains
- When driving over bumps in the road
- When driving over roads with potholes or uneven surfaces

■ TRC/VSC may not operate effectively when

Directional control and power may not be achievable while driving on slippery road surfaces, even if the TRC/VSC system is operating.
Drive the vehicle carefully in conditions where stability and power may be lost.

■ Active Cornering Assist does not operate effectively when

- Do not overly rely on Active Cornering Assist. Active Cornering Assist may not operate effectively when accelerating down slopes or driving on slippery road surfaces.
- When Active Cornering Assist frequently operates, Active Cornering Assist may temporarily stop operating to ensure proper operation of the brakes, TRC, VSC.

■ Hill-start assist control does not operate effectively when

- Do not overly rely on hill-start assist control. Hill-start assist control may not operate effectively on steep inclines and roads covered with ice.

WARNING

- Unlike the parking brake, hill-start assist control is not intended to hold the vehicle stationary for an extended period of time. Do not attempt to use hill-start assist control to hold the vehicle on an incline, as doing so may lead to an accident.

When the TRC/VSC/ABS/Trailer Sway Control (vehicles with towing package) is activated

The slip indicator light flashes. Always drive carefully. Reckless driving may cause an accident. Exercise particular care when the indicator light flashes.

When the TRC/VSC/Trailer Sway Control (vehicles with towing package) systems are turned off

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

Trailer Sway Control is part of the VSC system and will not operate if VSC is turned off or experiences a malfunction.

Replacing tires

Make sure that all tires are of the specified size, brand, tread pattern and total load capacity. In addition, make sure that the tires are inflated to the recommended tire inflation pressure level.
The ABS, TRC, Trailer Sway Control and VSC systems will not function correctly if different tires are installed on the vehicle. Contact your Lexus dealer for further information when replacing tires or wheels.

Handling of tires and the suspension

Using tires with any kind of problem or modifying the suspension will affect the driving assist systems, and may cause a system to malfunction.

Trailer Sway Control precaution (vehicles with towing package)

The Trailer Sway Control system is not able to reduce trailer sway in all situations. Depending on many factors such as the conditions of the vehicle, trailer, road surface and driving environment, the Trailer Sway Control system may not be effective. Refer to your trailer owner's manual for information on how to tow your trailer properly.

If trailer sway occurs (vehicles with towing package)

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

- Firmly grip the steering wheel. Steer straight ahead. Do not try to control trailer swaying by turning the steering wheel.
- Begin releasing the accelerator pedal immediately but very gradually to reduce speed. Do not increase speed. Do not apply vehicle brakes.

If you make no extreme correction with the steering or brakes, your vehicle and trailer should stabilize. (→P.162)

Secondary Collision Brake

Do not rely solely upon the Secondary Collision Brake. This system is designed to help reduce the possibility of further damage due to a secondary collision, however, that effect changes according to various conditions. Overly relying on the system may result in death or serious injury.

Hybrid Electric Vehicle driving tips

For economical and ecological driving, pay attention to the following points:

Using Eco drive mode

When using Eco drive mode, the torque corresponding to the accelerator pedal depression amount can be generated more smoothly than it is in normal conditions. In addition, the operation of the air conditioning system (heating/cooling) will be minimized, improving the fuel economy. (→P.178)

Use of Hybrid System Indicator

The Eco-friendly driving is possible by keeping the indicator of Hybrid System Indicator within Eco area. (→P.80, 85)

Changing the shift position

Shift the shift position to D when stopped at a traffic light, or driving in heavy traffic etc. Shift the shift position to P when parking. When using the N, there is no positive effect on fuel consumption. In the N, the gasoline engine operates but electricity cannot be generated. Also, when using the air conditioning system, etc., the hybrid battery (traction battery) power is consumed.

Accelerator pedal/brake pedal operation

- 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 fuel consumption. Battery power can be restored by driving with the accelerator pedal slightly released.

When braking

Make sure to operate the brakes gently and in a timely manner. A greater amount of electrical energy can be regenerated when slowing down.

Delays

Repeated acceleration and deceleration, as well as long waits at traffic lights, will lead to bad fuel economy. Check traffic reports before leaving and avoid delays as much as possible. When driving in a traffic jam, gently release the brake pedal to allow the vehicle to move forward slightly while avoiding overuse of the accelerator pedal. Doing so can help control excessive gasoline consumption.

Highway driving

Control and maintain the vehicle at a constant speed. Before stopping at a toll booth or similar, allow plenty of time to release the accelerator and gently apply the brakes. A greater amount of electrical energy can be regenerated when slowing down.

Air conditioning

Use the air conditioning only when necessary. Doing so can help reduce excessive gasoline consumption.
In summer: When the ambient temperature is high, use the recirculated air mode. Doing so will help to reduce the burden on the air conditioning system and reduce fuel consumption as well.
In winter: Because the gasoline engine will not automatically cut out until it and the interior of the vehicle are warm, it will consume fuel. Also, fuel consumption can be improved by avoiding overuse of the heater.

Checking tire inflation pressure

Make sure to check the tire inflation pressure frequently. Improper tire inflation pressure can cause poor fuel economy.
Also, as snow tires can cause large amounts of friction, their use on dry roads can lead to poor fuel economy. Use tires that are appropriate for the season.

Luggage

Carrying heavy luggage will lead to poor fuel economy. Avoid carrying unnecessary luggage. Installing a large roof rack will also cause poor fuel economy.

Warming up before driving

Since the gasoline engine starts up and cuts out automatically when cold, warming up the engine is unnecessary. Moreover, frequently driving short distances will cause the engine to repeatedly warm up, which can lead to excess fuel consumption.

Winter driving tips

Carry out the necessary preparations and inspections before driving the vehicle in winter. Always drive the vehicle in a manner appropriate to the prevailing weather conditions.

Preparation for winter

- Use fluids that are appropriate to the prevailing outside temperatures.
  - Engine oil
  - Engine/power control unit coolant
  - Washer fluid
- Have a service technician inspect the condition of the 12-volt battery.
- Have the vehicle fitted with four snow tires or purchase a set of tire chains for the front tires.*
  Ensure that all tires are the same size and brand, and that chains match the size of the tires.

*: Tire chains cannot be mounted on vehicles with 225/60R17 tires or 225/55R18 tires.

WARNING

■ Driving with snow tires

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

- Use tires of the specified size.
- Maintain the recommended level of air pressure.
- Do not drive at speeds in excess of the speed limit or the speed limit specified for the snow tires being used.
- Use snow tires on all, not just some wheels.

■ Driving with tire chains (vehicles with 215/60R17 tires)

Observe the following precautions to reduce the risk of accidents.
Failure to do so may result in the vehicle being unable to be driven safely, and may cause death or serious injury.

- Do not drive in excess of the speed limit specified for the tire chains being used, or 50 km/h (30 mph), whichever is lower.
- Avoid driving on bumpy road surfaces or over potholes.
- Avoid sudden acceleration, abrupt steering, sudden braking and shifting operations that cause sudden engine braking.
- Slow down sufficiently before entering a curve to ensure that vehicle control is maintained.
- Do not use LTA (Lane Tracing Assist).

NOTICE

■ Repairing or replacing snow tires

Request repairs or replacement of snow tires from your Lexus dealer or legitimate tire retailers.

This is because the removal and attachment of snow tires affects the operation of the tire pressure warning valves and transmitters.

Before driving the vehicle

Perform the following according to the driving conditions:

- Do not try to forcibly open a window or move a wiper that is frozen. Pour warm water over the frozen area to melt the ice. Wipe away the water immediately to prevent it from freezing.
- To ensure proper operation of the climate control system fan, remove any snow that has accumulated on the air inlet vents in front of the windshield.
- Check for and remove any excess ice or snow that may have accumulated on the exterior lights, outside rear view mirrors, windows, vehicle's roof, chassis, around the tires or on the brakes.
- Remove any snow or mud from the bottom of your shoes before getting in the vehicle.

When driving the vehicle

Accelerate the vehicle slowly, keep a safe distance between you and the vehicle ahead, and drive at a reduced speed suitable to road conditions.

When parking the vehicle

- Park the vehicle and shift the shift position to P without setting the parking brake. The parking brake may freeze up, preventing it from being released. If the vehicle is parked without setting the parking brake, make sure to block the wheels.

  Failure to do so may be dangerous because it may cause the vehicle to move unexpectedly, possibly leading to an accident.
- When the parking brake is in automatic mode, release the parking brake after shifting the shift position to P. (→P.182)
- If the vehicle is left parked with the brakes damp in cold temperatures, there is a possibility of the brakes freezing.
- If the vehicle is parked without setting the parking brake, confirm that the shift position cannot be moved out of P.

WARNING

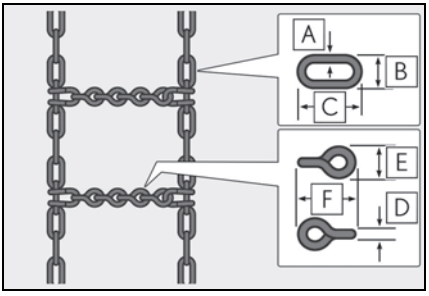
■ When parking the vehicle

When parking the vehicle without applying the parking brake, make sure to chock the wheels. If you do not chock the wheels, the vehicle may move unexpectedly, possibly resulting in an accident.

Selecting tire chains

▶ Vehicles with 215/60R17 tires

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



Side chain:

A 3 mm (0.12 in.) in diameter

B 10 mm (0.39 in.) in width

C 30 mm (1.18 in.) in length

Cross chain:

D 4 mm (0.16 in.) in diameter

E 14 mm (0.55 in.) in width

F 25 mm (0.98 in.) in length

▶ Vehicles with 225/60R17 tires or 225/55R18 tires

Tire chains cannot be mounted.

Snow tires should be used instead.

Regulations on the use of tire chains (vehicles with 215/60R17 tires)

Regulations regarding the use of tire chains vary depending on location and type of road. Always check local regulations before installing chains.

Tire chain installation

Observe the following precautions when installing and removing chains:

- Install and remove tire chains in a safe location.
- Install tire chains on the front tires only. Do not install tire chains on the rear tires.
- Install tire chains on front tires as tightly as possible. Retighten chains after driving 0.5 - 1.0 km (1/4 - 1/2 mile).
- Install tire chains following the instructions provided with the tire chains.

NOTICE

Fitting tire chains

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

Windshield wipers

To enable the windshield wipers to be lifted when heavy snow or icy conditions are expected, change the rest position of the windshield wipers from the retracted position below the hood to the service position using the wiper lever. (→P.199)

Utility vehicle precautions

This vehicle belongs to the utility vehicle class, which has higher ground clearance and narrower tread in relation to the height of its center of gravity.

Utility vehicle feature

- Specific design characteristics give it a higher center of gravity than ordinary passenger cars. This vehicle design feature causes this type of vehicle to be more likely to rollover. Utility vehicles have a significantly higher rollover rate than other types of vehicles.
- An advantage of the higher ground clearance is a better view of the road allowing you to anticipate problems.
- It is not designed for cornering at the same speeds as ordinary passenger cars any more than low-slung sports cars designed to perform satisfactorily under off-road conditions. Therefore, sharp turns at excessive speeds may cause rollover.

WARNING

■ Utility vehicle precautions

Always observe the following precautions to minimize the risk of death or serious injury or damage to your vehicle:

- In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Therefore, the driver and all passengers should always fasten their seat belts.
- Avoid sharp turns or abrupt maneuvers, if at all possible.
  Failure to operate this vehicle correctly may result in loss of control or vehicle rollover causing death or serious injury.
- Always slow down in gusty crosswinds. Because of its profile and higher center of gravity, your vehicle is more sensitive to side winds than an ordinary passenger car. Slowing down will allow you to have better control.
- Do not drive horizontally across steep slopes. Driving straight up or straight down is preferred. Your vehicle (or any similar off-road vehicle) can tip over sideways much more easily than forward or backward.

Off-road driving

Your vehicle is not designed to be driven off-road. However, in the event that off-road driving cannot be avoided, please observe the following precautions to help avoid the areas prohibited to vehicles.

- Drive your vehicle only in areas where off-road vehicles are permitted to travel.
- Respect private property. Get owner's permission before entering

private property.

- Do not enter areas that are closed. Honor gates, barriers and signs that restrict travel.
- Stay on established roads. When conditions are wet, driving techniques should be changed or travel delayed to prevent damage to roads.
- AWD models: Avoid driving on very steep, slippery roads and other surfaces, such as sand, where the tires are liable to lose traction. Your vehicle may not perform as well as conventional AWD on-road vehicles on these surfaces.

WARNING

■ Off-road driving precautions

Always observe the following precautions to minimize the risk of death or serious injury or damage to your vehicle:

- Drive carefully when off the road. Do not take unnecessary risks by driving in dangerous places.
- Do not grip the steering wheel spokes when driving off-road. A bad bump could jerk the wheel and injure your hands. Keep both hands and especially your thumbs on the outside of the rim.
- Always check your brakes for effectiveness immediately after driving in sand, mud, water or snow.
- After driving through tall grass, mud, rock, sand, water, etc., check that there is no grass, bush, paper, rags, stone, sand, etc. adhering or trapped to the underbody. Clear off any such matter from the underbody. If the vehicle is used with these materials trapped or adhering to the underbody, a breakdown or fire could occur.
- When driving off-road or in rugged terrain, do not drive at excessive speeds, jump, make sharp turns, strike objects, etc. This may cause loss of control or vehicle rollover causing death or serious injury. You are also risking expensive damage to your vehicle's suspension and chassis.

NOTICE

■ To prevent water damage

Take all necessary safety measures to ensure that water damage to the hybrid battery (traction battery), hybrid system or other components does not occur.

- Water entering the engine compartment may cause severe damage to the hybrid system. Water entering the interior may cause the hybrid battery stowed under the rear seats to short circuit.
- Water entering the hybrid transmission and rear electric motor (traction motor) will cause deterioration in transmission quality. The malfunction indicator may come on, and the vehicle may not be drivable.
- Water can wash the grease from wheel bearings, causing rusting and premature failure, and may also enter the hybrid transmission case, reducing the gear oil's lubricating qualities.

NOTICE

■ When you drive through water

If driving through water, such as when crossing shallow streams, first check the depth of the water and the bottom of the riverbed for firmness. Drive slowly and avoid deep water.

■ Inspection after off-road driving

- Sand and mud that has accumulated around brake discs may affect braking efficiency and may damage brake system components.
- Always perform a maintenance inspection after each day of off-road driving that has taken you through rough terrain, sand, mud, or water.

5-1. Lexus Climate Concierge

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5-5. Using the other interior features

Other interior features 352

Lexus Climate Concierge

The seat heaters (if equipped) and heated steering wheel (if equipped) are each automatically controlled according to the set temperature of the air conditioning system, the outside and cabin temperature, etc. Lexus Climate Concierge allows a comfortable condition to be maintained without adjusting each system.

Turning on Lexus Climate Concierge

1 Select the option screen switch. (→P.335)

2 Select "Climate concierge"

3 Turn the "AUTO" switch on.

The indicator on the switch illuminates, and the automatic air conditioning system, seat heaters and heated steering wheel operate in automatic mode.

If any of the system is operated manually, the indicator turns off. However, all other functions continue to operate in automatic mode.

Operation of each system

■ **Automatic air conditioning system (→P.335)**

The temperature can be adjusted independently for the driver seat and passenger seat.

■ **Seat heaters (if equipped) (→P.341)**

Heating is automatically selected according to the set temperature of the air conditioning system, the outside temperature, etc.

The seat heater of the front passenger seat operate in automatic mode if a passenger is detected.

■ **Heated steering wheel (if equipped) (→P.341)**

Heated steering wheel operates automatically according to the set temperature of the air conditioning system, the outside temperature, etc.

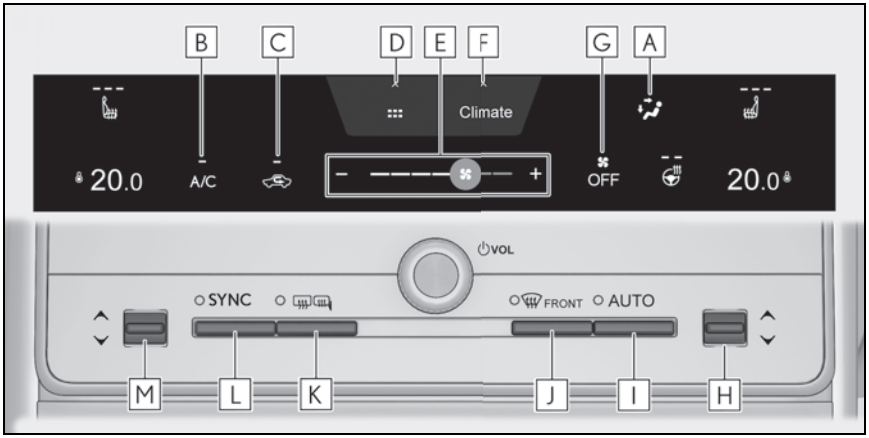
■ **Seat heater operation**

When automatic mode is selected using the seat heater switch, passenger detection is not performed.

Automatic air conditioning system

When the "AUTO" switch is on, the air outlets and fan speed will automatically be changed according to the set temperature.

Option screen switch



A Airflow mode control switch

B "A/C" switch

C Outside/recirculated air mode switch

D Shortcut screen switch

Select to display shortcut icons for various functions.

E Fan speed control switch

F Option screen switch

G "OFF" switch

H Right-hand side temperature control switch

I "AUTO" switch

J Windshield defogger switch

K Rear window and outside rear view mirror defoggers switch

L "SYNC" switch

M Left-hand side temperature control switch

■ Adjusting the temperature

Operate the temperature control switch upwards to increase the temperature and downwards to decrease the temperature.

When the indicator on the "SYNC" switch is illuminated, the temperature setting for the front passenger's side will match the setting for the driver's side.

When the indicator on the "SYNC" switch is off, turning the "SYNC" switch on will illuminate the "SYNC" switch indicator and the temperature setting for the front passenger's side will become the same as that for the driver's side.

When the front passenger's side temperature adjustment switch is operated, the indicator on the "SYNC" switch will turn off and the temperature setting for the front passenger's side will be able to be adjusted.

If the "A/C" indicator is turned off, the system will blow ambient temperature air or heated air.

■ Setting the fan speed

To increase the fan speed, select the "+" fan speed adjustment switch or slide the icon of the fan speed adjustment switch right. To decrease the fan speed, select the "-" fan speed adjustment switch or slide the icon of the fan speed adjustment switch left.

Select the "OFF" switch to turn the fan off.

The fan can also be stopped by touching and holding the "-" fan speed adjustment switch or sliding the icon of the fan speed adjustment switch to the leftmost position and holding it.

■ Changing the air flow mode

Select the airflow mode control switch.

The airflow mode changes each time the switch is selected.

The air outlets and air volume changes according to the selected air flow mode.

 : Air flows to the upper body

 : Air flows to the upper body and feet

 : Air flows to the feet

 : Air flows to the feet and the windshield defogger operates

■ Switching between outside air and recirculated air modes

Temporarily changing the air mode to recirculated air mode is recommended to prevent dirty air from entering the vehicle, such as when in a tunnel or heavy traffic, and to help cool the interior when the outside air temperature is high.

Select the outside/recirculated air mode switch.

The air mode changes between outside air mode and recirculated air mode each time the switch is selected. When recirculated air mode is selected, the indicator will illuminate.

The air mode may change automatically depending on the temperature setting, temperature inside the vehicle, etc.

Eco air conditioning mode

The air conditioning is controlled with low fuel consumption prioritized such as reducing fan speed, etc.

1 Select the option screen switch. (→P.335)

2 Select the "Eco Heat/Cool" switch.

- In Eco air conditioning mode, the air conditioning system is controlled as follows to prioritize fuel efficiency. To improve air conditioning performance, turn off Eco air conditioning mode.
  - Engine speed and compressor operation controlled to restrict heating/cooling capacity.
  - Fan speed restricted when automatic mode is selected.
- When the driving mode is set to Eco driving mode, the Eco air conditioning mode will be turned on automatically. Even in this case, the Eco air conditioning mode can be turned off by selecting the "Eco Heat/Cool".

Warming the interior quickly (Max heat)

When "MAX heat" is turned on, in order to warm the interior quickly, the settings of the air conditioning system will be changed immediately.

1 Select the shortcut screen switch . (→P.335)

2 Select the "MAX heat" switch.

- The driver's side temperature setting of the air conditioning system will be set to "Hi" and the "AUTO" switch will be turned on.
- Driver's side seat heater will be set to Hi.
- Heated steering wheel will be set to Hi.
- In the following situations, the front passenger's side seat heater will be set to "AUTO".
  - When "Climate concierge" is on
  - When the system determines that a passenger is in the front passenger seat
- When the indicator on the "SYNC" switch is illuminated, the temperature setting for the front passenger's side will also be set to "Hi".

nanoe™ X*1, 2 generator

A nanoe™ X generator is installed in this air conditioning system. This provides clean and refreshing air through the window side air outlet of the driver's seat by emitting nanoe™ X particles.*3

- When nanoe™ X is turned on, the nanoe™ X generator is automatically activated when the fan is turned on.
- The effects of nanoe™ X are maximized in the following conditions:
  - The upper body, upper body and feet, and feet vents are being used.
  - The window side air outlet of the driver's

seat is open.

- When nanoe™ X particles are generated, a small amount of ozone is emitted so a faint odour may be detectable. This is approximately the same as the amount that already exists in nature, such as in forests, and it has no effect on the human body.
- A slight noise may be detectable during operation. It may take some time for operation to begin. A more noticeable noise may be detectable immediately upon the start of operation. This is not a malfunction.

*1: nanoe™ and the nanoe™ X marks are trademarks of Panasonic Holdings Corporation.

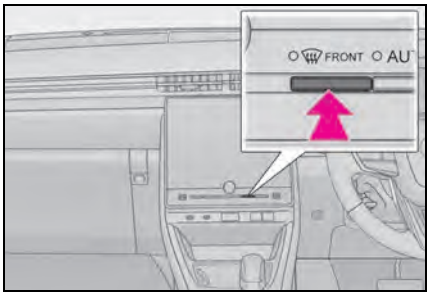
*2: nanoe™ X particles are nano-sized electrostatic atomised water particles that contain hydroxyl radicals, which have beneficial effects.

*3: According to temperature and humidity conditions, fan speed and direction of the air flow, the nanoe™ X generator may not operate at full capacity.

■ Defogging the windshield

Defoggers are used to defog the windshield and front side windows.

Press the windshield defogger switch.



The dehumidification function will operate and the air flow will increase.

Set the outside/recirculated air mode button to outside air mode if the recirculated air mode is used. (It may switch automatically.)

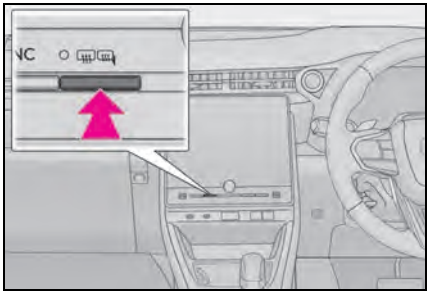
To defog the windshield and the side windows early, turn the air flow and temperature up.

To return to the previous mode, press the windshield defogger switch again when the windshield is defogged.

■ Defogging the rear window and outside rear view mirrors

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

Press the rear window and outside rear view mirror defoggers switch.



The rear window defogger and outside

rear view mirror defoggers will operate and defog the rear window and outside rear view mirrors.

The defoggers will automatically turn off after a period of time.

When driving on dusty roads

Close all windows. If dust thrown up by the vehicle is still drawn into the vehicle after closing the windows, it is recommended that the air intake mode be set to outside air mode and the fan speed to any setting except off.

When the outside temperature is low

The dehumidification function may not operate even when "A/C" is selected.

Ventilation and air conditioning odors

- To let fresh air in, set the air conditioning system to the outside air mode.
- During use, various odors from inside and outside the vehicle may enter into and accumulate in the air conditioning system. This may then cause odor to be emitted from the vents.
- To reduce potential odors from occurring:
  - It is recommended that the air conditioning system be set to outside air mode prior to turning the vehicle off.
  - The start timing of the blower may be delayed for a short period of time immediately after the air conditioning system is started in automatic mode.
- When parking, the system automatically switches to outside air mode to encourage better air circulation throughout the vehicle, helping to reduce odors that occur when starting the vehicle. (if equipped)

"MAX heat"

- The "MAX heat" switch cannot be used to turn the setting off.
- After the "MAX heat" switch has been operated, the temperature setting can be adjusted using the temperature control switches of the air conditioning system.
- When "Climate concierge" is on, if the "AUTO" switch is turned on, the seat heaters of the front seats, and the heated steering wheel will be operated automatically according to the temperature setting.
- Each function can also be adjusted to the desired setting.

Fogging up of the windows

The windows will easily fog up when the humidity in the vehicle is high. Selecting "A/C" on will dehumidify the air from the outlets and defog the windshield effectively.

- If you turn "A/C" off, the windows may fog up more easily.
- The windows may fog up if the recirculated air mode is used.

Using the voice control system

Air conditioning system can be operated using voice controls. For details, refer to the "Multimedia Owner's Manual".

Air conditioning filter

→P.404

Customization

Functions that are linked to automatic mode (when the "AUTO" switch is on) can be set through "Vehicle customise" on the Center Display. (→P.476)

WARNING

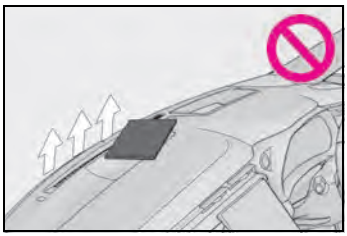
nanoe™ X generator

Do not disassemble or attempt to repair the nanoe™ X generator because it contains high voltage parts. Contact your Lexus dealer if the generator needs repair.

WARNING

■ To prevent the windshield defogger from operating improperly

- Do not use the windshield defogger in extremely humid areas when the air conditioning system is set to a low temperature. 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.
- Do not place anything on the instrument panel which may cover the air outlets. Otherwise, air flow may be obstructed, preventing the windshield defoggers from defogging.



■ When the outside rear view mirror defoggers are operating

Do not touch the surface of the outside rear view mirrors when the rear window defogger and outside rear view mirror defoggers are operating, as the surface of the mirrors will become extremely hot and may cause burns.

NOTICE

■ To prevent 12-volt battery discharge

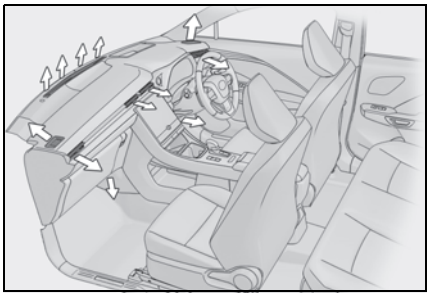
Do not leave the air conditioning system on longer than necessary when the hybrid system is off.

■ To prevent damage to the nanoe™ X generator

Do not insert anything into the window side air outlet of the driver's seat, attach anything to it, or use sprays around it. These actions could cause the generator to malfunction.

Air outlet layout and operations

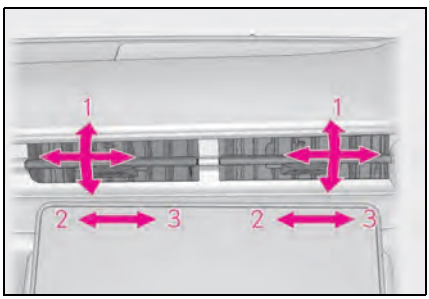
■ Location of air outlets



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

To adjust the position of and opening and closing the air outlets, perform the following operations:

▶ Center

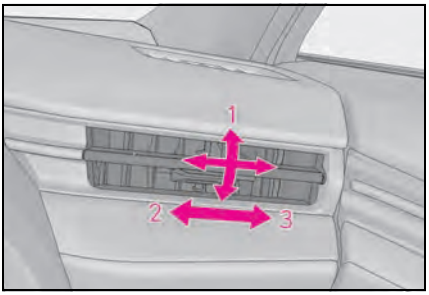


1 Direct air flow to the left or right, up or down

2 Close the vent

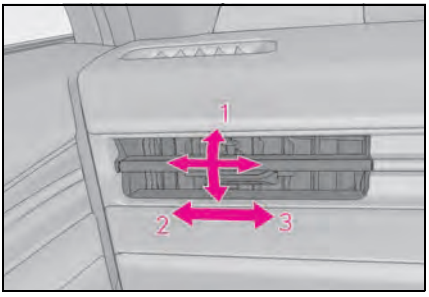
3 Open the vent

▶ Right side



1 Direct air flow to the left or right, up or down
2 Open the vent
3 Close the vent

▶ Left side



1 Direct air flow to the left or right, up or down
2 Close the vent
3 Open the vent

Heated steering wheel*/seat heaters*

*: If equipped

- Heated steering wheel

Warms up the grip of the steering wheel

- Seat heaters

Warm up the seat upholstery

WARNING

■ To prevent minor burn injuries

Care should be taken if anyone in the following categories comes in contact with the steering wheel or seats when the heater is on:

- Babies, small children, the elderly, the sick and the physically challenged
- Persons with sensitive skin
- Persons who are fatigued
- Persons who have taken alcohol or drugs that induce sleep (sleeping drugs, cold remedies, etc.)

NOTICE

■ To prevent damage to the seat heaters

Do not put heavy objects that have an uneven surface on the seat and do not stick sharp objects (needles, nails, etc.) into the seat.

■ To prevent 12-volt battery discharge

Do not use the functions when the hybrid system is off.

Heated steering wheel

Select on the Center Display.

Each time the switch is selected, the operation condition changes as follows.

AUTO → Hi (2 segments lit) → Lo (1 segment lit) → Off

The level indicator (red) lights up during operation. "AUTO" indicator lights up during automatic operation.

Operation condition

The power switch is in ON.

Customization

The temperature setting of the heated steering wheel can be set through "Vehicle customise" on the Center Display. (→P.476)

Seat heaters (Front seats)

Select or on the Center Display.

Each time the switch is selected, the operation condition changes as follows.

AUTO → Hi (3 segments lit) → Mid (2 segments lit) → Lo (1 segment lit) → Off

The level indicator (red) lights up during operation. "AUTO" indicator lights up during automatic operation.

Operation condition

The power switch is in ON.

Customization

The temperature setting of the seat heaters of the front seats can be set through "Vehicle customise" on the Center Display. (→P.476)

WARNING

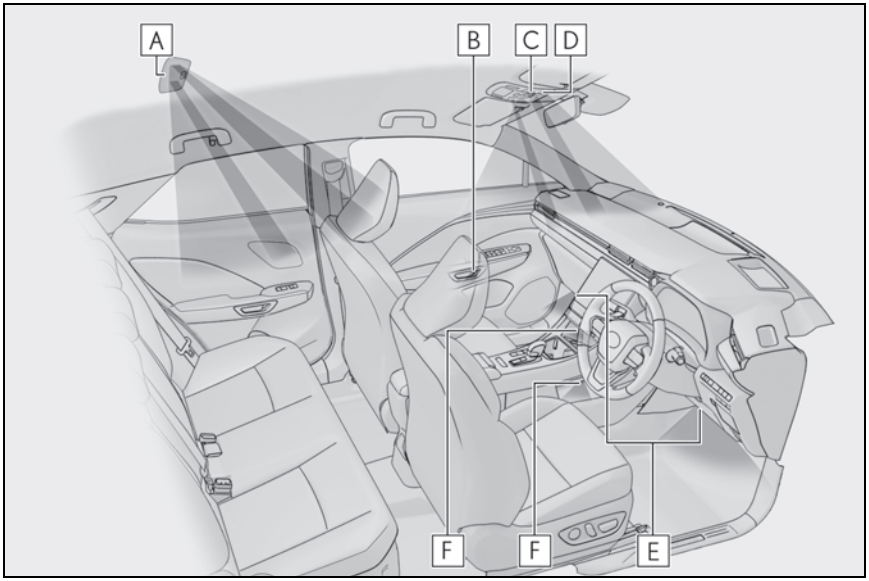
To prevent overheating and minor burn injuries

Observe the following precautions when using the seat heaters.

- Do not cover the seat with a blanket or cushion when using the seat heater.
- Do not use seat heater more than necessary.

Interior lights list

Location of the interior lights



A Rear personal light (→P.345)

B Door trim ornament lights (if equipped)*1, 2

C Front personal lights (→P.344)

D Interior lights (→P.344)

E Footwell lights*1, 2

F Auxiliary tray lights (if equipped)*1, 2

*1: When the power switch is in ON, the lights will turn on. However, if the instrument panel light control switch is turned to minimum, the lights will turn off. (→P.82, 88)

*2: These lights turn on when a door is unlocked. When the shift position is in a position other than P, the brightness of these lights will reduce intensity.

■ **Personal lights/interior lights automatic on/off**

- Illuminated entry system: The lights automatically turn on/off according to power switch mode, the presence of the electronic key, whether the doors are locked/unlocked, and whether the doors are opened/closed.
- If the interior lights remain on when the power switch is turned off, the lights will go off automatically after 10 minutes.

■ **When front interior light and personal lights do not respond as normal**

- When water, dirt, etc., have adhered to the lens surface
- When operated with a wet hand
- When wearing gloves, etc.

■ **Automatic illumination of the interior lights**

If any of the SRS airbags deploy (inflate) or in the event of a strong rear impact, the interior lights will turn on automatically. The interior lights will turn off automatically after approximately 20 minutes.

The interior lights can be turned off manually. However, in order to help prevent further collisions, it is recommended that they be left on until safety can be ensured.

(The interior lights may not turn on automatically depending on the force of the impact and conditions of the collision.)

■ **Customization**

Setting (e.g. the time elapsed before lights turn off) can be changed. (Customizable features: →P.476)

NOTICE

■ **Removing light lenses**

Never remove the lens for the front interior light and personal lights. Otherwise, the lights will be damaged. If the lens need to remove, contact your Lexus dealer.

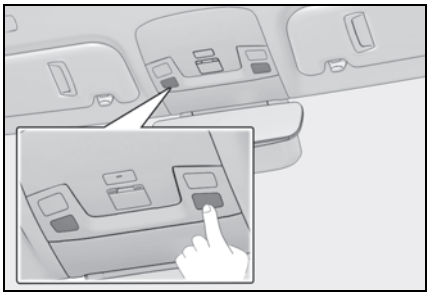
■ **To prevent 12-volt battery discharge**

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

Operating the interior lights

■ Turning the interior lights on/off

Touch the light

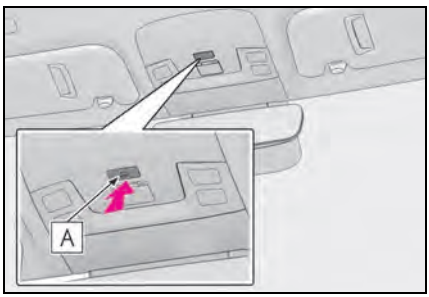


■ Turning the door position on

Press the door-linked interior light switch

The lights are turned on and off according to whether the doors are opened/closed.

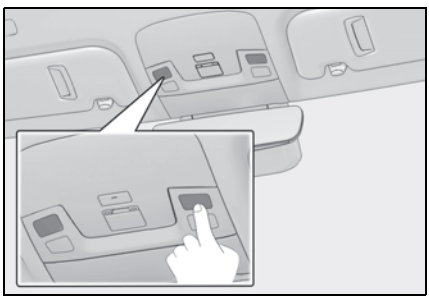
When the door position is on, the indicator A illuminates.



Operating the personal lights

■ Turning the front personal lights on/off

Touch the light

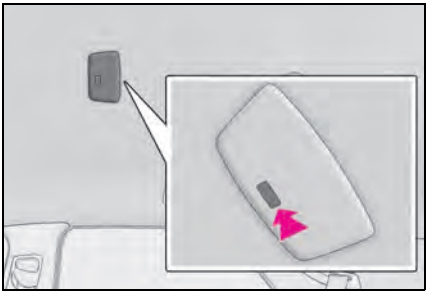


■ Turning the rear personal lights on/off

Press the switch

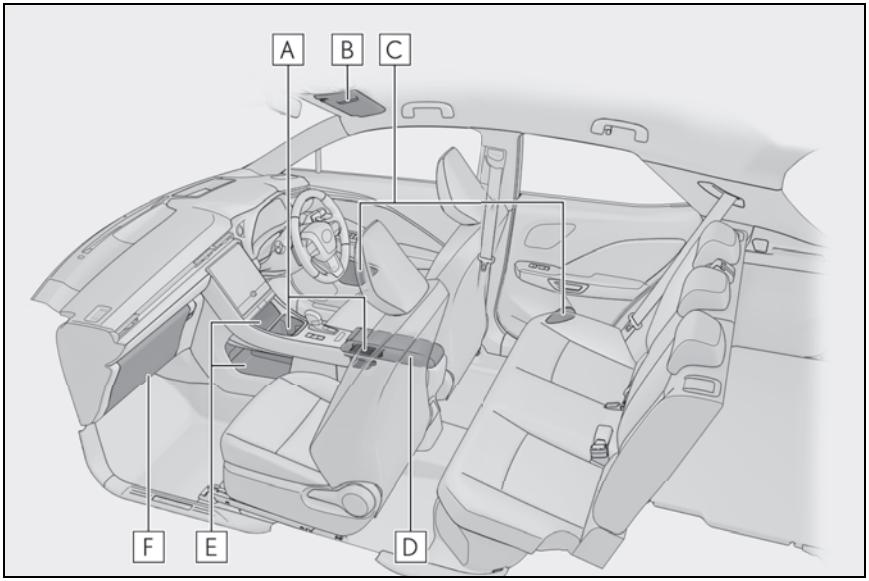
The rear interior lights turn on/off together the front interior lights.

When a door is opened while the door position is on, the lights turn on.



List of storage features

Equipment types and layout



A Cup holders (→P.347)

B Ticket holders

C Bottle holders (→P.348)

D Console box (→P.347)

E Auxiliary tray (→P.348)

F Glove box (→P.347)

WARNING

■ Items that should not be left in the vehicle

Do not leave glasses, lighters or spray cans in the storage spaces, as this may cause the following when cabin temperature becomes high:

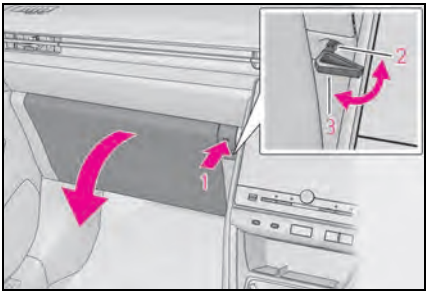
- Glasses may be deformed by heat or cracked if they come into contact with other stored items.
- Lighters or spray cans may explode. If they come into contact with other stored items, the lighter may catch fire or the spray can may release gas, causing a fire hazard.

WARNING

■ When storage compartments are not in use

When driving or when the glove box and the console box are not in use, keep it closed. In the event of sudden braking or sudden swerving, an accident may occur due to an occupant being struck by an open lid or the items stored inside.

Glove box

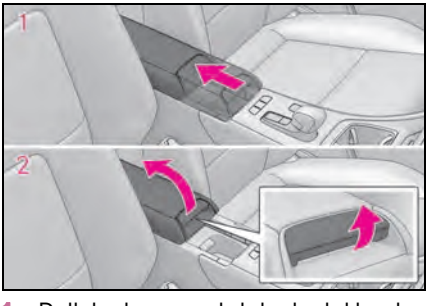


1 Open (press the button)
2 Unlock with the mechanical key
3 Lock with the mechanical key

■ Glove box light

The glove box light turns on when the tail lights are on.

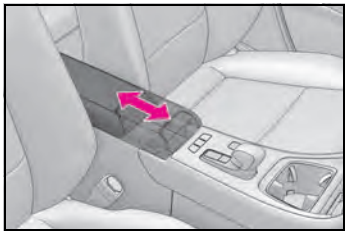
Console box



1 Pull the lever and slide the lid backward.
2 Lift the lid while pulling the lever to release the lock.

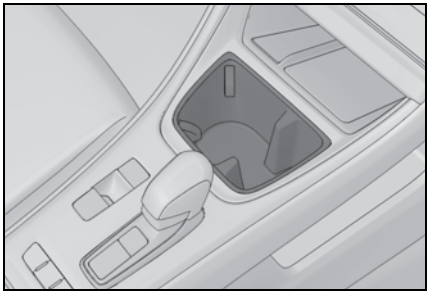
■ Console box lid

The lid can be slid forward/backward while pulling the lever.



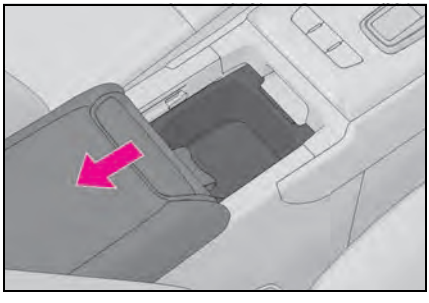
Cup holders

■ Front



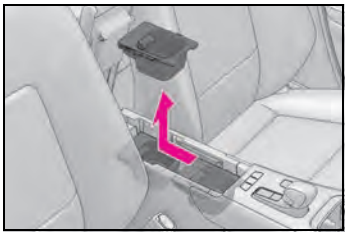
■ Console box

Slide the lid backward.



Removing the cup holder

The cup holder in the console box can be removed by sliding it into the rearmost position. In addition, the console box can be used as a bottle holder when the cup holder is slid back slightly.



WARNING

Items unsuitable for the cup holders

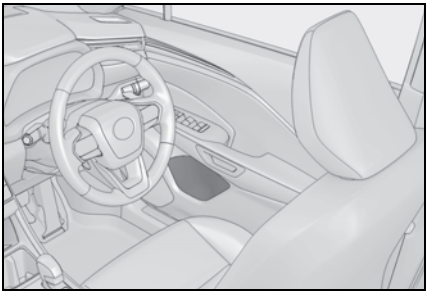
Do not place anything other than cups or aluminum cans in the cup holders. Other items may be thrown out of the holders in the event of an accident or sudden braking, causing injury. If possible, cover hot drinks to prevent burns.

NOTICE

When using the cup holder (console box only)

Do not drive with the cup holder slid into the rearmost position from which it can be removed. The cup holder may become unstable and cause abnormal noise.

Bottle holders



Bottle holders

- When storing a bottle, close the cap.
- The bottle may not be stored depending on its size or shape.

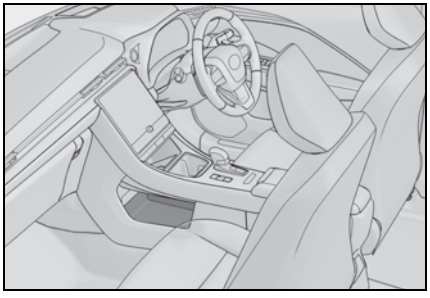
NOTICE

Items that should be not stowed in the bottle holders

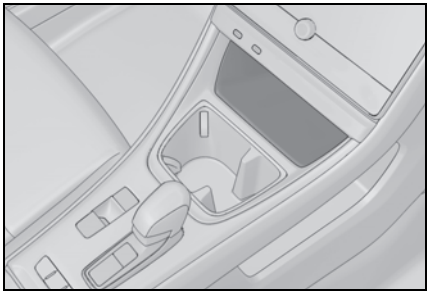
Do not place open bottles or glass and paper cups containing liquid in the bottle holders. The contents may spill and glasses may break.

Auxiliary tray

Under the console box

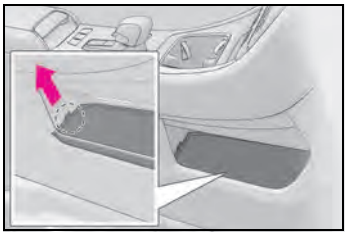


Front (if equipped)



When cleaning the interior (under the console box)

Remove the mat to clean it.



WARNING

Observe the following precautions when putting items in the open tray.

Failure to do so may cause items to be thrown out of the tray in the event of sudden braking or steering. In these cases, the items may interfere with pedal operation or cause driver distraction, resulting in an accident.

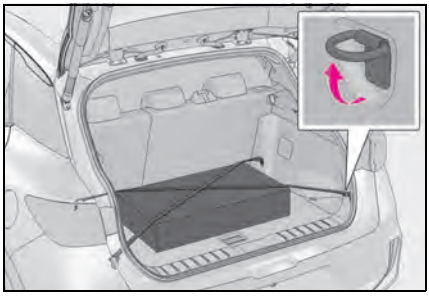
- Do not store items in the tray that can easily shift or roll out.
- Under the console box: Do not stack items in the tray higher than the edge of tray.
- Do not put items in the tray that may protrude over the edge of tray.

Luggage compartment features

Cargo hooks (if equipped)

Raise the hooks to use.

The cargo hooks are provided for securing loose items.



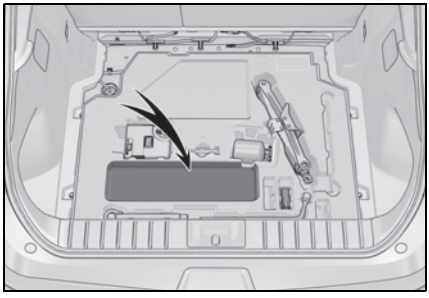
WARNING

■ When cargo hooks are not in use

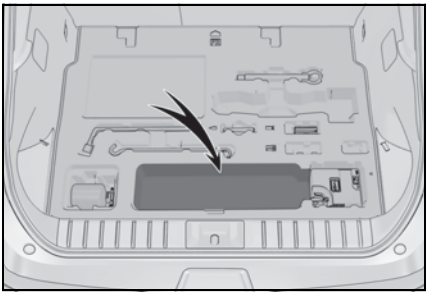
To avoid injury, always return the hooks to their stowed positions when not in use.

Warning reflector storage

▶ 2WD models



▶ AWD models



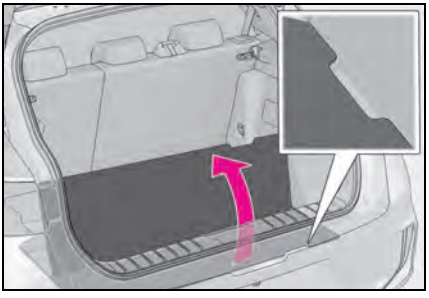
■ **Warning reflector**

- The warning reflector itself is not included as an original equipment.
- Depending on the size and shape of the warning reflector case, you may not be able to store it.

Deck board

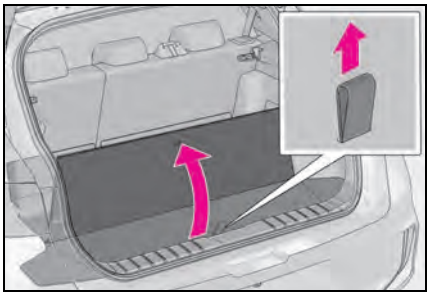
▶ 2WD models

1 Raise the deck board and fold it forward.



▶ AWD models

Pull up the lever to raise the deck board and fold it forward.



WARNING

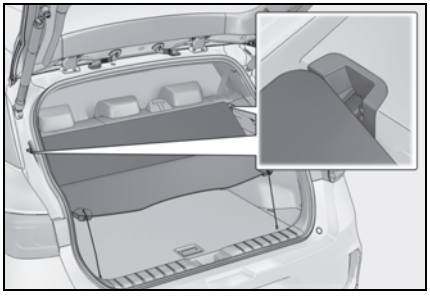
■ **If the deck boards are opened or removed**

If the deck boards are opened or removed, return them to their original positions before driving. In the event of sudden braking, an accident may occur due to an occupant being struck by the deck boards or the items stored in the deck under tray.

Installing the luggage cover (if equipped)

■ **Installing the luggage cover**

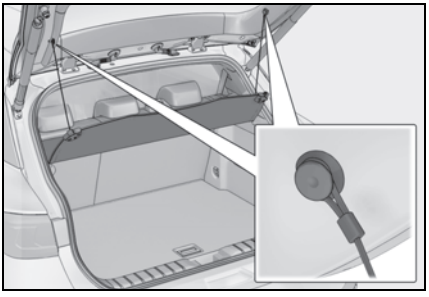
1 Insert into the recess to install.



2 Attach the strings to the luggage cover hooks.

Make sure that the side the strings are sewn faces down.

When removing, reverse the steps listed.



WARNING

■ When installing the luggage cover

Observe the following precautions. Failure to do so may cause an accident.

- Make sure that the rear edge of the luggage cover is laying flat to prevent the driver's view from being obstructed.
- Make sure to attach the strings correctly.

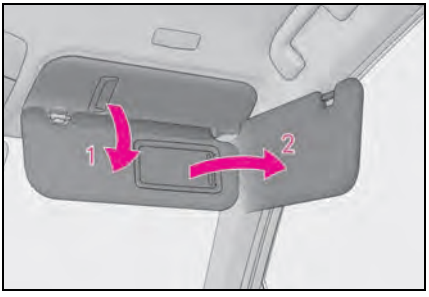
NOTICE

■ When using the luggage cover

- Do not place anything on the luggage cover. Doing so may deform the luggage cover.
- Do not open or close the back door with the strings unhooked. Doing so may cause damage to the luggage cover.
- Do not hook anything other than the luggage cover and deck board strings on the luggage cover hooks. The hooks and back door may be damaged.

Other interior features

Sun visors



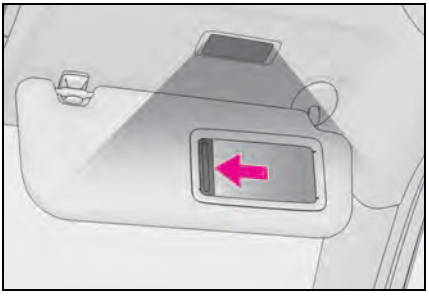
1 To set the visor in the forward position, flip it down.

2 To set the visor in the side position, flip down, unhook, and swing it to the side.

Vanity mirrors

Slide the cover to open.

The light turns on when the cover is opened.



■ Vanity lights

If the vanity lights remain on when the power switch is turned off, the lights will go off automatically after 10 minutes.

NOTICE

■ To prevent 12-volt battery discharge

Do not leave the vanity lights on for extended periods while the hybrid system is off.

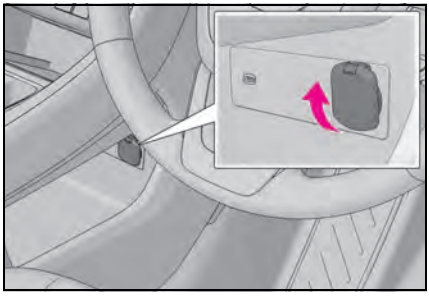
Power outlet

Please use a power supply for electronic goods that use less than 12 VDC /10 A (power consumption of 120 W).

When using electronic goods, make sure that the power consumption of all the connected power outlets is less than 120 W.

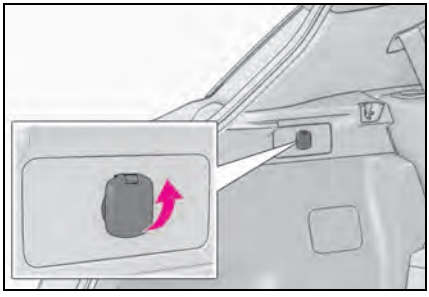
▶ Auxiliary tray

Open the lid.



▶ Rear

Open the lid.



■ **The power outlet can be used when**

The power switch is in ACC or ON, or the multimedia system is on.

■ **When stopping the hybrid system**

Disconnect electrical devices with charging functions, such as mobile battery packs.

If such devices are left connected, the hybrid system may not stop normally.

NOTICE

■ **When power outlet is not in use**

To avoid damaging the power outlet, close the power outlet lid when the power outlet is not in use.
Foreign objects or liquids that enter the power outlet may cause a short circuit.

■ **To prevent 12-volt battery discharge**

Do not use the power outlet longer than necessary when the hybrid system is off.

■ **To prevent incorrect operation of the vehicle**

When turning the power switch off, make sure to disconnect accessories designed for charging, such as portable chargers, power banks, etc. from the power outlets.

If such an accessory is left connected, the following may occur:

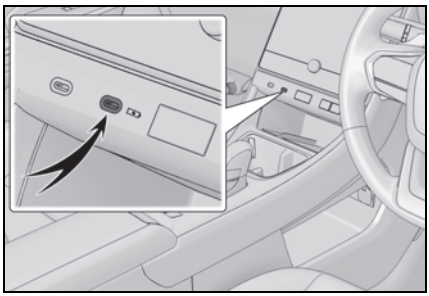
- The doors will not be able to be locked.
- The opening screen will be displayed on the multi-information display.
- The interior lights, instrument panel lights, etc. will illuminate.

USB Type-C charging ports

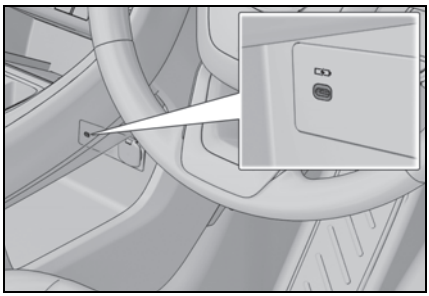
The USB Type-C charging ports are used to supply 3.0 A of electricity at 5 V to external devices.
The USB Type-C charging ports are for charging only. They are not designed for data transfer or other purposes.
Depending on the external device, it may not charge properly. Refer to the manual included with the device before using a USB charging port.

■ **Using the USB Type-C charging ports**

▶ Front type A

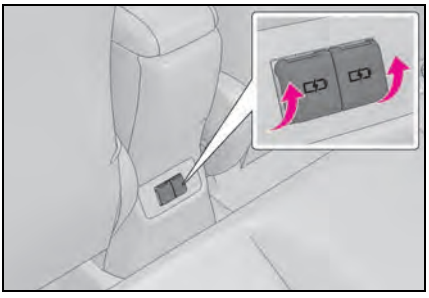


▶ Front type B (if equipped)



▶ Rear side of the console box (if equipped)

Open the lid.



■ The USB Type-C charging ports can be used when

The power switch is in ACC or ON, or the multimedia system is on.

■ Situations in which the USB Type-C charging ports may not operate correctly

- If a device which consumes more than 3.0 A at 5 V is connected
- If a device designed to communicate with a personal computer, such as a USB memory device, is connected
- If the connected external device is turned off (depending on device)
- If the temperature inside the vehicle is high, such as after the vehicle has been parked in the sun

■ About connected external devices

Depending on the connected external device, charging may occasionally be suspended and then start again. This is not a malfunction.

NOTICE

■ To prevent damage to the USB Type-C charging ports

- Do not insert foreign objects into the ports.
- Do not spill water or other liquids into the ports.
- Rear side of console box: When the USB Type-C charging ports are not in use, close the lids. If a foreign object or liquid enters a port may cause a short circuit.
- Do not apply excessive force to or impact the USB Type-C charging ports.
- Do not disassemble or modify the USB Type-C charging ports.

■ To prevent damage to external devices

- Do not leave external devices in the vehicle. The temperature inside the vehicle may become high, resulting in damage to an external device.
- Do not push down on or apply unnecessary force to an external device or the cable of an external device while it is connected.

■ To prevent 12-volt battery discharge

Do not use the USB Type-C charging ports for a long period of time with the hybrid system stopped.

Wireless charger (if equipped)

A portable device can be charged by just placing Qi standard wireless charge compatible portable devices according to the Wireless Power Consortium, such as smartphones and mobile batteries, etc., on the charge area.

The compatible portable devices can be found on the following Wireless Power Consortium website.

https://www.wirelesspowerconsortium.com/

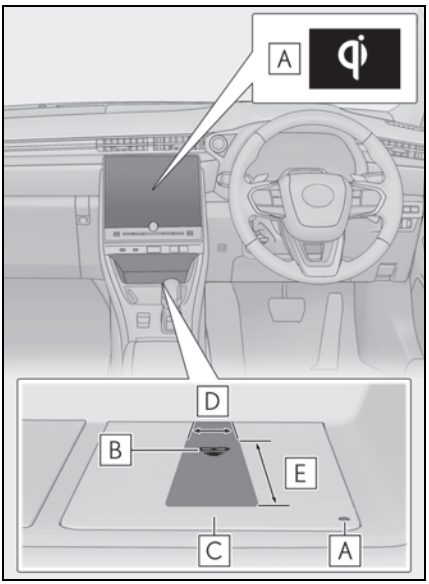
This function cannot be used with por-

table devices that are larger than the charging tray. Also, depending on the portable device, it may not operate as normal. Please read the operation manual for portable devices to be used.

The "Qi" logo

The "Qi" logo is a trademark of the Wireless Power Consortium.

Name for all parts



A Operation indicator light

B Charge area*

C Charging tray

D Approximately 2.5 cm (1.0 in.)

E Approximately 10 cm (3.9 in.)

*: Compatible portable devices and the wireless charger contain charging coils. The charging coil in the wireless charger can be moved within the charge area up to the position of the charging coil inside a portable device. Charging is possible if the center of the coil of the portable device is placed within the charge area. If 2 or more portable devices are placed on the charging tray, their charging coils may not be properly detected and they may not be charged.

Using the wireless charger

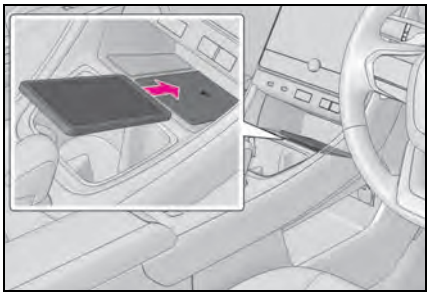
Place the portable device on the charging tray

Place the charging side of the portable device down with the center of the device in the center of the charge area.

When charging, the operation indicator light (orange) comes on.

If charging is not occurring, refer to "Situations in which the function may not operate normally" (→P.360).

When charging is complete, the operation indicator light (green) comes on.



Recharging function

- When charging is complete and after a fixed time in the charge suspension state, charging restarts.
- When a portable device is moved significantly in the charge area, the

charging coil is disconnected and charging is stopped momentarily. However, if there is the center of a charging coil in the charge area, the charging coil inside the wireless charger will move toward it and then charging restarts.

■ **Rapid charging function**

● The following portable devices support rapid charging.

- Portable devices compliant with WPC Ver1.3.2 and compatible with rapid charging
- iPhones with an iOS version that supports 7.5 W charging (iPhone 8 and later models)
- Portable devices compatible with Galaxy original rapid charging standard.

● When a portable device that supports rapid charging is charged, charging automatically switches to the rapid charging.

■ **Lighting conditions of operation indicator light**

Operation indicator light		Conditions
Charging tray side	Center Display side	
Turning off	Disappear	When power for Multimedia is off or the power switch is off
Green (comes on)	Gray	On Standby (charging possible state)*1
		When charging is complete*2
Orange (comes on)	Blue	Charging

*1: Charging power will not be output during standby. A metallic object will not be heated, if it is placed on the charging tray in this state.

*2: Depending on the portable device, there are cases where the operation indicator light will continue being lit up orange even after the charging is complete.

■ **When the wireless charger does not operate properly**

When the wireless charger does not operate properly, handle the probable cause based on the following tables.

Operation indicator light		Suspected causes/Handling method
Charging tray side	Center Display side	
Orange (Flashing repeatedly once every second)	Gray	**Vehicle to wireless charger communication failure** **→ If the hybrid system is operating, stop and then restart the hybrid system.** If the power switch is in ACC, start the hybrid system. (→P.168)
Green (Flashing repeatedly once every second)	Not displayed	**Wireless charger and multimedia system communication failure** **→ If the hybrid system is operating, stop and then restart the hybrid system.** If the power switch is in ACC, start the hybrid system. (→P.168)
Green (comes on)	Blue	**AM radio stations are being automatically selected (if equipped)** **→ Wait until the system has completed the automatic selection of AM radio stations. In the case that automatic selection cannot be completed, stop automatic selection.**
		The smart entry & start system is detecting the key. **→ Wait until key detection has completed.**

Operation indicator light		Suspected causes/Handling method
Charging tray side	Center Display side	
Green (comes on)	Gray	Foreign substance detection: A metallic foreign substance is in the charge area, and so the abnormal heating prevention function of the metallic foreign substance operated → Remove the foreign substance from the charge area.
		Portable device misaligned / distanced from charging surface: The center of charging coil in the portable device moved outside of the charging area, or lens convex is large, or case is thick so the abnormal heating prevention function operated → Remove the portable device from the wireless charger, after 5 seconds, then place the portable device so that it is near the center of the wireless charger. Also, if a case or cover is installed to the portable device, remove it.
Green (comes on)	Gray	Battery protection function of portable device: Before full charging, battery protection function of portable device operated → Confirm the setting of portable device.
		Continued detection of an electronic key: When a Multimedia function is enabled through vehicle customization, the electronic key is continually detected without being confirmed. → In this case, turn the power switch ACC or ON to confirm the key.

Operation indicator light		Suspected causes/Handling method
Charging tray side	Center Display side	
Orange (Repeatedly flashes 4 times continuously)	Gray	**Safety shutdown resulting when the temperature within the wireless charger exceeded the set value** **→ Stop charging, remove the portable device from the charging tray, wait for the temperature to drop, and then start charging again.**

■ The wireless charger can be operated when

The power switch is in ACC or ON, or the multimedia system is on.

■ Usable portable devices

- Qi standard wireless charge standard can be used on compatible devices. However, compatibility with portable devices that comply with Qi Ver. 1.0, 1.3.2 and later versions is not guaranteed.
- Starting with mobile phones and smartphones, it is aimed for low power electrically supplied portable devices of no more than 5 W.
- However, charging exceeding 5 W is supported by the following portable devices.
  - Charging at 7.5 W or less is supported by iPhones that support 7.5 W charging.
  - Charging at 10 W or less is supported by Galaxy device that support 10 W charging of original standard.
  - Charging at 15 W or less is supported by portable devices compliant with EPP output as defined by WPC standard Ver1.3.2.

■ Using the smart entry & start system

If the smart entry & start system detects the electronic key while a device is being charged, charging will be temporarily stopped. When the electronic key is detected, charging will automatically start again.

■ When covers and accessories are attached to portable devices

Do not charge in situations where cover and accessories not able to handle Qi are attached to the portable device. Depending on the type of cover (including for certain genuine manufacturer parts) and accessory, it may not be possible to charge. When charging is not performed even with the portable device placed on the charge area, remove the cover and accessories.

■ AM radio cooperation function during charging (if equipped)

- When noise enters the AM radio during charging, charging frequency will be automatically changed to reduce noise.
- During the AM radio automatic tuning, charging is temporarily stopped in order to prevent tuning error due to noise caused by charging. When tuning is finished, charging will be automatically resumed.

■ Important points of the wireless charger

- If the electronic key cannot be detected within the vehicle interior, charging cannot be done. When the door is opened and closed, charging may be temporarily suspended.
- When charging, the wireless charging device and portable device will get warmer, however this is not a malfunction.
  When a portable device gets warm while charging, charging may stop due to the protection function on the portable

device side. In this case, when the temperature of the portable device drops significantly, charge again.

The fan may start operating to lower the temperature inside the wireless charger, however this is not a malfunction.

■ **Operation sounds**

A buzzing noise may be heard when pressing the power switch to turn to ACC or ON or when detecting a portable device. However, this is not a malfunction.

■ **Trademark information**

- iPhone is a trademark of Apple Inc., registered in the U.S. and other countries.
- Galaxy is a trademark or registered trademark of Samsung Electronics Co.,Ltd.

WARNING

■ **Caution while driving**

When charging a portable device, for safety reasons, the driver should not operate the main part of the portable device while driving.

■ **Caution while in motion**

Do not charge lightweight devices such as wireless headphones while in motion. These devices are very light and may be ejected from the charging tray, which may lead to unforeseen accidents.

■ **Caution regarding interference with electronic devices**

People with implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverters, as well as any other electrical medical device, should consult their physician about the usage of the wireless charger.

■ **To prevent malfunctions or burns**

Observe the following precautions. Failure to do so may result in a equipment failure and damage, catch fire, burns due to overheat or electric shock.

- Do not insert any metallic objects between the charge area and the portable device while charging
- Do not attach an aluminum sticker or other metallic object to the charge area
- Do not attach an aluminum sticker or other metallic object to the side of the portable device (or to its case or cover) that touches the charge area
- Do not use the charging tray as a small storage space
- Do not subject to a strong force or impact
- Do not disassemble, modify or remove
- Do not charge devices other than specified portable devices
- Keep away from magnetic items
- Do not charge devices if the charge area is covered in dust
- Do not cover with a cloth or similar material

NOTICE

■ **Situations in which the function may not operate normally**

Devices may not be charged normally in the following situations.

- The portable device is fully charged
- The portable device is being charged with a cable connected
- There is foreign matter between the charge area and portable device

NOTICE

- Charging has caused the portable device to heat up
- The temperature around the charging tray is 35°C (95°F) or higher, such as in extreme heat
- The portable device is placed with its charging side facing up
- The small portable device such as foldable type is placed in an area misaligned from the charge area
- The portable device is larger than the charging tray
- The camera lens protrudes 3 mm (0.12 in) or more from the surface of the portable device
- The vehicle is in an area where strong electrical waves or noise are emitted, such as near a television tower, power plant, gasoline station, broadcasting station, large display, airport, etc.
- Any of the following objects is stuck or inserted between the charging side of the portable device and the charge area.
  - Thick cases or covers
  - A case or cover with an uneven or tilted surface, so that the charging side is not flat
  - Thick decorations
  - Accessories, such as finger rings, straps, etc.
- When the portable device is in contact with, or is covered by any of the following metallic objects:
  - A card that has metal on it, such as aluminum foil, etc.
  - A pack of cigarettes that includes aluminum foil
  - A wallet or bag that is made of metal
  - Coins
  - A heating pad
  - CDs, DVDs or other media
  - A metal accessory
  - A case or cover made of metal
  - Casing which has magnet in it on the charging side of the portable device
- Electric wave type wireless remote controls are being used nearby
- The electronic key is not inside the vehicle
- 2 or more portable devices are placed on the charging tray at the same time
- In case of using device built in S-pen (Galaxy "Note" series etc.), device that inserted S-pen is placed on the tray

If charging is abnormal or the operation indicator light continues to flash for any other reason, the wireless charger may be malfunctioning. Contact your Lexus dealer.

■ To prevent malfunctions and data corruptions

- When charging, bringing a credit, or other magnetic card, or magnetic storage media close to the charge area may clear any stored data due to magnetic influence. Also, do not bring a wristwatch or other precision instrument close to the charge area since doing so may cause it to malfunction.

NOTICE

- Do not charge with a non-contact IC card such as a transportation system IC card inserted between the charging side of a portable device and the charge area. The IC chip may become extremely hot and damage the portable device or IC card. Be especially careful not to charge a portable device in a case or cover containing a non-contact IC card.
- Do not leave portable devices inside the vehicle. The inside of the vehicle can become hot in extreme heat, which could cause a malfunction.

■ If the smartphone OS has been updated

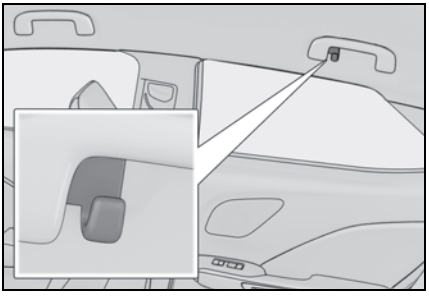
If the smartphone OS has been updated to a newer version, its charging specifications may have changed significantly. For details, check the information on the manufacturer's website.

■ To prevent 12-volt battery discharge

Do not use the wireless charger for a long period of time when the hybrid system is stopped.

Coat hooks

The coat hooks are provided with the rear assist grips.



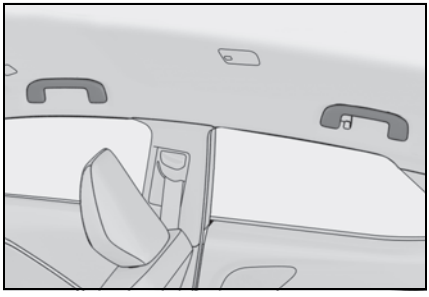
WARNING

■ Items that must not be hung on the hook

Do not hang coat hangers or other hard or sharp objects on the hook. If the SRS curtain shield airbags deploy, these items may become projectiles, causing death or serious injury.

Assist grips

An assist grip installed on the ceiling can be used to support your body while sitting on the seat.



WARNING

■ Assist grips

Do not use the assist grip when getting in or out of the vehicle or rising from your seat.

NOTICE

■ To prevent damage to the assist grip

Do not hang any heavy object or put a heavy load on the assist grip.

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Cleaning and protecting the vehicle exterior

Perform cleaning in a manner appropriate to each component and its material.

Cleaning instructions

- Working from top to bottom, liberally apply water to the vehicle body, wheel wells and underside of the vehicle to remove any dirt and dust.
- Wash the vehicle body using a sponge or soft cloth, such as a chamois.
- For hard-to-remove marks, use car wash soap and rinse thoroughly with water.
- Wipe away any water.
- Wax the vehicle when the waterproof coating deteriorates.

If water does not bead on a clean surface, apply wax when the vehicle body is cool.

■ Self-restoring coat

The vehicle body has a self-restoring coating that is resistant to small surface scratches caused in a car wash, etc.

- The coating lasts for 5 to 8 years from when the vehicle is delivered from the plant.
- The restoration time differs depending on the depth of the scratch and outside temperature. The restoration time may become shorter when the coating is warmed by applying warm water.
- Deep scratches caused by keys, coins, etc., cannot be restored.
- Do not use wax that contain abrasives.

■ Automatic car washes

- Before washing the vehicle:
  - Fold the mirrors
  - Turn off the power back door (if equipped)

Start washing from the front of the vehicle.
Extend the mirrors before driving.

- Brushes used in automatic car washes may scratch the vehicle surface, parts (wheel, etc.) and harm your vehicle's paint.
- Rear spoiler may not be washable in some automatic car washes. There may also be an increased risk of damage to vehicle.

When the shift position needs to be held in N, refer to P.178.

■ High pressure car washes

As water may enter the cabin, do not bring the nozzle tip near the gaps around the doors or perimeter of the windows, or spray these areas continuously.

■ Note for a smart entry & start system

- If the door handle becomes wet while the electronic key is within the effective range, the door may lock and unlock repeatedly. In that case, follow the following correction procedures to wash the vehicle:
  - Place the key in a position 2 m (6 ft.) or more separate from the vehicle while the vehicle is being washed. (Take care to ensure that the key is not stolen.)
  - Set the electronic key to battery-saving mode to disable the smart entry & start system. (→P.128)
- If the electronic key is inside the vehicle and a door handle becomes wet during a car wash, a buzzer may sound outside the vehicle and "Key Detected In Vehicle" may be shown on the multi-information display. To turn off the alarm, lock all the doors.

■ Wheels and wheel ornaments

- Remove any dirt immediately by using a

neutral detergent.

- Wash detergent off with water immediately after use.
- To protect the paint from damage, make sure to observe the following precautions.
  - Do not use acidic, alkaline or abrasive detergent.
  - Do not use hard brushes.
  - Do not use detergent on the wheels when they are hot, such as after driving or parking in hot weather.

■ Brake pads and calipers

Rust may form if the vehicle is parked with wet brake pads or disc rotors, causing them to stick. Before parking the vehicle after it is washed, drive slowly and apply the brakes several times to dry the parts.

■ Bumpers

Do not scrub with abrasive cleaners. (vehicles with water-repellent coating)

■ Plated portions

If dirt cannot be removed, clean the parts as follows:

- Use a soft cloth dampened with an approximately 5% solution of neutral detergent and water to clean the dirt off.
- Wipe the surface with a dry, soft cloth to remove any remaining moisture.
- To remove oily deposits, use alcohol wet wipes or a similar product.

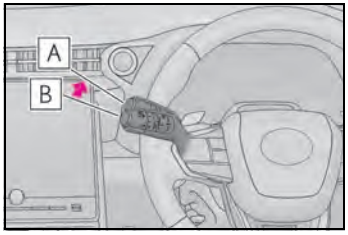
WARNING

■ When washing the vehicle

Do not apply water to the inside of the engine compartment. Doing so may cause the electrical components, etc., to catch fire.

■ When cleaning the windshield (vehicles with rain-sensing windshield wipers)

Set the wiper switch to off.
If the wiper switch is in AUTO, the wipers may operate unexpectedly in the following situations, and may result in hands being caught or other serious injuries and cause damage to the wiper blades.



A Off

B AUTO

- When the upper part of the windshield where the raindrop sensor is located is touched by hand
- When a wet rag or similar is held close to the raindrop sensor
- If something bumps against the windshield
- If you directly touch the raindrop sensor body or if something bumps into the raindrop sensor

■ Precautions regarding the exhaust pipe

Exhaust gasses cause the exhaust pipe to become quite hot.

When washing the vehicle, be careful not to touch the pipe until it has cooled sufficiently, as touching a hot exhaust pipe can cause burns.

WARNING

■ **Precaution regarding the front and rear bumpers**

If the paint of the front or rear bumper is chipped or scratched, the following systems may not function correctly. If this occurs, consult your Lexus dealer.

- BSM
- RCTA
- Safe Exit Assist
- PKSB
- Lexus parking assist-sensor
- Lexus Safety System +

NOTICE

■ **To prevent paint deterioration and corrosion on the body and components (aluminum wheels, etc.)**

- Wash the vehicle immediately in the following cases:
  - After driving near the sea coast
  - After driving on salted roads
  - If coal tar or tree sap is present on the paint surface
  - If dead insects, insect droppings or bird droppings are present on the paint surface
  - After driving in an area contaminated with soot, oily smoke, mine dust, iron powder or chemical substances
  - If the vehicle becomes heavily soiled with dust or mud
  - If liquids such as benzene and gasoline are spilled on the paint surface
- If the paint is chipped or scratched, have it repaired immediately.
- To prevent the wheels from corroding, remove any dirt and store in a place with low humidity when storing the wheels.

■ **Cleaning the exterior lights**

- Wash carefully. Do not use organic substances or scrub with a hard brush. This may damage the surfaces of the lights.
- Do not apply wax to the surfaces of the lights.
  Wax may cause damage to the lenses.

■ **When using an automatic car wash (vehicles with rain-sensing windshield wipers)**

Set the wiper switch to the off position. If the wiper switch is in AUTO, the wipers may operate and the wiper blades may be damaged.

■ **When using a high pressure car wash**

- When washing the vehicle, do not spray the camera or its surrounding area directly with a high pressure washer. Shock applied from high pressure water may cause the device to not operate normally.
- Do not spray water directly on the radar which is equipped behind the radar sensor cover. Otherwise it may cause the device to be damaged.
- Do not bring the nozzle tip close to boots (rubber or resin manufactured cover), connectors or the following parts. The parts may be damaged if they come into contact with high-pressure water.
  - Traction related parts
  - Steering parts
  - Suspension parts
  - Brake parts

NOTICE

- Keep the cleaning nozzle at least 30 cm (11.9 in.) away from the vehicle body. Otherwise resin section, such as moldings and bumpers, may be deformed and damaged. Also, do not continuously hold the nozzle in the same place.
- Do not spray the lower part of the windshield continuously.
  If water enters the air conditioning system intake located near the lower part of the windshield, the air conditioning system may not operate correctly.
- Do not wash the underside of the vehicle using a high pressure car washer.

Cleaning and protecting the vehicle interior

Perform cleaning in a manner appropriate to each component and its material.

Protecting the vehicle interior

- Remove dirt and dust using a vacuum cleaner. Wipe dirty surfaces with a cloth dampened with lukewarm water.
- If dirt cannot be removed, wipe it off with a soft cloth dampened with neutral detergent diluted to approximately 1%.
  Wring out any excess water from the cloth and thoroughly wipe off remaining traces of detergent and water.

Shampooing the carpets

There are several commercial foaming-type cleaners available. Use a sponge or brush to apply the foam. Rub in overlapping circles. Do not use water. Wipe dirty surfaces and let them dry. Excellent results are obtained by keeping the carpet as dry as possible.

Handling the seat belts

Clean with mild soap and lukewarm water using a cloth or sponge. Also check the belts periodically for excessive wear, fraying or cuts.

Front side windows with UV protective coating (vehicles with UV protective coating)

The front side windows have UV protective coating. To prevent any damage to the UV protective coating, observe the following:

- If the windows are dirty, gently wipe them with a cloth soaked in water or lukewarm water as soon as possible.
- If the windows are very dirty, do not open and close them repeatedly.

WARNING

■ Water in the vehicle

- Do not splash or spill liquid in the vehicle, such as on the floor, in the hybrid battery (traction battery) air intake vent, and in the luggage compartment. (→P.64)
  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.33) An electrical malfunction may cause the airbags to deploy or not function properly, resulting in death or serious injury.
- Vehicles with wireless charger: Do not let the wireless charger (→P.354) get wet. Failure to do so may cause the charger to become hot and cause burns or could cause electric shock resulting in death or serious injury.

■ Cleaning the interior (especially instrument panel)

Do not use a polish wax or polish cleaner. The instrument panel may reflect off the windshield, obstructing the driver's view and leading to an accident, resulting in death or serious injury.

NOTICE

■ Cleaning detergents

- Do not use the following types of detergent, as they may discolor the vehicle interior or cause streaks or damage to painted surfaces:
  - Non-seat portions: Organic substances such as benzene or gasoline, alkaline or acidic solutions, dye, and bleach
  - Seats: Alkaline or acidic solutions, such as thinner, benzene, and alcohol
- Do not use a polish wax or polish cleaner. The instrument panel's or other interior part's painted surface may be damaged.

■ Water on the floor

Do not wash the vehicle floor with water. Vehicle systems such as the audio system may be damaged if water comes into contact with electrical components such as the audio system above or under the floor of the vehicle. Water may also cause the body to rust.

■ When cleaning the inside of the windshield

Do not allow glass cleaner to contact the lens. Also, do not touch the lens. (→P.206)

■ Cleaning the inside of the rear window

- Do not use a glass cleaner to clean the rear window, as this may cause damage to the rear window defogger heater wires or antenna. Use a cloth dampened with lukewarm water to gently wipe the window clean. Wipe the window in strokes running parallel to the heater wires or antenna.
- Be careful not to scratch or damage the heater wires or antenna.

NOTICE

■ Cleaning the front side windows

Do not use any compound or abrasive product (e.g., glass cleaner, detergent, wax) to clean the windows. It may damage the coating.

Cleaning the areas with satin-finish metal accents

- Remove dirt using a water-dampened soft cloth or synthetic chamois.
- Wipe the surface with a dry soft cloth to remove any remaining moisture.

■ Cleaning the areas with satin-finish metal accents

The metal areas use a layer of real metal for the surface. It is necessary to clean them regularly. If dirty areas are left uncleaned for long periods of time, they may be difficult to clean.

Cleaning the leather areas

■ Cleaning the leather

- Remove dirt and dust using a vacuum cleaner.
- Wipe off any excess dirt and dust with a soft cloth dampened with diluted detergent.
  Use a diluted water solution of approximately 5% neutral wool detergent.
- Wring out any excess water from the cloth and thoroughly wipe off all remaining traces of detergent.
- Wipe the surface with a dry, soft cloth to remove any remaining moisture. Allow the leather to dry in a shaded and ventilated area.

■ Cleaning the synthetic leather

- Remove dirt and dust using a vacuum cleaner.
- If the area gets dirty, wipe it off with a soft cloth dampened with water and wrung out.
- If dirt cannot be removed by wiping with water, wipe it off using cleaner for leather.

■ 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.

■ Dirt on the synthetic leather areas

Ingrained dirt which has been left uncleaned for long periods of time is difficult to clean. Lexus recommends cleaning the area regularly.

NOTICE

■ Preventing damage to leather surfaces

Observe the following precautions to avoid damage to and deterioration of leather surfaces:

- Remove any dust or dirt from leather surfaces immediately.
- Do not expose the vehicle to direct sunlight for extended periods of time. Park the vehicle in the shade, especially during summer.
- Do not place items made of vinyl, plastic, or containing wax on the upholstery, as they may stick to the leather surface if the vehicle interior heats up significantly.

NOTICE

■ **Preventing color from transferring to clothing**

Observe the following precautions to prevent the ink on interior upholstery such on seats from transferring to clothing.

- Do not sit down when the seat or your clothing is wet.
- Colors may be more easily transferred to white or light-colored clothing.

Maintenance requirements

To ensure safe and economical driving, day-to-day care and regular maintenance are essential. Lexus recommends the following maintenance:

WARNING

■ If your vehicle is not properly maintained

Improper maintenance could result in serious damage to the vehicle and possible serious injury or death.

■ Handling of the 12-volt battery

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.383)

Scheduled maintenance

Scheduled maintenance should be performed at specified intervals according to the maintenance schedule.

For full details of your maintenance schedule, refer to the "Warranty and Service Booklet".

Do-it-yourself maintenance

What about do-it-yourself maintenance?

Many of the maintenance items are easy to do yourself if you have a little mechanical ability and a few basic automotive tools.

Note, however, that some maintenance tasks require special tools and skills. These are best performed by qualified technicians. Even if you are an experienced do-it-yourself mechanic, we recommend that repairs and maintenance be conducted by your Lexus dealer who will keep a record of maintenance on your vehicle. This record could be helpful should you ever require Warranty Service.

■ Where to go for maintenance service?

It makes good sense to take your vehicle to your local Lexus dealer for service. Lexus technicians are well-trained specialists receiving the latest service information through technical bulletins, service tips, and in-dealership training programs. They learn to work on Lexus before they work on your vehicle, rather than while they are working on it. Doesn't that seem like the best way?

Your Lexus dealer has invested a lot of money in special Lexus tools and service equipment. It helps them to do the job better and at less cost.

Your Lexus dealer's service department will perform all of the scheduled maintenance on your vehicle reliably and economically.

■ Does your vehicle need repairs?

Be on the alert for changes in performance and sounds, and visual tip-offs that indicate service is needed. Some important clues are:

- Engine missing, stumbling or pinging
- Appreciable loss of power
- Strange engine noises
- A fluid leak under the vehicle (However, water dripping from the air conditioning system after use is normal.)
- Change in exhaust sound (This may indicate a dangerous carbon monoxide leak. Drive with the windows open and have the exhaust system checked immediately.)
- Flat-looking tires, excessive tire squeal when cornering, uneven tire wear
- Vehicle pulls to one side when driven

straight on a level road

- Strange noises related to suspension movement
- Loss of brake effectiveness, spongy feeling brake pedal, pedal almost touches the floor, vehicle pulls to one side when braking
- Engine coolant temperature continually higher than normal (→P.77, 83)

If you notice any of these clues, take your vehicle to your Lexus dealer as soon as possible. Your vehicle may need adjustment or repair.

Do-it-yourself service precautions

If you perform maintenance by yourself, be sure to follow the correct procedure as given in these sections.

Maintenance

Items	Parts and tools
12-volt battery condition (→P.383)	• Grease • Conventional wrench (for terminal clamp bolts)
Engine/power control unit coolant level (→P.381)	• "Toyota Super Long Life Coolant" or a similar high quality ethylene glycol-based non-silicate, non-amine, non-nitrite and non-borate coolant with long-life hybrid organic acid technology "Toyota Super Long Life Coolant" is premixed with 50% coolant and 50% deionized water. • Funnel (used only for adding coolant)
Hybrid battery (traction battery) air intake vent (→P.406)	• Vacuum cleaner, etc. • Phillips screwdriver
Engine oil level (→P.379)	• "Toyota Genuine Motor Oil" or equivalent • Rag or paper towel • Funnel (used only for adding engine oil)
Fuses (→P.411)	• Fuse with same amperage rating as original
Light bulbs (→P.414)	• Bulb with same number and wattage rating as original
Radiator and condenser (→P.382)	—
Tire inflation pressure (→P.401)	• Tire pressure gauge • Compressed air source
Washer fluid (→P.382)	• Water or washer fluid containing antifreeze (for winter use) • Funnel (used only for adding water or washer fluid)

WARNING

The engine compartment contains many mechanisms and fluids that may move suddenly, become hot, or become electrically energized. To avoid death or serious injury, observe the following precautions.

■ **When working on the engine compartment**

● Make sure that "POWER ON" on the multi-information display and the "READY" indicator are both off.

WARNING

- Keep hands, clothing and tools away from the moving fan 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 and rags, in the engine compartment.
- Do not smoke, cause sparks or expose an open flame to fuel. Fuel fumes are flammable.
- Take care because brake fluid can harm your hands or eyes and damage painted surfaces. If fluid gets on your hands or in your eyes, flush the affected area with clean water immediately. If you still experience discomfort, consult a doctor.

■ When working near the electric cooling fans or radiator grille

Be sure the power switch is OFF.

With the power switch in ON, the electric cooling fans may automatically start to run if the air conditioning is on and/or the coolant temperature is high. (→P.382)

■ Safety glasses

Wear safety glasses to prevent flying or falling material, fluid spray, etc., from getting in your eyes.

NOTICE

■ If you remove the air cleaner filter

Driving with the air cleaner filter removed may cause excessive engine wear due to dirt in the air.

■ If the fluid level is low or high

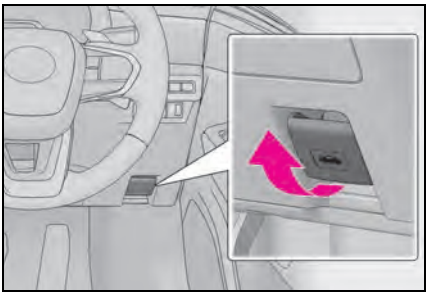
It is normal for the brake fluid level to go down slightly as the brake pads wear or when the fluid level in the accumulator is high.
If the reservoir needs frequent refilling, it may indicate a serious problem.

Hood

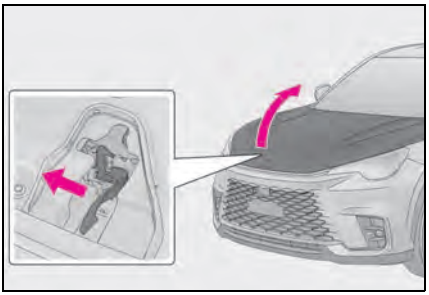
Opening the hood

1 Pull the hood lock release lever.

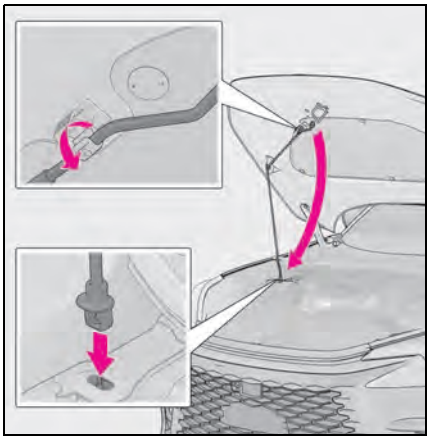
The hood will pop up slightly.



2 Pull up the auxiliary catch lever and lift the hood.



3 Hold the hood open by inserting the supporting rod into the slot.



WARNING

■ Pre-driving check

Check that the hood is fully closed and locked.
If the hood is not locked properly, it may open while the vehicle is in motion and cause an accident, which may result in death or serious injury.

■ After installing the support rod into the slot

Make sure the rod is properly inserted into the slot to prevent the hood from shutting on your head or body.

NOTICE

■ When closing the hood

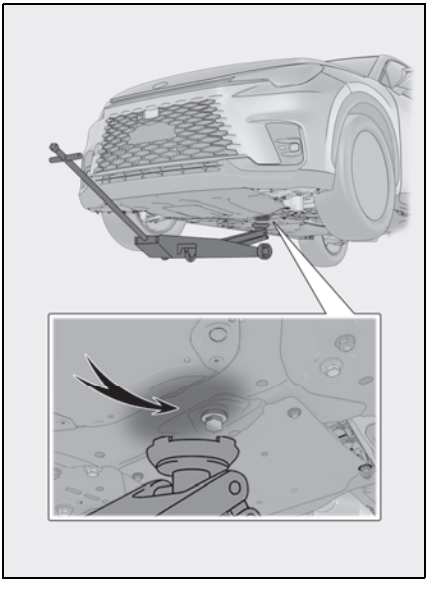
Be sure to return the support rod to its clip before closing the hood. Closing the hood without returning the support rod properly may cause the hood to be damaged.

Positioning a floor jack

When using a floor jack, follow the instructions in the manual provided with the jack and perform the operation safely.
When raising your vehicle with a floor jack, position the jack correctly. Improper placement may damage your vehicle or cause injury.

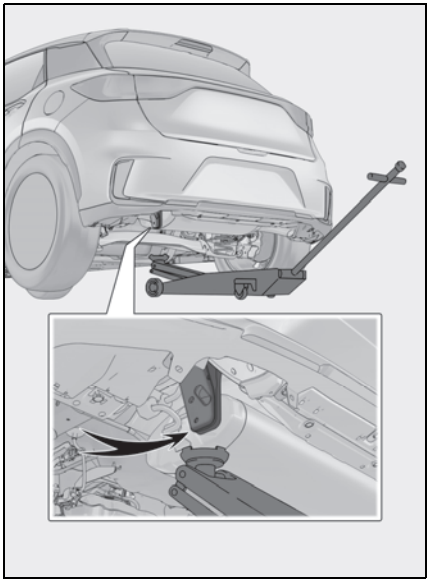
Location of the jack point

■ Front

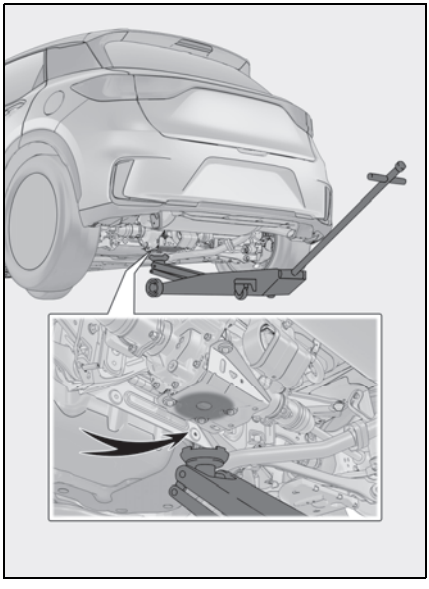


■ Rear

▶ 2WD models



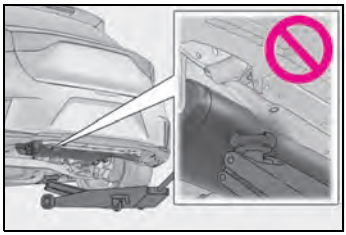
▶ AWD models



NOTICE

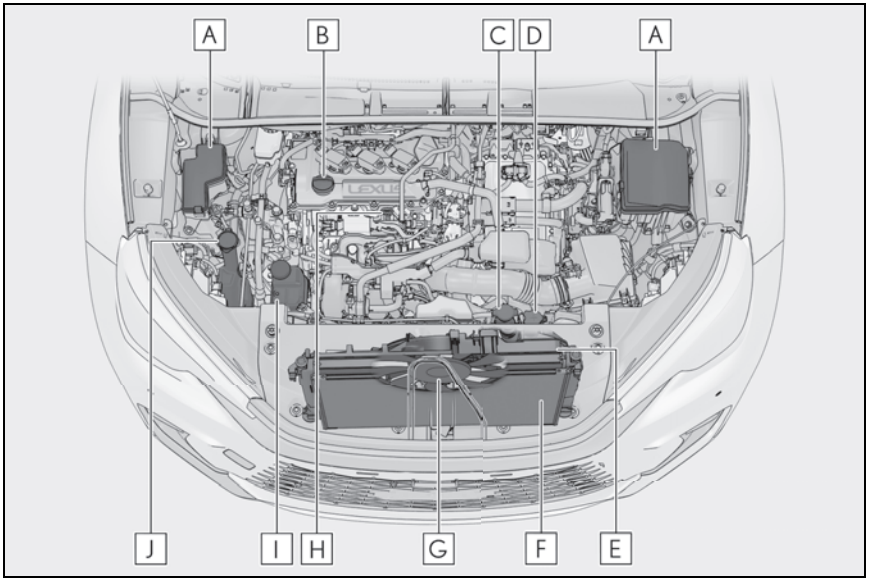
When jacking up the rear of the vehicle

Make sure that the jack saddle does not contact the muffler. If the vehicle is jacked up with the jack saddle contacting the muffler, exhaust system parts may become damaged.



Engine compartment

Components



A Fuse boxes (→P.411)

B Engine oil filler cap (→P.379)

C Engine coolant radiator cap

D Engine coolant reservoir (→P.381)

E Radiator (→P.382)

F Condenser (→P.382)

G Electric cooling fan

H Engine oil level dipstick (→P.379)

I Power control unit coolant reservoir (→P.381)

J Washer fluid tank (→P.382)

■ **12-volt battery**

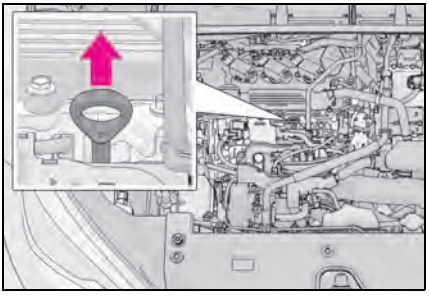
→P.383

Checking the engine oil

With the engine at operating temperature and turned off, check the oil level on the dipstick.

1 Park the vehicle on level ground. After warming up the engine and turning off the hybrid system, wait about 5 minutes for the oil to drain back into the bottom of the engine.

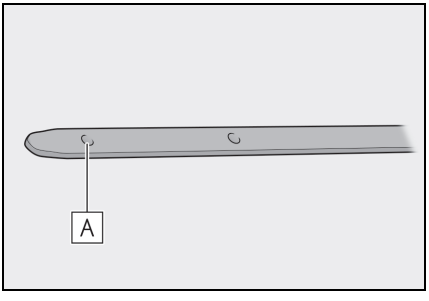
2 Holding a rag under the end, pull the dipstick out.



3 Wipe the dipstick clean.

4 Reinsert the dipstick fully.

5 Holding a rag under the end, pull the dipstick out and check whether the oil level is above low level mark.



A Low level mark

The shape of the dipstick may differ depending on the type of vehicle or engine.

6 Wipe the dipstick and reinsert it fully.

NOTICE

To prevent serious engine damage

Check the oil level on a regular basis.

Engine oil consumption

A certain amount of engine oil will be consumed while driving. In the following situations, oil consumption may increase, and engine oil may need to be refilled in between oil maintenance intervals.

- When the engine is new, for example directly after purchasing the vehicle or after replacing the engine
- If low quality oil or oil of an inappropriate viscosity is used
- When driving at high engine speeds or with a heavy load, when towing (vehicles with towing package), or when driving while accelerating or decelerating frequently
- When leaving the engine idling for a long time, or when driving frequently through heavy traffic

Engine oil level rise

If the vehicle is repeatedly driven without the engine warmed up, moisture caused by dew condensation inside the engine or fuel which did not burn mixes into the engine oil, resulting in a rise in engine oil level. However, this is not a malfunction.
For example, the engine become difficult to be warmed up in the following situations.

- When driving a short distance
- When driving at a low speed
- When the outside temperature is low

When checking the engine oil, make sure that the engine is warmed up. If the engine oil level exceeds the refill upper limit mark, contact your Lexus dealer.

Adding engine oil

■ Checking the oil type and preparing the items needed

Make sure to check the oil type and prepare the items needed before adding oil.

- Engine oil selection

→P.470

- Oil quantity (Low level mark → Refill upper limit mark)

1.2 L (1.3 qt., 1.1 Imp. qt.)

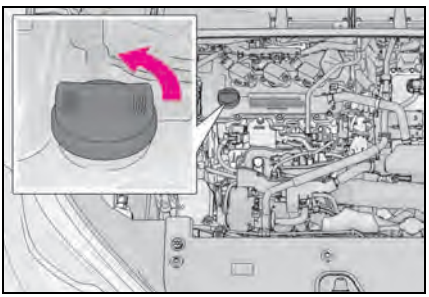
- Items

Clean funnel

■ Adding engine oil

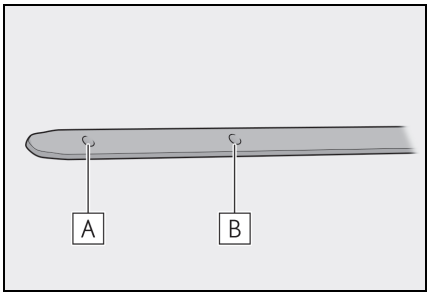
If the oil level is below or near the low level mark, add engine oil of the same type as that already in the engine.

1 Remove the oil filler cap by turning it counterclockwise.



2 Add engine oil slowly, checking the dipstick.

Make sure that the oil level does not exceed the refill upper limit mark and is between the low level mark and refill upper limit mark.



A Low level mark

B Refill upper limit mark

The shape of the dipstick may differ depending on the type of vehicle or engine.

3 Install the oil filler cap by turning it clockwise.

4 When installing the cover, reverse the steps listed.

■ After changing the engine oil

After the engine oil has been replaced, the engine oil maintenance data should be reset. Perform the following procedures:

1 Select ⚙ on the Center Display.
2 Select “Vehicle customise”.
3 Select “Utility”.
4 Select “Oil maintenance”.
5 Select “Reset”.

“The data has been reset.” will be displayed on the Center Display when the reset procedure has been completed.

WARNING

■ **Used engine oil**

- Used engine oil contains potentially harmful contaminants which may cause skin disorders such as inflammation and skin cancer, so care should be taken to avoid prolonged and repeated contact. To remove used engine oil from your skin, wash thoroughly with soap and water.
- 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

■ **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.

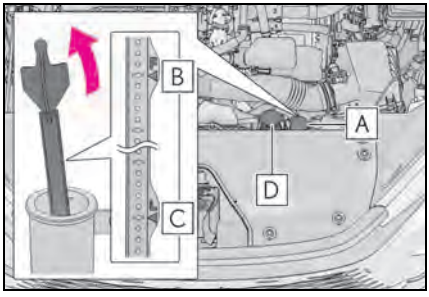
■ **Precautions when filling engine oil**

When lifting up the cover (→P.380), lift slowly to prevent any load from being applied to the weatherstrip. If strongly pulled, the weatherstrip may become damaged.

Checking the coolant

The coolant level is satisfactory if it is between the “F” and “L” lines on the reservoir when the hybrid system is cold.

■ **Engine coolant reservoir**



A Reservoir cap

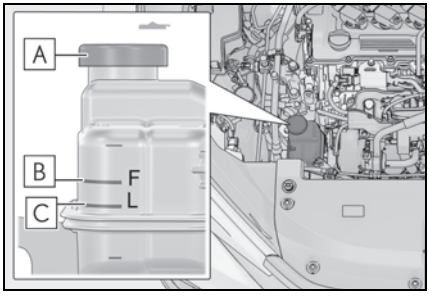
B “F” line

C “L” line

D Radiator cap

If the level is on or below the “L” line, add coolant up to the “F” line. (→P.462)

■ **Power control unit coolant reservoir**



A Reservoir cap

B “F” line

B “L” line

If the level is on or below the “L” line, add coolant up to the “F” line. (→P.462)

■ Coolant selection

Only use "Toyota Super Long Life Coolant" or a similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology.

"Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water. (Minimum temperature: -35°C [-31°F])

For more details about coolant, contact your Lexus dealer.

■ If the coolant level drops within a short time of replenishing

Visually check the radiator, hoses, engine/power control unit coolant reservoir caps, drain cock and water pump.

If you cannot find a leak, have your Lexus dealer, test the cap and check for leaks in the cooling system.

WARNING

■ When the hybrid system is hot

Do not remove the engine/power control unit coolant reservoir caps. The cooling system may be under pressure and may spray hot coolant if the cap is removed, causing serious injuries, such as burns.

NOTICE

■ When adding coolant

Coolant is neither plain water nor straight antifreeze. The correct mixture of water and antifreeze must be used to provide proper lubrication, corrosion protection and cooling. Be sure to read the antifreeze or coolant label.

■ If you spill coolant

Be sure to wash it off with water to prevent it from damaging parts or paint.

Checking the radiator and condenser

Check the radiator and condenser and clear away any foreign objects.

If either of the above parts is extremely dirty or you are not sure of their condition, have your vehicle inspected by your Lexus dealer.

WARNING

■ When the hybrid system is hot

Do not touch the radiator or condenser as they may be hot and cause serious injuries, such as burns.

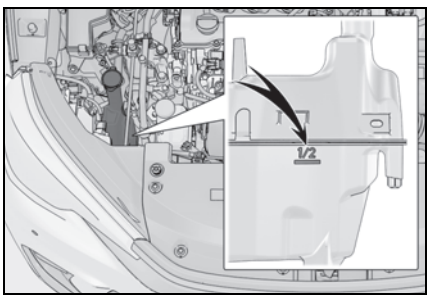
■ When the electric cooling fans are operating

Do not touch the engine compartment.

The electric cooling fans may keep rotating for about 3 minutes even after the power switch is off.
With the power switch in ON, the electric cooling fans may automatically start to run if the air conditioning is on and/or the coolant temperature is high. Be sure the power switch is OFF when working near the electric cooling fans or radiator grille.

Adding the washer fluid

If the washer fluid level is at "1/2", add washer fluid.



WARNING

■ When adding washer fluid

Do not add washer fluid when the hybrid system is hot or operating as washer fluid contains alcohol and may catch fire if spilled on the engine, etc.

NOTICE

■ Do not use any fluid other than washer fluid

Do not use soapy water or engine anti-freeze instead of washer fluid.
Doing so may cause streaking on the vehicle's painted surfaces, as well as damaging the pump leading to problems of the washer fluid not spraying.

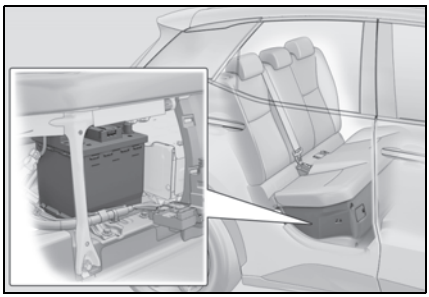
■ Diluting washer fluid

Dilute washer fluid with water as necessary.
Refer to the freezing temperatures listed on the label of the washer fluid bottle.

12-volt battery

Location

The 12-volt battery is located under the rear right side seat.



■ Before recharging

When recharging, the 12-volt battery produces hydrogen gas which is flammable and explosive. Therefore, observe the following precautions 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

- Unlocking the doors using the smart entry & start system may not be possible immediately after reconnecting the 12-volt battery. If this happens, use the wireless remote control or the mechanical key to lock/unlock the doors.
- Start the hybrid system with the power switch in ACC*. The hybrid system may not start with the power switch turned off. However, the hybrid system will operate normally from the second attempt.
- The power switch mode is recorded by the vehicle. If the 12-volt battery is disconnected and reconnected, the vehicle

will return the power switch mode to the status it was in before the 12-volt battery was disconnected. Make sure to turn off the power switch before disconnecting the 12-volt battery. Take extra care when connecting the 12-volt battery if the power switch mode prior to the 12-volt battery being disconnected is unknown.

If the system will not start even after multiple attempts at all the methods above, contact your Lexus dealer.

*: ACC mode can be enabled/disabled on the customize menu. (→P.476)

WARNING

■ 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 insufficient ventilation.

■ Emergency measures regarding electrolyte

- If electrolyte gets in your eyes
  Flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while traveling to the nearest medical facility.
- If electrolyte gets on your skin
  Wash the affected area thoroughly. If you feel pain or burning, get medical attention immediately.
- If electrolyte gets on your clothes
  It can soak through clothing on to your skin. Immediately take off the clothing and follow the procedure above if necessary.
- If you accidentally swallow electrolyte
  Drink a large quantity of water or milk. Get emergency medical attention immediately.

■ When handling the 12-volt battery

→P.460

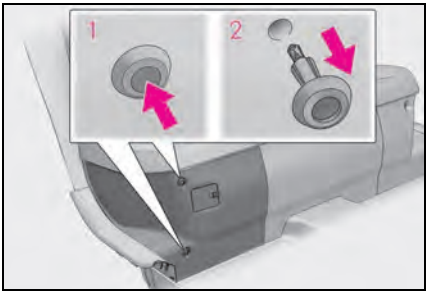
NOTICE

■ 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.

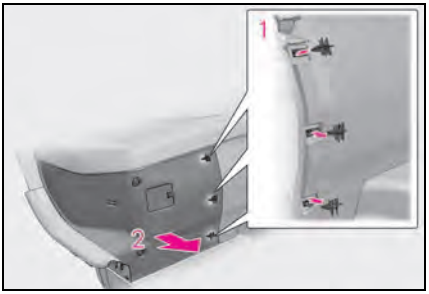
Removing the 12-volt battery cover

1 Remove the 2 clips



1 Push in the center part of the clips
2 Remove the clips

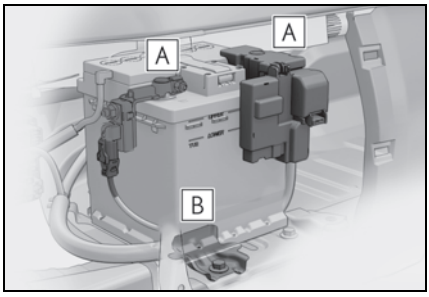
2 Remove the 12-volt battery cover.



1 Pull the cover as shown in the illustration to disengage the 3 claws.
2 Pull the cover toward the front of the vehicle to remove it.

Exterior

Make sure that the 12-volt battery terminals are not corroded and that there are no loose connections, cracks, or loose clamps.



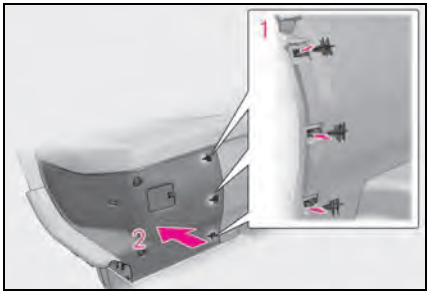
A Terminals

B Hold-down clamp

Installing the 12-volt battery cover

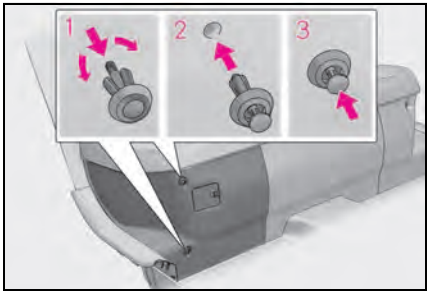
Install the cover with the clips.

1 Install the 12-volt battery cover.



1 Insert the cover as shown in the illustration to engage the 3 claws.
2 Push the cover.

2 Install the 2 clips.



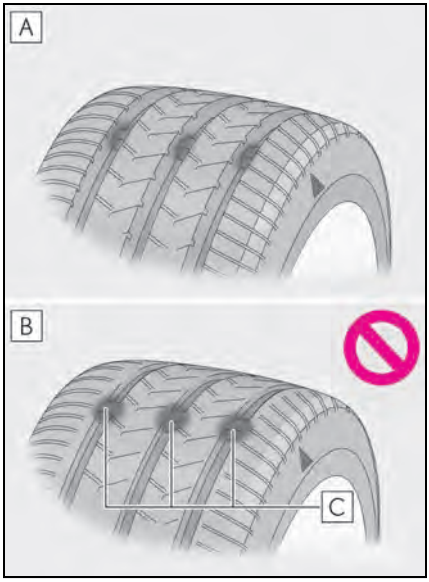
1 Push out the center part of the clips
2 Insert the clips
3 Push in the center part of the clips

Tires

Replace or rotate tires in accordance with maintenance schedules and treadwear.

Checking tires

Check if the treadwear indicators are showing on the tires. Also check the tires for uneven wear, such as excessive wear on one side of the tread.



A New tread

B Worn tread

C Treadwear indicator

The location of treadwear indicators is shown by a "TWI" or " △ " mark, etc., molded into the sidewall of each tire.

Replace the tires if the treadwear indicators are showing on a tire.

■ When to replace your vehicle's tires

Tires should be replaced if:

- The treadwear indicators are showing on a tire.
- You have tire damage such as cuts, splits, cracks deep enough to expose the fabric, and bulges indicating internal damage
- A tire goes flat repeatedly or cannot be properly repaired due to the size or location of a cut or other damage

If you are not sure, consult your Lexus dealer.

■ Tire life

Any tire over 6 years old must be checked by a qualified technician even if it has seldom or never been used or damage is not obvious.

■ If the tread on snow tires wears down below 4 mm (0.16 in.)

The effectiveness of the tires as snow tires is lost.

WARNING

■ When inspecting or replacing tires

Observe the following precautions to prevent accidents.
Failure to do so may cause damage to parts of the drivetrain as well as dangerous handling characteristics, which may lead to an accident resulting in death or serious injury.

- Do not mix tires of different makes, models or tread patterns.
  Also, do not mix tires of remarkably different treadwear.
- Do not use tire sizes other than those recommended by Lexus.
- Do not mix differently constructed tires (radial, bias-belted or bias-ply tires).
- Do not mix summer, all season and snow tires.
- Do not use tires that have been used on another vehicle.
  Do not use tires if you do not know how they were used previously.

NOTICE

■ Driving on rough roads

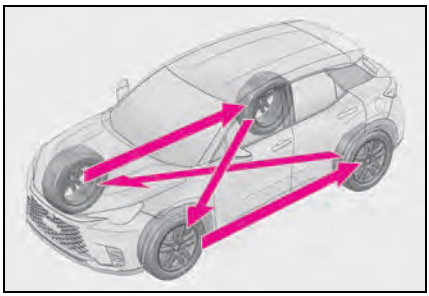
Take particular care when driving on roads with loose surfaces or potholes. These conditions may cause losses in tire inflation pressure, reducing the cushioning ability of the tires. In addition, driving on rough roads may cause damage to the tires themselves, as well as the vehicle's wheels and body.

■ If tire inflation pressure of each tire becomes low while driving

Do not continue driving, or your tires and/or wheels may be ruined.

Tire rotation

Rotate the tires in the order shown.



To equalize tire wear and help extend tire life, Lexus recommends that tire rotation is carried out approximately at the following intervals:

2WD models: Every 10000 km (6000 miles)

AWD models: Every 5000 km (3000 miles)

Make sure to perform wheel position reg-

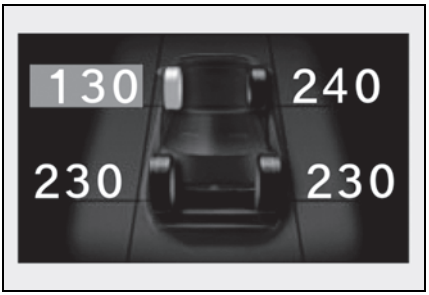
istration procedure after rotating the tires. (→P.390)

Tire pressure warning system

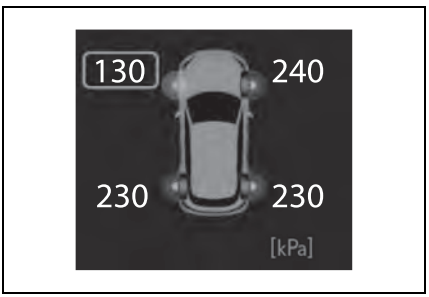
Your vehicle is equipped with a tire pressure warning system that uses tire pressure warning valves and transmitters to detect low tire inflation pressure before serious problems arise.

The tire pressure warning system of this vehicle adopts a 2-type warning system. (→P.428)

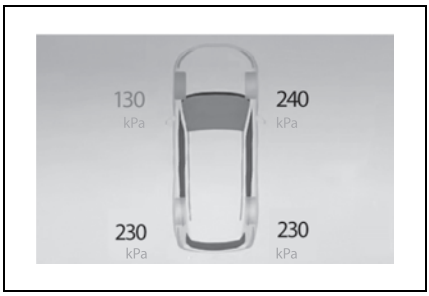
▶ Multi-information display (vehicles with 7-inch multi-information display)



▶ Multi-information display (vehicles with 12.3-inch multi-information display)



▶ Center Display



- When "Adjust Pressure" is displayed on the multi-information display (Normal Warning)

A warning with the tire pressure warning light and warning buzzer when there is an unknown level of low tire pressure with the appearance of the tire due to natural air leakage as well as the pressure lowering due to changes in the pressure according to the outside temperature.

- When "Immediately Check Tyre when Safe" is displayed on the multi-information display (Emergency Warning)

A warning with the tire pressure warning light and warning buzzer when there is a known level of low tire pressure with the appearance of the tire due to pressure suddenly lowering.
However, the system may not be able to detect sudden tire ruptures (bursting, etc.).

- The tire pressure detected by the tire pressure warning system can be displayed on the Center Display. (→P.99)

Routine tire inflation pressure checks

The tire pressure warning system does not replace routine tire inflation pressure checks. Make sure to check tire inflation

pressure as part of your routine of daily vehicle checks.

■ **Tire inflation pressure**

- It may take a few minutes to display the tire inflation pressure after the power switch is turned to ON. It may also take a few minutes to display the tire inflation pressure after inflation pressure has been adjusted.
- Tire inflation pressure changes with temperature. The displayed values may also be different from the values measured using a tire pressure gauge.

■ **Situations in which the tire pressure warning system may not operate properly**

- In the following cases, the tire pressure warning system may not operate properly.
  - If non-genuine Lexus wheels are used.
  - A tire has been replaced with a tire that is not an OE (Original Equipment) tire.
  - A tire has been replaced with a tire that is not of the specified size.
  - Tire chains, etc. are equipped.
  - If a window tint that affects the radio wave signals is installed.
  - If there is a lot of snow or ice on the vehicle, particularly around the wheels or wheel housings.
  - If the tire inflation pressure is extremely higher than the specified level.
  - If 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.
- Performance may be affected in the following situations.
  - Near a TV tower, electric power plant, gas station, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
  - When carrying a portable radio, cellular phone, cordless phone or other wireless communication device
- If tire position information is not correctly displayed due to the radio wave conditions, the display may be corrected by changing the location of the vehicle as the radio wave conditions may change.
- When the vehicle is parked, the time taken for the warning to start or go off could be extended.
- When tire inflation pressure declines rapidly for example when a tire has burst, the warning may not operate.

Installing tire pressure warning valves and transmitters

When replacing tires or wheels, tire pressure warning valves and transmitters must also be installed.

When new tire pressure warning valves and transmitters are installed, new ID codes must be registered in the tire pressure warning computer. (→P.393)

■ **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. In this case, after driving for about 10 minutes, the tire pressure warning light blinks for 1 minute and stays on to indicate a system malfunction.

NOTICE

■ **Repairing or replacing tires, wheels, tire pressure warning valves, transmitters and tire valve caps**

- When removing or fitting the wheels, tires or the tire pressure warning valves and transmitters, contact your Lexus dealer as the tire pressure warning valves and transmitters may be damaged if not handled correctly.

NOTICE

- Make sure to install the tire valve caps. If the tire valve caps are not installed, water could enter the tire pressure warning valves, corrode the valve, and cause sticking and air leaks.
- When replacing tire valve caps, do not use tire valve caps other than those specified. The cap may become stuck.

To avoid damage to the tire pressure warning valves and transmitters

When a tire is repaired with liquid sealants, the tire pressure warning valve and transmitter may not operate properly. If a liquid sealant is used, contact your Lexus dealer or other qualified service shop as soon as possible. Make sure to replace the tire pressure warning valve and transmitter when replacing the tire. (→P.389)

Registering the position of each wheel

When to register the position of each wheel

It is necessary to register the position of each wheel after performing a tire rotation.

Wheel position registration can be performed by oneself. Wheel position registration is performed by driving forward with moderate left and right turns. However, depending on the driving conditions and driving environment, registration may take some time to complete.

Registering the position of each wheel

1. Park the vehicle in a safe place, turn the power switch off and wait 15 minutes or more.
2. Start the hybrid system.

The wheel position registration procedure cannot be performed while the vehicle is moving.

3. Select on the Center Display.
4. Select “Vehicle customise”.
5. Select “Tyre pressure”.
6. Select “Tyre rotation”.
7. Select “Continue”.

A message indicating that wheel position registration is being performed will be displayed on the multi-information display. “---” will be displayed for the tire inflation pressure of each tire and wheel position registration will begin.

8. Drive straight (with occasional left and right turns) at approximately 40 km/h (25 mph) or more for approximately 10 to 30 minutes.

When wheel position registration is complete, a message indicating that registration has been completed and the inflation pressure of each tire will be displayed on the multi-information display.

Even if it is not possible to drive continuously at approximately 40 km/h (25 mph) or more, registration can be completed by driving for a long time. However, if registration does not complete after driving for 1 hour or more, park the vehicle in a safe place and leave it with the power switch in ON for approximately 15 minutes or more, and then perform the driving procedure again.

■ **When performing wheel position registration**

- Normally, wheel position registration can be completed within approximately 30 minutes.
- Wheel position registration is performed while driving at a vehicle speed of approximately 40 km/h (25 mph) or more.

■ **Wheel position registration procedure**

- If the power switch is turned off while registering the wheel position, the next time the power switch is turned to ON, the wheel position registration will resume and it will not be necessary to restart the procedure.
- While the position of each wheel is being determined and the inflation pressures are not being displayed, if the inflation pressure of a tire drops, the tire pressure warning light will come on.

■ **If the wheel position cannot be registered easily**

- In the following situations, wheel position registration may take longer than usual to be completed or may not be possible.
  - Vehicle is not driven at approximately 40 km/h (25 mph) or more
  - Vehicle is driven on unpaved roads
- If wheel position registration does not complete after driving for 1 hour or more, park the vehicle in a safe place for approximately 15 minutes and then drive the vehicle again.
- If the vehicle is reversed during wheel position registration, all data collected until then will be cleared. Perform driving again.

Setting the tire pressure

■ **When you need to setting the tire pressure**

In the following situations, it will be necessary to perform the tire inflation pressure setting procedure of the tire pressure warning system.

- When the specified tire inflation pressure has changed, such as due to carried load, etc.
- When the tire inflation pressure is changed such as when the tire size is changed.

If the tire inflation pressure has been adjusted to the specified level, perform the tire inflation setting procedure by selecting specified inflation pressure on the Center Display. (→P.391)

When the tire inflation pressure is to be other than specified, such as when tires other than the specified size are used, etc., set the tire inflation pressure using the current pressure. Make sure to adjust the tire inflation pressure of each tire to the appropriate level before performing tire pressure setting. The tire pressure warning system operates based on this tire inflation pressure. (→P.392)

■ **Setting by selecting a specified tire inflation pressure**

1 Start the hybrid system.

The tire inflation pressure cannot be set while the vehicle is moving.

2 Select ⚙ on the Center Display.

3 Select “Vehicle customise”.

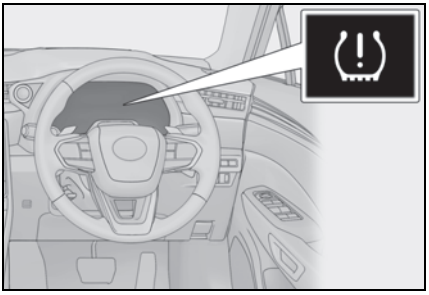
4 Select “Tyre pressure”.

5 Select “Set indicated air pressure” and then select the desired front and rear tire pressures.

6 Select “OK”.

The tire pressure warning light will slowly blink 3 times.

After setting the tire inflation pressure, a message indicating that setting has been completed will be displayed on the multi-information display.



■ **Setting using the current tire inflation pressure**

1 Adjust the tire inflation pressure of each tire to the appropriate level.

Make sure to adjust the tire inflation pressure with the tires cold.

2 Start the hybrid system.

The tire inflation pressure cannot be set while the vehicle is moving.

3 Select ⚙ on the Center Display.

4 Select “Vehicle customise”.

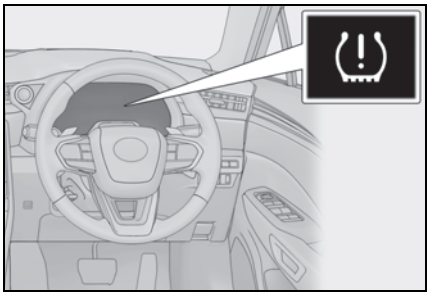
5 Select “Tyre pressure”.

6 Select “Set current air pressure”.

7 Select “Continue”.

The tire pressure warning light will slowly blink 3 times and a message indicating that tire inflation pressure is being set will be displayed on the multi-information display.

After setting the tire inflation pressure, a message indicating that setting has been completed will be displayed on the multi-information display.



■ **Warning performance of the tire pressure warning system (Setting using the current tire inflation pressure)**

- When performing the tire pressure setting using the current tire inflation pressure, the warning timing of the tire pressure warning system will vary according to the conditions under which tire pressure setting was performed. Therefore, a warning may be output even if the tire inflation pressure drops slightly or if the tire inflation pressure increases above that when the tire inflation pressure was set.
- Make sure to perform the tire pressure setting procedure after adjusting the tire inflation pressure. Also, make sure the tires are cold before performing the tire pressure setting procedure or adjusting the tire inflation pressure.

■ **Tire inflation pressure setting procedure (Setting using the current tire inflation pressure)**

- If the power switch is turned off while setting the tire inflation pressure, the next time the power switch is turned to ON, the setting procedure will resume and it will not be necessary to restart the procedure.
- If the tire inflation pressure setting procedure is started unnecessarily, adjust the tire inflation pressure to the specified level with the tires cold and then perform setting by selecting a specified tire inflation pressure, or perform the tire inflation pressure setting procedure with the current tire inflation pressure.

■ **If the tire inflation pressure cannot be set easily**

- Normally, it takes approximately 3 minutes to complete the setting procedure to the current tire inflation pressure.
- If the tire pressure warning light does not blink 3 times when starting the tire inflation pressure setting procedure, the procedure may not have started. Perform the procedure again from the beginning.
- If tire inflation pressure setting procedure cannot be completed after performing the above procedure, contact your Lexus dealer.

WARNING

■ **When setting using the current tire inflation pressure**

Make sure to adjust the tire inflation pressure of each tire to the appropriate level before performing tire pressure setting. Otherwise, the tire pressure warning light may not illuminate even if the tire inflation pressure drops or may illuminate even though the tire inflation pressure is normal.

Registering ID codes

■ When to register ID codes

The tire pressure warning valve and transmitter is equipped with a unique ID code. When new tire pressure warning valves and transmitters are installed, new ID codes must be registered in the tire pressure warning computer.

■ How to registration ID code

Before performing ID code registration, make sure that no wheels with tire pressure warning valve and transmitters installed are near the vehicle.

1 Park the vehicle in a safe place, turn the power switch off and wait 15 minutes or more.

2 Start the hybrid system.

The ID code registration procedure cannot be performed while the vehicle is moving.

3 Select ⚙ on the Center Display.

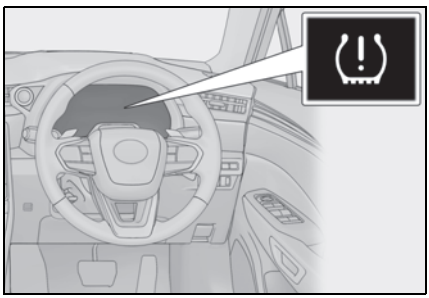
4 Select “Vehicle customise”.

5 Select “Tyre pressure”.

6 Check if the desired wheel set (“Set 1” or “Set 2”) is displayed.

ID codes will be registered to the displayed wheel set.
To change the wheel set to be registered, select the displayed set, and then select the wheel set you wish to register.

If ID codes have already been registered for that wheel set, the tire pressure warning light will slowly blink 3 times, and a message indicating that change is occurring will be displayed on the multi-information display.



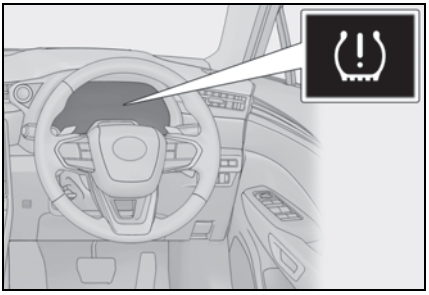
7 Select “New tyre registration”.

8 Select “Continue”.

The tire pressure warning light will slowly blink 3 times and a message indicating that ID code registration is being performed will be displayed on the multi-information display. Wheel set changing will be canceled and registration will begin.

When registration is being performed, the

tire pressure warning light will blink for approximately 1 minute then illuminate and "---" will be displayed for the inflation pressure of each tire on the multi-information display.



9 Drive straight (with occasional left and right turns) at approximately 40 km/h (25 mph) or more for approximately 10 to 30 minutes.

When registration is complete, the tire pressure warning light will turn off and a message indicating that registration has been completed will be displayed on the multi-information display.

Registration may take longer than normal to complete if the vehicle speed cannot be maintained at approximately 40 km/h (25 mph) or more. If registration cannot be completed after driving for 1 hour or more, perform the registration procedure again from the beginning.

10 If the tire inflation pressure of the wheel set installed differs from that of the previous set, it will be necessary to perform the tire inflation pressure setting procedure of the tire pressure warning system. (→P.391)

If the specified tire inflation pressure is the same, it will not be necessary to perform the tire inflation pressure setting procedure.

■ **When registering ID codes**

- Normally, wheel position registration can be completed within approximately 30 minutes.
- ID code registration is performed while driving at a vehicle speed of approximately 40 km/h (25 mph) or more.
- ID codes can be registered by yourself, but depending on the driving conditions and driving environment, registration may take some time to complete.
- When using a wheel set which all of the ID codes have already been registered, the wheel set can be changed in a short amount of time. (→P.395)

■ **If ID codes are not registered easily**

- In the following situations, ID code registration may take longer than usual to be completed or may not be possible.
  - When the vehicle has not been parked for approximately 15 minutes or more before being driven
  - Vehicle is not driven at approximately 40 km/h (25 mph) or more
  - Vehicle is driven on unpaved roads
  - Vehicle is driven near other vehicles and system cannot recognize tire pressure warning valve and transmitters of your vehicle over those of other vehicles
  - Wheel with tire pressure warning valve and transmitter installed is inside or near the vehicle
- If the vehicle is reversed during registration, all data collected until then will be cleared. Perform driving again.
- If registration does not complete after driving for 1 hour or more, perform the ID code registration procedure again from the beginning.
- If the tire pressure warning light does not blink 3 times when starting ID code registration procedure, the procedure may not have started. Perform the procedure again from the beginning.
- If the ID codes cannot be registered even when performing the above procedure, contact your Lexus dealer.

Canceling ID code registration

To cancel ID code registration after it has been started, select "New tyre registration" again on the Center Display.

If ID code registration has been canceled, the tire pressure warning light will turn off.

If the warning light does not turn off, ID code registration may not have been cancelled correctly. To cancel registration, select "New tyre registration" again on the Center Display.

Selecting wheel set

Your vehicle is equipped with a tire pressure warning system with a function to register two sets of ID codes. This allows for registration of a second wheel set, for example a winter set.

- The wheel set can be changed only if a second wheel set has been registered to the system. If a second wheel set has not been registered, "Set 2 (Unregistered)" will be displayed and it will not be possible to change to the selected wheel set.

ID codes can be registered by yourself. (→P.393)

- Only a change between both registered wheel set is possible, mixing between these wheel sets is not supported.
- While registering ID codes, it may not be possible to change between wheel sets normally. Cancel registration before changing between wheel sets.

■ Changing ID codes between different wheel sets

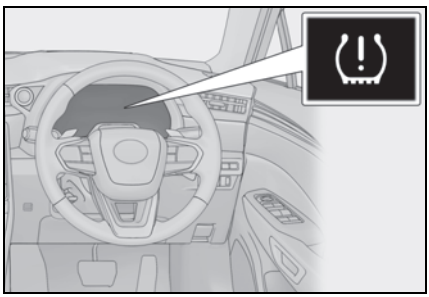
1. Install the desired wheel set.
2. Select ⚙ on the Center Display.
3. Select "Vehicle customise".
4. Select "Tyre pressure".
5. Select the wheel set ("Set 1" or "Set 2") displayed for the set selection setting.
6. Select the wheel set you wish to register, and then select "OK".

The tire pressure warning light will slowly blink 3 times, a message indicating that change is occurring will be displayed, and the wheel set change will begin.

Wheel set change will begin and the tire pressure warning light will blink for 1 minute and then illuminate. Also, while the change is being performed, "---" will be displayed for the tire inflation pressure of each tire on the multi-information display.

After approximately 2 minutes, the wheel set change will complete, the tire pressure warning light will turn off, and a completion message will be displayed on the multi-information display.

If changing does not complete after approximately 4 minutes, a message indicating that the change could not be completed will be displayed.
Check which wheel set is installed and perform the change procedure again from the beginning.



7 If the specified tire inflation pressure of the wheel set installed differs from that of the previous set, it will be necessary to perform the tire inflation pressure setting procedure of the tire pressure warning system. (→P.391)

If the specified tire inflation pressure is the same, it will not be necessary to perform the tire inflation pressure setting procedure.

8 Register the position of each wheel. (→P.390)

Replacing the tire

When replacing the tires yourself, prepare the necessary tools and a jack.

This vehicle uses wheel bolts.

When using wheels that were installed when the vehicle was shipped from the factory, specialized Lexus genuine wheel bolts must be used.

If necessary tire replacement seems difficult to perform, contact your Lexus dealer.

Before jacking up the vehicle

- Stop the vehicle in a safe place on a hard, flat surface.
- Set the parking brake.
- Shift the shift position to P.
- Turn off the intrusion sensor (→P.69)
- Stop the hybrid system.
- Turn on the emergency flashers. (→P.416)
- Vehicles with power back door: Turn off the power back door function. (→P.126)

WARNING

■ Using the tire jack

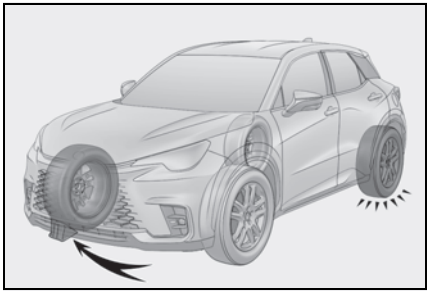
Observe the following precautions. Improper use of the tire jack may cause the vehicle to suddenly fall off the jack, leading to death or serious injury.

WARNING

- Do not use the tire jack for any purpose other than replacing tires or installing and removing tire chains
- Only use the tire jack that comes with this vehicle for replacing a flat tire. Do not use it on other vehicles, and do not use other tire jacks for replacing tires on this vehicle.
- Put the jack properly in its jack point.
- Do not put any part of your body under the vehicle while it is supported by the jack.
- Do not start the hybrid system or drive the vehicle while the vehicle is supported by the jack.
- Do not raise the vehicle while someone is inside.
- When raising the vehicle, do not put an object on or under the jack.
- Do not raise the vehicle to a height greater than that required to replace the tire.
- Use a jack stand if it is necessary to get under the vehicle.
- When lowering the vehicle, make sure that there is no-one near the vehicle. If there are people nearby, warn them vocally before lowering.

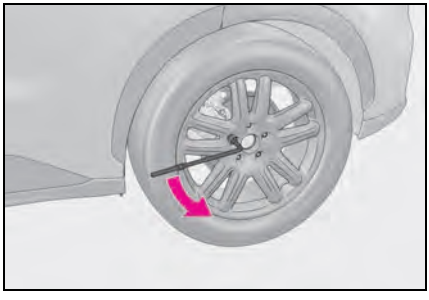
Removing a tire

1 Chock the tires.



Tire	Wheel chock positions
Front left-hand side	Behind the rear right-hand side tire
Front right-hand side	Behind the rear left-hand side tire
Rear left-hand side	In front of the front right-hand side tire
Rear right-hand side	In front of the front left-hand side tire

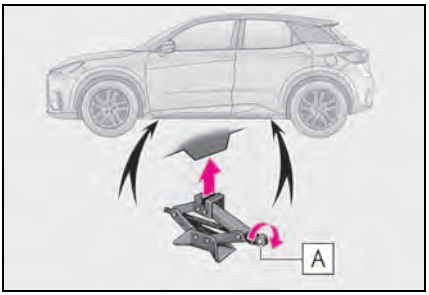
2 Using a wheel bolt wrench, slightly loosen the wheel bolts (approximately one turn).



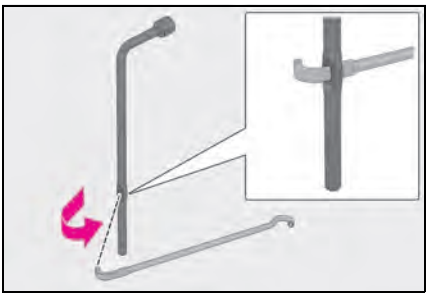
3 Turn the tire jack portion A by hand until the notch of the jack is in contact with the jack point.

The jack point guides are located under

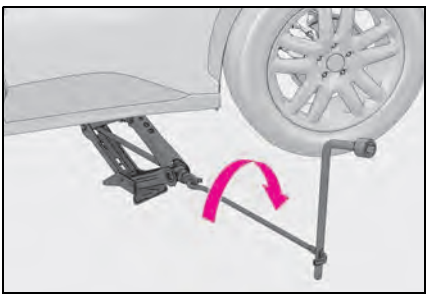
the rocker panel. They indicate the jack point positions.



4 Install the wheel bolt wrench in jack handle.

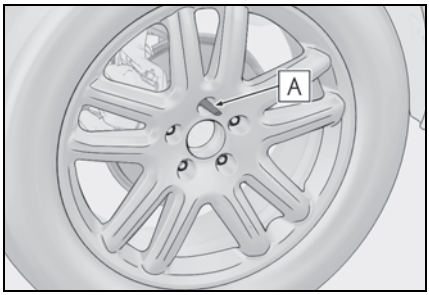


5 Raise the vehicle until the tire is slightly raised off the ground.



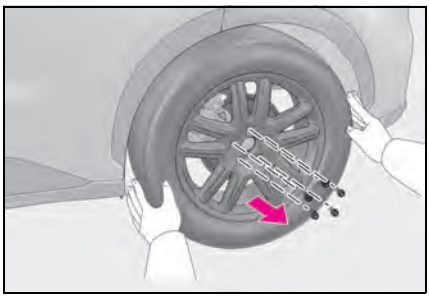
6 Remove the uppermost wheel bolt and install the guide pin [A] by hand.

Turn the guide pin clockwise to tighten it until it stops.



7 Remove all the wheel bolts and the tire.

When resting the tire on the ground, place the tire so that the wheel design faces up to avoid scratching the wheel surface.



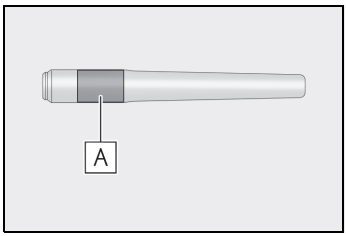
WARNING

■ Replacing a tire

- Do not touch the disc wheels or the area around the brakes immediately after the vehicle has been driven. After the vehicle has been driven the disc wheels and the area around the brakes will be extremely hot. Touching these areas with hands, feet or other body parts while changing a tire, etc. may result in burns.

WARNING

- When removing or installing a tire, make sure to use the guide pin. Also, the guide pin is made of resin. It may be damaged if the wheel is placed anywhere other than A or if a large amount of force is applied to the guide pin.



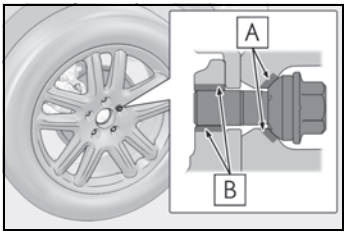
- Failure to follow these precautions could cause the wheel bolts to loosen and the tire to fall off, resulting in death or serious injury.

- The contact surfaces of the wheel bolt and wheel are designed specifically to fit together. When using wheels that were installed when the vehicle was shipped from the factory, use specialized Lexus genuine wheel bolts. Do not use wheel bolts designed for other models, model years or types even if they are Lexus genuine parts. If the vehicle does not have wheels that were installed to the vehicle when it was shipped from the factory, the factory-installed wheel bolts may not be appropriate for the wheel. Contact either the retailer where the wheels were purchased or the manufacturer of the wheels for proper installation advice.

- Never apply oil or grease to the wheel bolts or their contact surface on the wheel A .

Doing so may cause the wheel bolts to be tightened excessively, leading to damage to the wheel bolts, the threaded portion the wheel bolts install to B , or the wheel.

Remove any oil or grease that has adhered when installing the wheel bolts.



- After replacing a tire, check the tightening torque as soon as possible. If you cannot confirm the tightening torque yourself, have the vehicle inspected at your Lexus dealer.

- If a wheel bolt hole in a wheel or the threads of a wheel bolt or the wheel hub are deformed, cracked, rusty or otherwise damaged, have the vehicle inspected by your Lexus dealer.

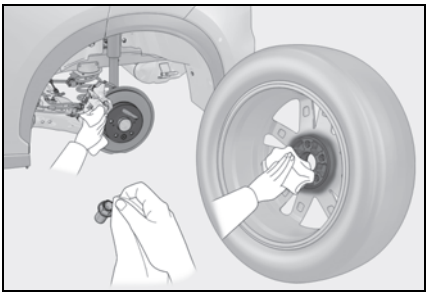
- When tightening the wheel bolts, do not tighten them excessively. Doing so may cause the wheel bolts, the threads of the wheel hub, or the wheel to be damaged.

Installing the tire

1 Remove any dirt or foreign matter from the wheel contact surface.

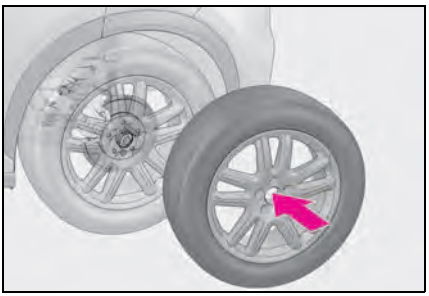
If foreign matter is not removed, the wheel bolts may loosen while the vehicle is in

motion, and the wheel may come off.



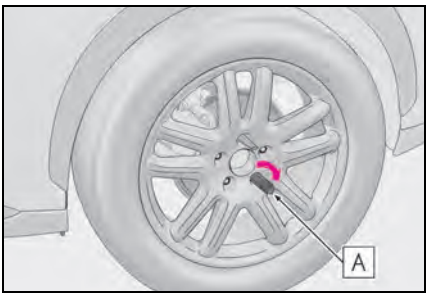
2 Align a wheel bolt hole on the tire with the guide pin, and set the tire on the guide pin.

Align the center hole of the wheel with the center of the hub and securely set the tire so that the wheel and hub contact surfaces

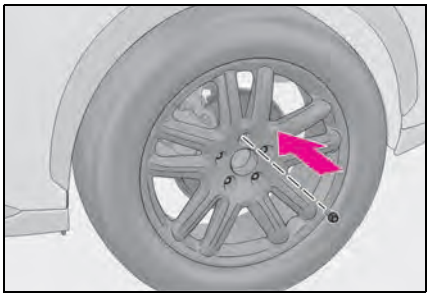


3 Loosely tighten each wheel bolt by hand or using a wheel bolt socket A .

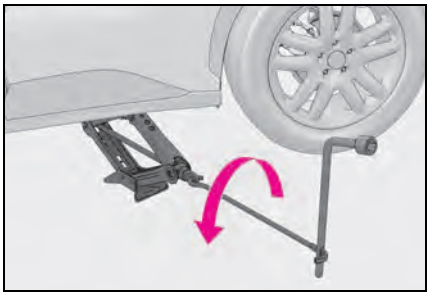
Do not use the wheel bolt socket for anything other than loosely tightening the wheel bolts by hand.



4 Remove the guide pin and loosely tighten the wheel bolt as in step **3**.

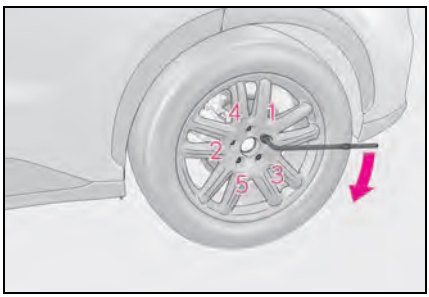


5 Lower the vehicle.



6 Securely tighten the wheel bolts two or three times in the order shown in the illustration using a wheel bolt wrench.

Tightening torque:
140 N•m (14.3 kgf•m, 103 ft•lbf)



7 Stow all the tools.

WARNING

■ When installing the tire

Failure to follow these precautions could cause the wheel bolts to loosen and the tire to fall off, resulting in death or serious injury.

- Never use oil or grease on the wheel bolts.
  Oil and grease may cause the wheel bolts to be excessively tightened, leading to bolt or disc wheel damage. In addition, the oil or grease can cause the wheel bolts to loosen and the wheel may fall off, causing a serious accident. Remove any oil or grease from the wheel bolts.
- Have the wheel bolts tightened with a torque wrench to 140 N•m (14.3 kgf•m, 103 ft•lbf) as soon as possible after changing wheels.
- Do not attach a heavily damaged wheel ornament, as it may fly off the wheel while the vehicle is moving.
- When installing a tire, only use wheel bolts that have been specifically designed for that wheel.
- If there are any cracks or deformations in the bolt screws, bolt threads or bolt holes of the wheel, have the vehicle inspected by your Lexus dealer.

■ After using the tools

Before driving, make sure all the tools are stored securely in place. Failure to do so may cause injury in case of a collision or sudden braking.

NOTICE

■ Repairing or replacing tires, wheels, tire pressure warning valves, transmitters and tire valve caps

→P.389

Tire inflation pressure

Make sure to maintain proper tire inflation pressure. Tire inflation pressure should be checked at least once per month. However, Lexus recommends that tire inflation pressure be checked once every two weeks.

■ Effects of incorrect tire inflation pressure

Driving with incorrect tire inflation pressure may result in the following:

- Reduced fuel economy
- Reduced driving comfort and poor handling
- Reduced tire life due to wear
- Reduced safety
- Damage to the drive train

If a tire needs frequent inflating, have it checked by your Lexus dealer.

■ Instructions for checking tire inflation pressure

When checking tire inflation pressure, observe the following:

- Check only when the tires are cold.
  If your vehicle has been parked for at least 3 hours or has not been driven for more than 1.5 km or 1 mile, you will get an accurate cold tire inflation pressure reading.
- Always use a tire pressure gauge.
  It is difficult to judge if a tire is properly inflated based only on its appearance.
- It is normal for the tire inflation pressure to be higher after driving as heat is generated in the tire. Do not reduce tire inflation pressure after driving.
- Passengers and luggage weight should be placed so that the vehicle is balanced.

WARNING

■ **Proper inflation is critical to save tire performance**

Keep your tires properly inflated.
If the tires are not properly inflated, the following conditions may occur which could lead to an accident resulting in death or serious injury:

- Excessive wear
- Uneven wear
- Poor handling
- Possibility of blowouts resulting from overheated tires
- Air leaking from between tire and wheel
- Wheel deformation and/or tire damage
- Greater possibility of tire damage while driving (due to road hazards, expansion joints, sharp edges in the road, etc.)

NOTICE

■ **When inspecting and adjusting tire inflation pressure**

Be sure to put the tire valve caps back on.

If a valve cap is not installed, dirt or moisture may get into the valve and cause an air leak, resulting in decreased tire inflation pressure.

Wheels

If a wheel is bent, cracked or heavily corroded, it should be replaced. Otherwise, the tire may separate from the wheel or cause a loss of handling control.

Wheel selection

When replacing wheels, care should be taken to ensure that they are equivalent to those removed in load capacity, diameter, rim width and inset*.

Replacement wheels are available at your Lexus dealer.

*: Conventionally referred to as offset.

Lexus does not recommend using the following:

- Wheels of different sizes or types
- Used wheels
- Bent wheels that have been straightened

■ **When replacing wheels**

The wheels of your vehicle are equipped with tire pressure warning valves and transmitters that allow the tire pressure warning system to provide advance warning in the event of a loss in tire inflation pressure. Whenever wheels are replaced, tire pressure warning valves and transmitters must be installed. (→P.388)

WARNING

■ When replacing wheels

- Do not use wheels that are a different size from those recommended in the Owner's Manual, as this may result in a loss of handling control.
- Never use an inner tube in a leaking wheel which is designed for a tubeless tire. Doing so may result in an accident, causing death or serious injury.

■ Use of defective wheels prohibited

Do not use cracked or deformed wheels.

Doing so could cause the tire to leak air during driving, possibly causing an accident.

NOTICE

■ Replacing tire pressure warning valves and transmitters

- Because tire repair or replacement may affect the tire pressure warning valves and transmitters, make sure to have tires serviced by your Lexus dealer or other qualified service shop. In addition, make sure to purchase your tire pressure warning valves and transmitters at your Lexus dealer.
- Ensure that only genuine Lexus wheels are used on your vehicle.
  Tire pressure warning valves and transmitters may not work properly with non-genuine wheels.

Aluminum wheel precautions

- Use only Lexus wheel bolts and wrenches designed for use with your aluminum wheels.
- When rotating, repairing or changing your tires, check that the wheel bolts are still tight after driving 1600 km (1000 miles).
- Be careful not to damage the aluminum wheels when using tire chains.
- Use only Lexus genuine balance weights or equivalent and a plastic or rubber hammer when balancing your wheels.

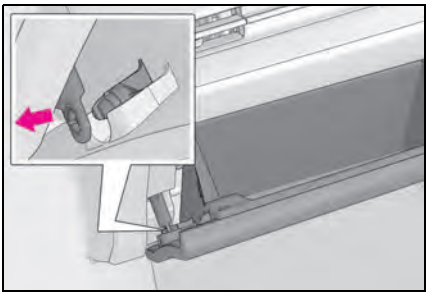
Air conditioning filter

The air conditioning filter must be changed regularly to maintain air conditioning efficiency.

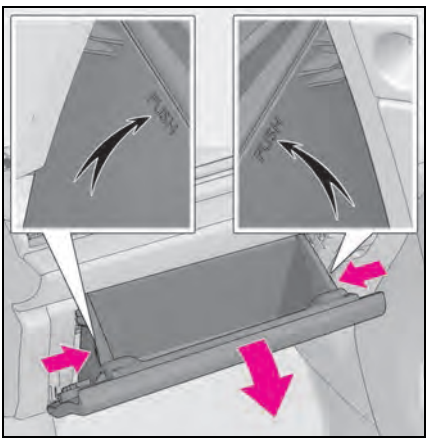
Removing the air conditioning filter

1 Turn the power switch off.

2 Open the glove box and slide off the damper.

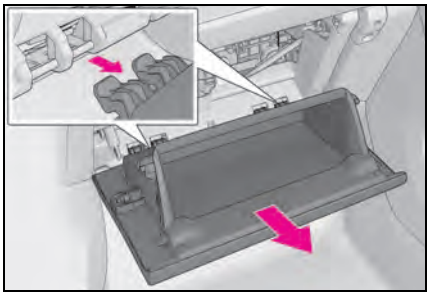


3 Push in each side of the glove box to disconnect the claws, and then slowly and fully open the glove box while supporting it.

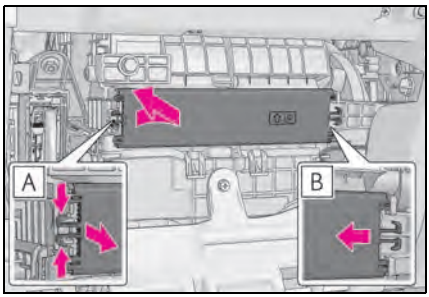


4 With the glove box fully open, slightly lift up the glove box and pull toward the seat to detach the bottom of the glove box.

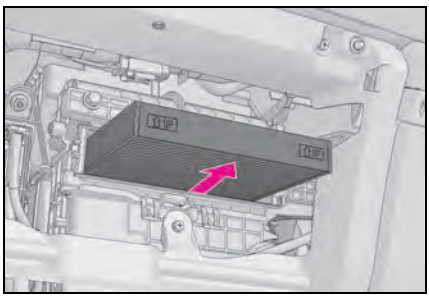
Do not use excessive force if the glove box does not detach when lightly pulled. Instead, pull toward the seat while slightly adjusting the height of the glove box.



5 Unlock the filter cover (A), pull the filter cover out of the claws (B), and remove the filter cover.

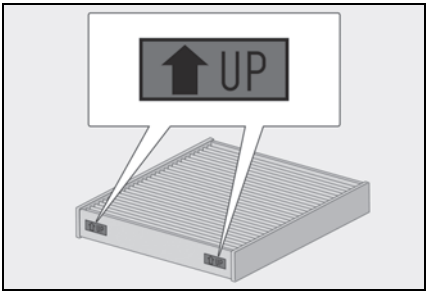


6 Remove the filter.



7 Replace the air conditioning filter with a new one.

The " ⇧ UP" marks shown on the filter and the filter case should be pointing up.



■ Checking interval

Inspect and replace the air conditioning filter according to the maintenance schedule. In dusty areas or areas with heavy traffic flow, early replacement may be required. (For scheduled maintenance information, please refer to the "Warranty and Service Booklet".)

■ If air flow from the vents decreases dramatically

The filter may be clogged. Check the filter and replace if necessary.

■ Air conditioning filter with deodorizing function

When fragrances are placed in your vehicle, the deodorizing effect may become significantly weakened in a short period. When an air conditioning odor comes out continuously, replace the air conditioning filter.

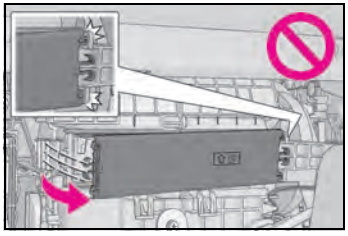
NOTICE

■ When using the air conditioning system

Make sure that a filter is always installed. Using the air conditioning system without a filter may cause damage to the system.

■ To prevent damage to the filter cover

When moving the filter cover in the direction of arrow to release the fitting, pay attention not to apply excessive force to the claws. Otherwise, the claws may be damaged.



Cleaning the hybrid battery (traction battery) air intake vent

To prevent the fuel economy from being affected, visually inspect the hybrid battery (traction battery) air intake vent periodically for clogs.

If it is dusty or clogged or if "Maintenance Required for Traction Battery Cooling Parts See Owner's Manual" is displayed on the multi-information display, clean the air intake vent using the following procedures:

■ Scheduled maintenance of the air intake vent is necessary when

In some situations such as when the vehicle is used frequently or in heavy traffic or dusty areas, the air intake vent may need to be cleaned more regularly.

For details, refer to the "Warranty and Service Booklet".

■ Cleaning the air intake vent

Improper handling of the air intake vent cover and filter may result in damage to them. If you have any concerns about cleaning the filter, contact your Lexus dealer.

NOTICE

■ If "Maintenance Required for Traction Battery Cooling Parts See Owner's Manual" is displayed on the multi-information display

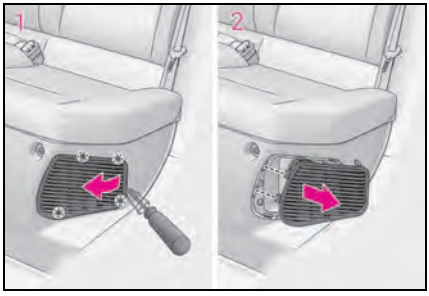
Clean the air intake vent immediately.

If the vehicle is continuously driven with the warning message displayed, it may cause a malfunction or output restriction of the hybrid battery (traction battery).

Cleaning procedure

1 Turn the power switch off.

2 Using a flathead screwdriver, remove the air intake vent cover.

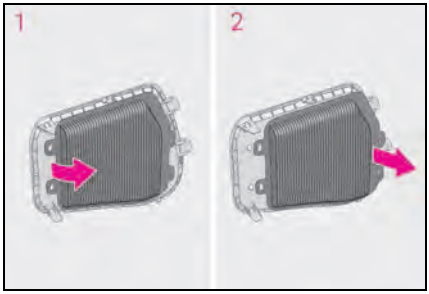


1 Pull the cover as shown in the illustration to disengage the 4 claws, starting from the claw in the upper right corner.

2 Pull the cover toward the front of the vehicle to remove it.

3 Remove the filter from the air intake vent cover.

If dust has accumulated on the air intake vent cover, remove the dust with a vacuum cleaner, etc.

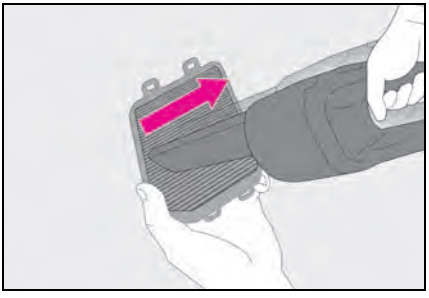


1 Disengage the 2 claws as shown in the illustration.

2 Disengage the 2 claws and remove the filter from the cover.

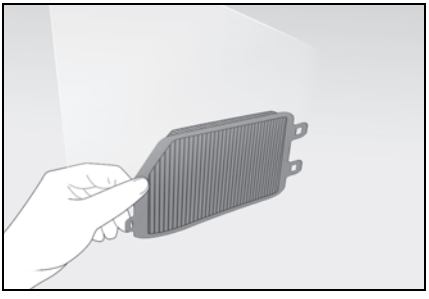
4 Remove the dust and sand from the filter.

Using a vacuum cleaner, etc., absorb dust and sand from the filter by profiling the nozzle lightly along the fold.

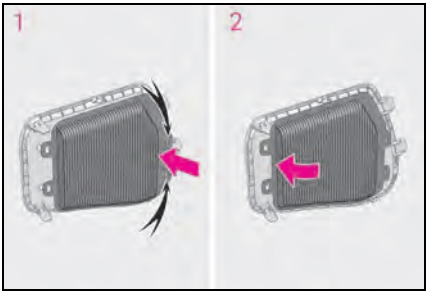


5 Hold the filter to the light and check if it is not clogged.

If the dust or sand cannot be removed completely, contact your Lexus dealer.



6 Reinstall the filter to the cover.

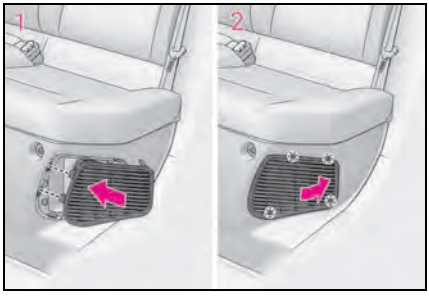


1 Engage the filter to the 2 claws as shown in the illustration.

2 Engage the filter to the 2 claws to reinstall the filter.

Make sure that the filter is not crooked or deformed when installing it.

7 Install the air intake vent cover.



1 Insert the tab of the cover as shown in the illustration.

2 Push the cover to engage the 4 claws.

▶ If "Maintenance Required for Traction Battery Cooling Parts See Owner's Manual" was displayed on the multi-information display

8 Start the hybrid system and check that the warning message is no longer displayed.

It may be necessary to drive the vehicle for approximately 20 minutes before the warning message is displayed again then disappears.

If the warning message does not disappear after some time, have the vehicle inspected by your Lexus dealer.

■ If the dust or sand on the filter cannot be removed

It is recommended to use a vacuum cleaner with plastic brushes.

WARNING

■ When cleaning the air intake vent

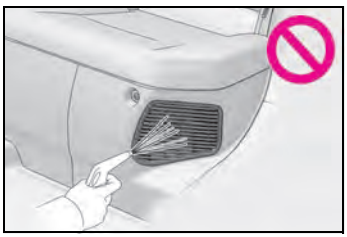
- Do not use water or other liquids to clean the air intake vent. If water is applied to the hybrid battery (traction battery) or other components, a malfunction or fire may occur.
- Do not touch the service plug located near the air intake vent. (→P.62)
- Before cleaning the air intake vent, make sure to turn the power switch off to stop the hybrid system.
- Do not put a hand or leg in the air intake vent. If it is caught in a cooling fan, or if it touches a high voltage part that results in an electric shock, death or serious injuries may result.

NOTICE

■ When cleaning the air intake vent

Do not use an air blow gun, etc.

Dust may be blown out, possibly causing a malfunction or output restriction of the hybrid battery (traction battery).



■ To prevent damage to the vehicle

Observe the following precautions:

- Do not allow water or foreign matter to enter the air intake vent.
- Make sure to reinstall the filter and cover to their original positions after cleaning.
- Do not install anything to the air intake vent other than the exclusive filter for this vehicle or use the vehicle without the filter installed.

■ To prevent damage to the filter

Observe the following precautions.

If the filter is damaged, have it replaced with a new filter by your Lexus dealer.

- Do not use an air blow gun, etc.
- Do not press hard a vacuum cleaner, etc. against the filter.
- Do not use a hard brush, such as a metal brush.
- Do not break the fold of the filter.

Electronic key battery

Replace the battery with a new one if it is depleted.
As the key may be damaged if the following procedure is not performed properly, it is recommended that key battery replacement be performed by your Lexus dealer.

If the electronic key battery is depleted

The following symptoms may occur:

- The smart entry & start system and wireless remote control will not function properly.
- The operational range will be reduced.

Items to prepare

Prepare the following before replacing the battery:

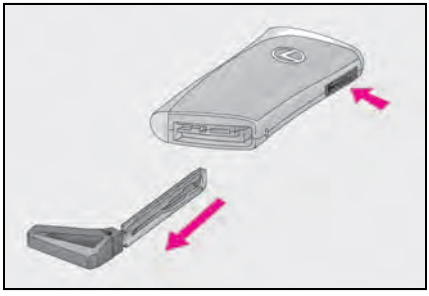
- Flathead screwdriver
- Small flathead screwdriver
- Lithium battery CR2032

Use a CR2032 lithium battery

- Batteries can be purchased at your Lexus dealer, local electrical appliance shops or camera stores.
- Replace only with the same or equivalent type recommended by the manufacturer.
- Dispose of used batteries according to the local laws.

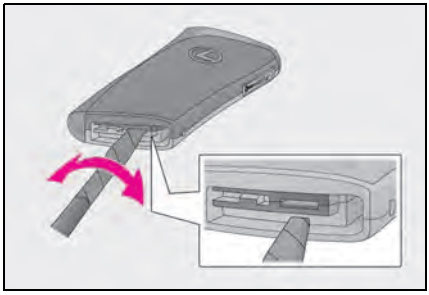
Replacing the battery

1 Take out the mechanical key.



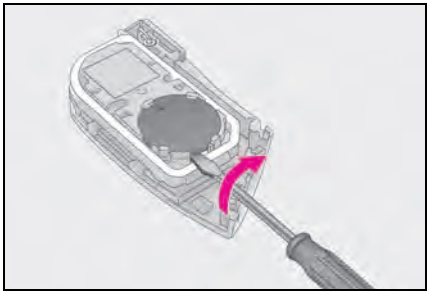
2 Remove the cover.

To prevent damage to the key, cover the tip of the flathead screwdriver with a tape.



3 Remove the depleted battery using the small flathead screwdriver.

Insert a new battery with the "+" terminal facing up.



WARNING

■ Battery precautions

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

- Do not swallow the battery. Doing so may cause chemical burns.
- A coin battery or button battery is used in the electronic key. If a battery is swallowed, it may cause severe chemical burns in as little as 2 hours and may result in death or serious injury.
- Keep away new and removed batteries from children.
- If the cover cannot be firmly closed, stop using the electronic key and stow the key in the place where children cannot reach, and then contact your Lexus dealer.
- If you accidentally swallow a battery or put a battery into a part of your body, get emergency medical attention immediately.

■ To prevent battery explosion or leakage of flammable liquid or gas

- Replace the battery with a new battery of the same type. If a wrong type of battery is used, it may explode.
- Do not expose batteries to extremely low pressure due to high altitude or extremely high temperatures.
- Do not burn, break or cut a battery.

NOTICE

■ When replacing the battery

Use a flathead screwdriver of appropriate size. Applying excessive force may deform or damage the cover.

■ For normal operation after replacing the battery

Observe the following precautions to prevent accidents:

- Always work with dry hands. Moisture may cause the battery to rust.
- Do not touch or move any other component inside the remote control.
- Do not bend either of the battery terminals.

Checking and replacing fuses

If any of the electrical components do not operate, a fuse may have blown. If this happens, check and replace the fuses as necessary.

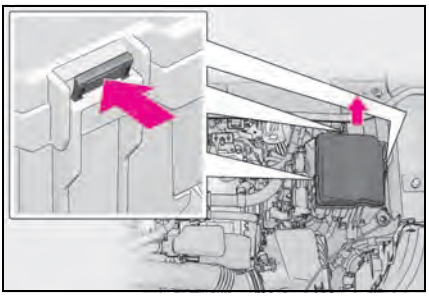
Checking and replacing fuses

1 Turn the power switch off.

2 Open the fuse box cover.

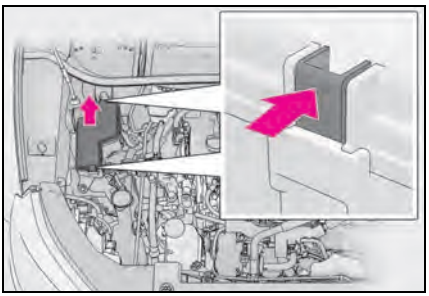
▶ Engine compartment: type A fuse box

Push the tab in and lift the lid off.



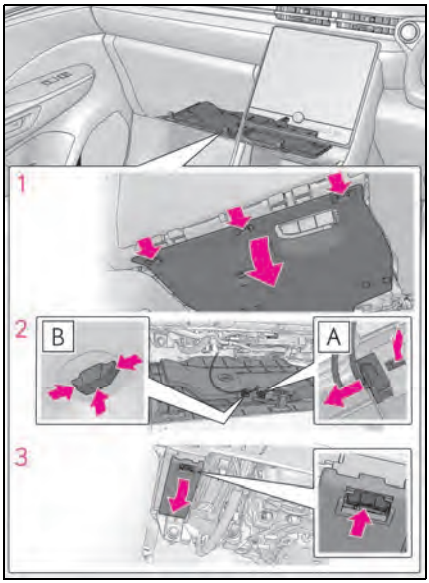
▶ Engine compartment: type B fuse box

Push the tab in and lift the lid off.



▶ Left side instrument panel

Remove the cover.



1 Push the tab in and remove the cover.

2 Unplug the connector A and fixing part B while pressing the lock release.

3 Remove the lid.

▶ Right side rear seat

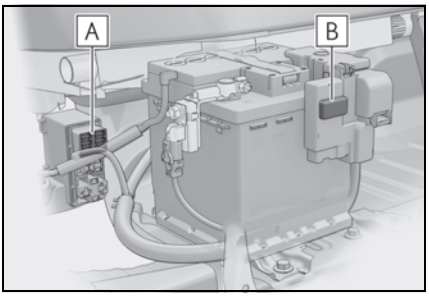
Remove the 12-volt battery cover (→P.385).

You can inspect or replace fuse A by yourself.

It is necessary to remove the 12-volt battery when inspecting or replacing fuse B.

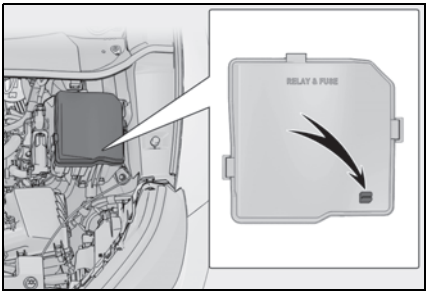
As there is a danger that components may be damaged, we recommend that inspection and replacement be carried

by your Lexus dealer.



3 Remove the fuse.

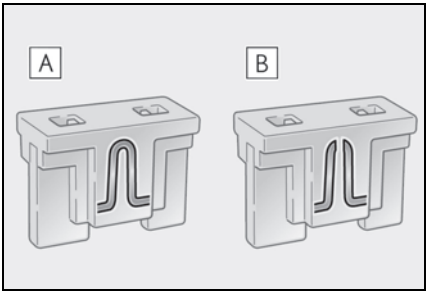
Only type A fuse can be removed using the pullout tool.



4 Check if the fuse is blown.

Replace the blown fuse with a new fuse of an appropriate amperage rating. The amperage rating can be found on the fuse box lid.

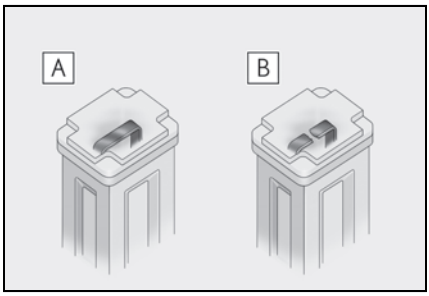
▶ Type A



A Normal fuse

B Blown fuse

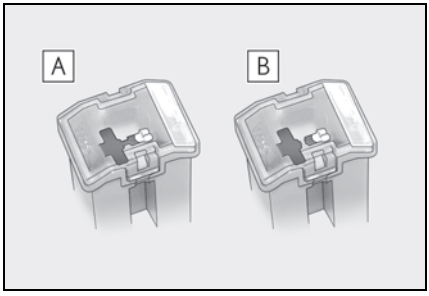
▶ Type B



A Normal fuse

B Blown fuse

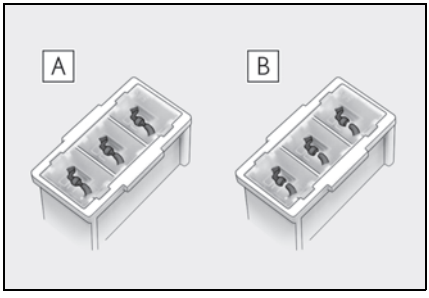
▶ Type C



A Normal fuse

B Blown fuse

▶ Type D



A Normal fuse

B Blown fuse

■ **After a fuse is replaced**

- When installing the lid, make sure that the tab is installed securely.
- If the lights do not turn on even after the fuse has been replaced, a bulb may need replacement. (→P.414)
- If the replaced fuse blows again, have the vehicle inspected by your Lexus dealer.

■ **If there is an overload in a circuit**

The fuses are designed to blow, protecting the wiring harness from damage.

■ **When replacing light bulbs**

Lexus recommends that you use genuine Lexus products designed for this vehicle. Because certain bulbs are connected to circuits designed to prevent overload, non-genuine parts or parts not designed for this vehicle may be unusable.

WARNING

■ **To prevent system breakdowns and vehicle fire**

Observe the following precautions. Failure to do so may cause damage to the vehicle, and possibly a fire or injury.

- Never use a fuse of a higher amperage rating than that indicated, or use any other object in place of a fuse.
- Always use a genuine Lexus fuse or equivalent.
  Never replace a fuse with a wire, even as a temporary fix.
- Do not modify the fuses or fuse boxes.

■ **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 as soon as possible.

Exterior lights

If any exterior light does not turn on, have it replaced by your Lexus dealer.

■ LED lights

The lights consist of a number of LEDs. If any of the LEDs burn out, take your vehicle to your Lexus dealer to have the light replaced.

■ Condensation build-up on the inside of the lens

Temporary condensation build-up on the inside of the headlight lens does not indicate a malfunction. Contact your Lexus dealer for more information in the following situations:

- Large drops of water have built up on the inside of the lens.
- Water has built up inside the headlight.

■ When replacing an electric component, such as a lights, etc.

→P.413

7-1. Essential information

Emergency flashers 416

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If the vehicle becomes stuck 465

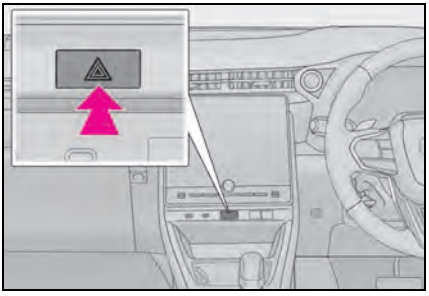
Emergency flashers

The emergency flashers are used to warn other drivers when the vehicle has to be stopped in the road due to a breakdown, etc.

Operating instructions

Press the switch.

All the turn signal lights will flash. To turn them off, press the switch once again.



■ Emergency flashers

- If the emergency flashers are used for a long time while the hybrid system is not operating (while the "READY" indicator is not illuminated), the 12-volt battery may discharge.
- If any of the SRS airbags deploy (inflate) or in the event of a strong rear impact, the emergency flashers will turn on automatically. The emergency flashers will turn off automatically after operating for approximately 20 minutes. To manually turn the emergency flashers off, press the switch twice. (The emergency flashers may not turn on automatically depending on the force of the impact and conditions of the collision.)

If your vehicle has to be stopped in an emergency

Only in an emergency, such as if it becomes impossible to stop the vehicle in the normal way, stop the vehicle using the following procedure:

Stopping the vehicle

1 Steadily step on the brake pedal with both feet and firmly depress it.

Do not pump the brake pedal repeatedly as this will increase the effort required to slow the vehicle.

2 Shift the shift position to N.

▶ If the shift position is shifted to N

3 After slowing down, stop the vehicle in a safe place by the road.

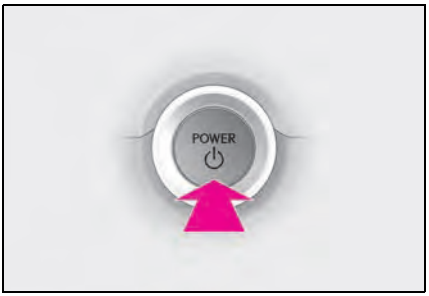
4 Stop the hybrid system.

▶ If the shift position cannot be shifted to N

3 Keep depressing the brake pedal with both feet to reduce vehicle speed as much as possible.

4 To stop the hybrid system, press and hold the power switch for 2 consecutive seconds or more, or

press it briefly 3 times or more in succession.



5 Stop the vehicle in a safe place by the road.

■ If emergency stopped

The functions of the air conditioning, etc. may be partially limited in order to reduce the power consumption of the 12-volt battery.

WARNING

■ If the hybrid system has to be turned off while driving

Turning the hybrid system off while driving will not cause loss of steering or braking control. However, power assist for the steering wheel may be lost making it difficult to steer smoothly before stopping the vehicle depending on the remaining charge in the 12-volt battery or usage conditions. Decelerate as much as possible before turning off the hybrid system.

If the vehicle is submerged or water on the road is rising

This vehicle is not designed to be able to drive on roads that are deeply flooded with water. Do not drive on roads where the roads may be submerged or the water may be rising. It is dangerous to remain in the vehicle, if it is anticipated that the vehicle will be flooded or set adrift. Remain calm and follow the following.

- If the door can be opened, open the door and exit the vehicle.
- If the door cannot be opened, open the window using the power window switch and ensure an escape route.
- If the window can be opened, exit the vehicle through the window.
- If the door and window cannot be opened due to the rising water, remain calm, wait until the water level inside the vehicle rises to the point that the water pressure inside of the vehicle equals the water pressure outside of the vehicle and then open the door after waiting for the rising water to enter the vehicle, and exit the vehicle.

When the outside water level exceeds half the height of the door, the door cannot be opened from the inside due to water pressure.

Water level exceeds the floor

When the water level exceeds the floor and time has passed, the electrical equipment will get damaged, the power windows will not operate, the engine and motor stop, and the vehicle may not be able to get moving.

Using an emergency escape hammer*1

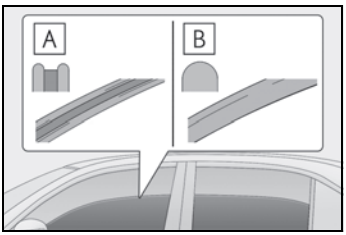
Laminated glass*2 is used in the windshield and the windows on this vehicle. Laminated glass cannot be shattered with an emergency hammer*1.

*1: Contact your Lexus dealer or aftermarket accessory manufacturer for further information about an emergency hammer.

*2: If equipped

How to distinguish laminated glass

When looking from the cross-sectional view point, laminated glass is two sheets of glass pasted together.



A Laminated glass

B Tempered glass

WARNING

Caution while driving

Do not drive on roads where the roads may be submerged or the water may be rising. Otherwise the vehicle may be damaged and cannot move, as well as become flooded and set adrift, which may lead to death.

If your vehicle needs to be towed

If towing is necessary, we recommend having your vehicle towed by your Lexus dealer or commercial towing service, using a wheel-lift type truck or flatbed truck.

Use a safety chain system for all towing, and abide by all state/provincial and local laws.

Situations when it is not possible to be towed by another vehicle

In the following situations, it is not possible to be towed by another vehicle using cables or chains, as the front wheels may be locked due to the parking lock. Contact your Lexus dealer or commercial towing service.

- There is a malfunction in the shift control system. (→P.432)
- There is a malfunction in the immobilizer system. (→P.66)
- There is a malfunction in the smart entry & start system. (→P.452)
- The 12-volt battery is discharged. (→P.456)

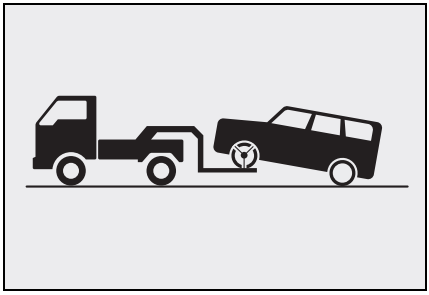
Situations when it is necessary to contact dealers before towing

The following may indicate a problem with your transmission. Contact your Lexus dealer or commercial towing service before towing.

- The hybrid system warning message is shown on the multi-information display and the vehicle does not move.
- The vehicle makes an abnormal sound.

Towing with a wheel-lift type truck

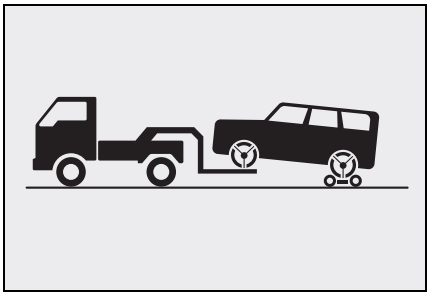
▶ From the front (2WD models)



Release the parking brake.

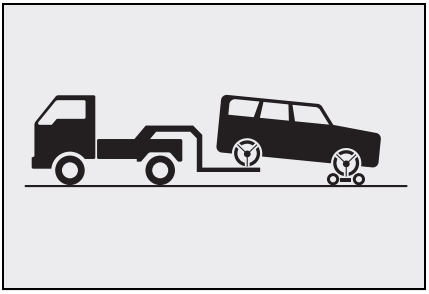
Turn automatic mode off. (→P.183)

▶ From the front (AWD models)



Use a towing dolly under the rear wheels.

▶ From the rear



Use a towing dolly under the front wheels.

WARNING

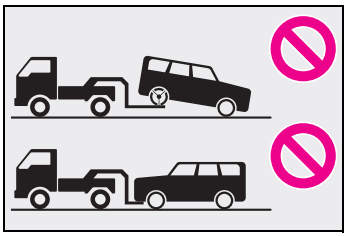
Observe the following precautions.

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

■ When towing the vehicle

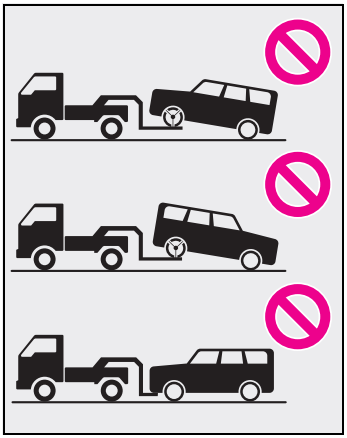
▶ 2WD models

Be sure to transport the vehicle with the front wheels raised or with all four wheels raised off the ground. If the vehicle is towed with the front wheels contacting the ground, the drivetrain and related parts may be damaged or electricity generated by the operation of the motor may cause a fire to occur depending on the nature of the damage or malfunction.



▶ AWD models

Be sure to transport the vehicle with all four wheels raised off the ground. If the vehicle is towed with the tires contacting the ground, the drivetrain or related parts may be damaged, the vehicle may fly off the truck, or electricity generated by the operation of the motor may cause a fire to occur depending on the nature of the damage or malfunction.



NOTICE

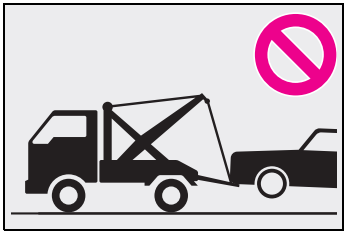
■ To prevent damage to the vehicle when towing using a wheel-lift type truck

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.

NOTICE

■ Towing with a sling-type truck

Do not tow with a sling-type truck to prevent body damage.



Using a flatbed truck

When using a flat-bed truck to transport the vehicle, use tire strapping belts. Refer to the owner's manual of the flat-bed truck for the tire strapping method.

In order to suppress vehicle movement during transportation, set the parking brake and turn the power switch off.

Emergency towing

If a tow truck is not available in an emergency, your vehicle may be temporarily towed using cables or chains secured to the emergency towing eyelet. This should only be attempted on hard surfaced roads for short distances at under 30 km/h (18 mph).

A driver must be in the vehicle to steer and operate the brakes. The vehicle's wheels, drive train, axles, steering and brakes must be in good condition.

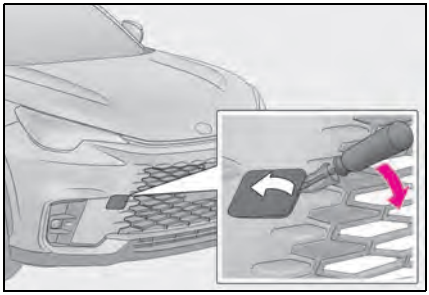
Emergency towing procedure

To have your vehicle towed by another vehicle, the towing eyelet must be installed to your vehicle. Install the towing eyelet using the following procedure.

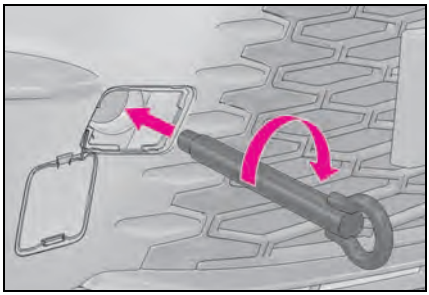
1 Take out the towing eyelet. (→P.440)

2 Remove the eyelet cover using a flathead screwdriver.

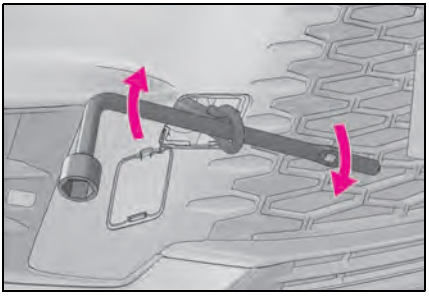
To protect the bodywork, place a rag between the screwdriver and the vehicle body as shown in the illustration.



3 Insert the towing eyelet into the hole and tighten partially by hand.



4 Tighten down the towing eyelet securely using a hard metal bar.



5 Securely attach cables or chains to the towing eyelet.

Take care not to damage the vehicle body.

6 Enter the vehicle being towed and start the hybrid system.

If the hybrid system does not start, turn the power switch to ON.

7 Shift the shift position to N and release the parking brake.

Turn automatic mode off. (→P.183)

■ **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.

■ **Wheel bolt wrench**

Wheel bolt wrench can be purchased at your Lexus dealer.

WARNING

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

■ **While towing**

- When towing using cables or chains, avoid sudden starts, etc. which place excessive stress on the towing eyelet, cables or chains. The towing eyelet, cables or chains may become damaged, broken debris may hit people, and cause serious damage.
- Do not perform any of the following as doing so may cause the parking lock mechanism to engage, locking the front wheels and possibly leading to an accident resulting in death or serious injury:
  - Unfasten the driver's seat belt and open the driver's door.
  - Turn the power switch off.

■ **Installing towing eyelets to the vehicle**

Make sure that towing eyelets are installed securely.

If not securely installed, towing eyelets may come loose during towing.

NOTICE

■ **To prevent damage to the vehicle during emergency towing**

Do not secure cables or chains to the suspension components.

If you think something is wrong

If you notice any of the following symptoms, your vehicle probably needs adjustment or repair. Contact your Lexus dealer as soon as possible.

Visible symptoms

- Fluid leaks under the vehicle (Water dripping from the air conditioning after use is normal.)
- Flat-looking tires or uneven tire wear
- Engine coolant temperature gauge continually points higher than normal

Audible symptoms

- Changes in exhaust sound
- Excessive tire squeal when cornering
- Strange noises related to the suspension system
- Pinging or other noises related to the hybrid system

Operational symptoms

- Engine missing, stumbling or running roughly
- Appreciable loss of power
- Vehicle pulls heavily to one side when braking
- Vehicle pulls heavily to one side when driving on a level road
- Loss of brake effectiveness, spongy feeling, pedal almost touches the floor

If a warning light turns on or a warning buzzer sounds

Calmly perform the following actions if any of the warning lights comes on or flashes. If a light comes on or flashes, but then goes off, this does not necessarily indicate a malfunction in the system. However, if this continues to occur, have the vehicle inspected by your Lexus dealer.

Actions to the warning lights or warning buzzers

■ Brake system warning light (warning buzzer)

Warning light	Details/Actions
 (Red)	Indicates that: ● The brake fluid level is low; or ● The brake system is malfunctioning → **Immediately stop the vehicle in a safe place and contact your Lexus dealer. Continuing to drive the vehicle may be dangerous.**

■ Brake system warning light

Warning light	Details/Actions
 (Yellow)	Indicates a malfunction in: ● The regenerative braking system; ● The electronically controlled brake system; or ● The electric parking brake → **Have the vehicle inspected by your Lexus dealer immediately.**

■ High coolant temperature warning light* (warning buzzer)

Warning light	Details/Actions
	Indicates that the engine is overheating → **Immediately stop the vehicle in a safe place and check the vehicle.** **(→P.462)**

*: This light illuminates on the multi-information display with a message.

■ Charging system warning light* (warning buzzer)

Warning light	Details/Actions
	Indicates a malfunction in the vehicle's charging system → **Immediately stop the vehicle in a safe place and contact your Lexus dealer.**

*: This light illuminates on the multi-information display with a message.

■ Low engine oil pressure warning light* (warning buzzer)

Warning light	Details/Actions
	Indicates that the engine oil pressure is too low → **Immediately stop the vehicle in a safe place and contact your Lexus dealer.**

*: This light illuminates on the multi-information display with a message.

■ Hybrid system overheat warning light* (warning buzzer)

Warning light	Details/Actions
	Indicates the hybrid system has overheated This light may be displayed when driving under severe operating conditions. (For example, when driving up a long steep hill.) → **Stop the vehicle in a safe place.** **Handling method (→P.462)**

*: This light illuminates on the multi-information display with a message.

■ Malfunction indicator lamp

Warning light	Details/Actions
	Indicates a malfunction in: ● The hybrid system; ● The electronic engine control system; or ● The electronic throttle control system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ SRS warning light

Warning light	Details/Actions
	Indicates a malfunction in: ● The SRS airbag system; or ● The seat belt pretensioner system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ ABS warning light

Warning light	Details/Actions
	Indicates a malfunction in: ● The ABS; or ● The brake assist system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ Inappropriate pedal operation warning light* (warning buzzer)

Warning light	Details/Actions
	When a buzzer sounds: ● Brake Override System is malfunctioning ● Drive-Start Control is malfunctioning ● Drive-Start Control is operating → **Follow the instructions displayed on the multi-information display.** When a buzzer does not sound: Brake Override System is operating. → **Release the accelerator pedal and depress the brake pedal.**

*: This light illuminates on the multi-information display with a message.

■ Electric power steering system warning light (warning buzzer)

Warning light	Details/Actions
 (Red) or  (Yellow)	Indicates a malfunction in the EPS (Electric Power Steering) system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ Low fuel level warning light

Warning light	Details/Actions
	Indicates that remaining fuel is approximately 5.4 L (1.4 gal., 1.2 Imp.gal.) or less → **Refuel the vehicle.**

■ Driver's and front passenger's seat belt reminder light (warning buzzer)*

Warning light	Details/Actions
	Warns the driver and/or front passenger to fasten their seat belts → **Fasten the seat belt.** **If the front passenger's seat is occupied, the front passenger's seat belt also needs to be fastened to make the warning light (warning buzzer) turn off.**

*: Driver's and front passenger's seat belt warning buzzer:

The driver's and front passenger's seat belt warning buzzer sounds to alert the driver and front passenger that his or her seat belt is not fastened. If the seat belt is unfastened, the buzzer sounds intermittently for a certain period of time after the vehicle reaches a certain speed.

■ Rear passengers' seat belt reminder lights*1 (warning buzzer)*2

Warning light	Details/Actions
 (if equipped)  (if equipped)	Warns the rear passengers to fasten their seat belts → **Fasten the seat belt.**

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

Regardless of whether or not a rear passenger is present, if the power switch is turned to ON with the rear seat belts unfastened, this light will also illuminate for a certain period of time.

*2: Rear passengers' seat belt warning buzzer:

The rear passengers' seat belt warning buzzer sounds to alert the rear passenger that his or her seat belt is not fastened. If the seat belt is unfastened, the buzzer sounds intermittently for a certain period of time after the vehicle reaches a certain

speed.

■ Tire pressure warning light (warning buzzer)

Warning light	Details/Actions
	When the light comes on (a buzzer sounds): ● Low tire inflation pressure from natural causes → **After the temperature of the tires has lowered sufficiently, check the inflation pressure of each tire and adjust them to the specified level.** ● Low tire inflation pressure from flat tire → **Immediately stop the vehicle in a safe place and perform the necessary actions.** When the light comes on after blinking for approximately 1 minute (a buzzer does not sounds): Malfunction in the tire pressure warning system → **Have the system checked by your Lexus dealer.**

■ PCS warning light (warning buzzer)

Warning light	Details/Actions
	Indicates a malfunction in the PCS (Pre-Collision System). → **Follow the instructions displayed on the multi-information display.** If the PCS (Pre-Collision System) or VSC (Vehicle Stability Control) system is disabled, the PCS warning light will illuminate.

■ LTA indicator (warning buzzer)

Warning light	Details/Actions
 (Yellow)	Indicates a malfunction in the LTA (Lane Tracing Assist) → **Follow the instructions displayed on the multi-information display.**

■ LDA indicator (warning buzzer)

Warning light	Details/Actions
 (Yellow)	Indicates a malfunction in the LDA (Lane Departure Alert) → **Follow the instructions displayed on the multi-information display.**

■ Cruise control indicator (warning buzzer)

Warning light	Details/Actions
 (Yellow)	Indicates a malfunction in the cruise control system. → **Follow the instructions displayed on the multi-information display.**

■ Dynamic radar cruise control indicator (warning buzzer)

Warning light	Details/Actions
 (Yellow)	Indicates a malfunction in the dynamic radar cruise control system. → **Follow the instructions displayed on the multi-information display.**

■ Driving assist information indicator

Warning light	Details/Actions
	Indicates one of the following systems is malfunctioning. ● PCS (Pre-Collision System) ● LDA (Lane Departure Alert) → **Follow the instructions displayed on the multi-information display.** Indicates one of the following systems is malfunctioning or disabled. ● PKSB (Parking Support Brake) ● RCD (Rear Camera Detection) ● BSM (Blind Spot Monitor) ● RCTA (Rear Cross Traffic Alert) ● Safe Exit Assist → **Follow the instructions displayed on the multi-information display.**

■ Lexus parking assist-sensor OFF indicator (warning buzzer)

Warning light	Details/Actions
	When a buzzer sounds: Indicates a malfunction in the Lexus parking assist-sensor function → **Have the vehicle inspected by your Lexus dealer immediately.** When a buzzer does not sound: Indicates that the system is temporarily unavailable, possibly due to a sensor being dirty or covered with ice, etc. → **Follow the instructions displayed on the multi-information display.** (→P.436)

■ Slip indicator

Warning light	Details/Actions
	Indicates a malfunction in: ● The VSC system; ● The TRC system; or ● The hill-start assist control system The light will flash when the ABS, VSC or TRC system is operating. → **Have the vehicle inspected by your Lexus dealer immediately.**

■ Parking brake indicator

Warning light	Details/Actions
 (Flashes)	Indicates that the parking brake is not fully engaged or released → **Operate the parking brake switch once again.** This light comes on when the parking brake is not released. If the light turns off after the parking brake is fully released, the system is operating normally. Indicates a malfunction in the parking brake system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ Brake hold operated indicator (warning buzzer)

Warning light	Details/Actions
 (Flashes)	Indicates a malfunction in the brake hold system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ Warning buzzer

In some cases, the buzzer may not be heard because of noisy place or an audio sound.

■ Front passenger detection sensor, seat belt reminder and warning buzzer

- If luggage is placed on the front passenger seat, the front passenger detection sensor may cause the warning light to flash and the warning buzzer to sound even if a passenger is not sitting in the seat.
- If a cushion is placed on the seat, the sensor may not detect a passenger, and the warning light may not operate properly.

■ Electric power steering system warning light (warning buzzer)

When the 12-volt battery charge becomes insufficient or the voltage temporarily drops, the electric power steering system warning light may come on and the warning buzzer may sound.

■ When the tire pressure warning light comes on

Inspect the tires to check if a tire is punctured.
If a tire is punctured: →P.439
If none of the tires are punctured:
Turn the power switch off then turn it to ON. Check if the tire pressure warning light comes on or blinks.

▶ If the tire pressure warning light blinks for approximately 1 minute then stays on

There may be a malfunction in the tire pressure warning system. Have the vehicle inspected by your Lexus dealer immediately.

▶ If the tire pressure warning light comes on

After the temperature of the tires has lowered sufficiently, check the inflation pressure of each tire and adjust them to the specified level.

If the warning light does not turn off even after several minutes have elapsed, check that the inflation pressure of each tire is at the specified level and perform the tire inflation pressure setting procedure. (→P.391)

If the warning light does not turn off even after several minutes have elapsed since performing the tire inflation pressure setting procedure, have the vehicle inspected by your Lexus dealer immediately.

■ The tire pressure warning light may come on due to natural causes

The tire pressure warning light may come on due to natural causes such as natural air leaks and tire inflation pressure changes caused by temperature. In this case, adjusting the tire inflation pressure will turn off the warning light (after a few minutes).

■ Conditions that the tire pressure warning system may not function properly

→P.389

WARNING

■ If a warning light comes on or a warning buzzer sounds when a warning message is displayed on the multi-information display

Check and follow the message displayed on the multi-information display.

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

■ When the electric power steering system warning light comes on

When the light comes on yellow, the assist to the power steering is restricted. When the light comes on red, the assist to the power steering is lost and handling operations of the steering wheel become extremely heavy. When steering wheel operations are heavier than usual, grip the steering wheel firmly and operate it using more force than usual.

■ If the tire pressure warning light comes on

Be sure to observe the following precautions. Failure to do so could cause a loss of vehicle control and result in death or serious injury.

- Stop your vehicle in a safe place as soon as possible. Check and adjust the tire inflation pressure immediately.
- If the tire pressure warning light comes on even after tire inflation pressure adjustment, it is probable that you have a flat tire. Check the tires. If a tire is flat, repair the flat tire by using emergency tire puncture repair kit.
- Avoid abrupt maneuvering and braking. If the vehicle tires deteriorate, you could lose control of the steering wheel or the brakes.

■ If a blowout or sudden air leakage should occur

The tire pressure warning system may not activate immediately.

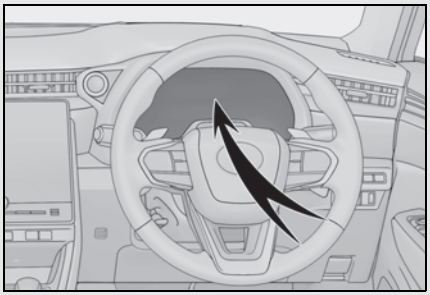
NOTICE

■ To ensure the tire pressure warning system operates properly

Do not install tires with different specifications or makers, as the tire pressure warning system may not operate properly.

If a warning message is displayed

The multi-information display shows warnings of system malfunctions, incorrectly performed operations, and messages that indicate a need for maintenance. When a message is shown, perform the correction procedure appropriate to the message.



If a warning message is displayed again after the appropriate actions have been performed, contact your Lexus dealer.

Messages and warnings

The warning lights and warning buzzers operate as follows depending on the content of the message. If a message indicates the need for inspection by a dealer, have the vehicle inspected by your Lexus dealer immediately.

Warning light	Warning buzzer*	Warning
—	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 • Indicates a situation, such as when damage to the vehicle or danger may result
Comes on or flashes	Sounds	Indicates an important situation, such as when the systems shown on the multi-information display may be malfunctioning
—	Does not sound	• Indicates a condition, such as malfunction of electrical components, their condition, or indicates the need for maintenance • 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.

■ **Warning messages**

The warning messages explained below may differ from the actual messages according to operation conditions and vehicle specifications.

■ **Warning buzzer**

→P.431

■ **If a message that indicates the need for visiting your Lexus dealer is displayed**

The system or part shown on the multi-information display is malfunctioning. Have the vehicle inspected by your Lexus dealer immediately.

■ **If a message about an operation is shown**

● If a message about an operation of the accelerator pedal or brake pedal is shown

- A warning message about an operation of the brake pedal may be shown while the driving assist systems such as PCS (Pre-Collision system) or the dynamic radar cruise control is operating. If a warning message is shown, be sure to decelerate the vehicle or follow an instruction shown on the multi-information display.
- A warning message is shown when Brake Override System operates. (→P.156)
- A warning message is shown when Drive-Start Control (→P.160) operates. Follow the instructions on the multi-information display.

● If a message about an operation of the power switch is shown

An instruction for operation of the power switch is shown when the incorrect procedure for starting the hybrid system is performed or the power switch is operated incorrectly. Follow the instructions shown on the multi-information display to operate the power switch again.

● If a message that indicates the need for the shift lever operation is displayed

To prevent the shift lever from being operated incorrectly or the vehicle from moving unexpectedly, a message that requires shifting the shift position may be displayed

on the multi-information display.

In that case, follow the instruction of the message and shift the shift position.

● If a message or image about an open/close state of a part or replenishment of a consumable is shown

Confirm the part indicated by the multi-information display or a warning light, and then perform the coping method such as closing the open door or replenishing a consumable.

■ **If a message that indicates the need for referring to Owner's Manual is displayed**

● If "Engine Coolant Temp High" is shown, follow the instructions, accordingly. (→P.462)

● If the following messages are shown, there may be a malfunction. Immediately have the vehicle inspected by your Lexus dealer.
- "Hybrid System Malfunction"
- "Check Engine"
- "Traction battery system malfunction"
- "Accelerator System Malfunction"
- "Smart Entry & Start System Malfunction"
- "Shift System Malfunction Apply Parking Brake Securely When Parking See Owner's Manual"
- "P Switch Malfunction Apply Parking Brake Securely When Parking See Owner's Manual"
- "Shift System Unavailable Apply Parking Brake Securely When Parking See Owner's Manual"
- "Shift System Malfunction See Owner's Manual"
- "Shift System Malfunction Stop in a Safe Place See Owner's Manual"
- "Battery Low Shifting Unavailable See Owner's Manual"

● If the following messages are shown, there may be a malfunction. Immediately stop the vehicle in a safe place and contact your Lexus dealer. Continuing to drive the vehicle may be dangerous.
- "Oil pressure low"
- "Braking Power Low"

● If any of the following messages are shown on the multi-information display, the vehicle may have run out of fuel. Stop the vehicle in a safe place and, if the fuel level is low, refuel the vehicle.
- "Hybrid system stopped"
- "Engine stopped"

● If "Maintenance Required for Traction Battery Cooling Parts See Owner's Manual" is shown, the filter may be clogged, the air intake vent may be blocked, or there may be a gap in the duct. Therefore, perform the following correction procedure.
- Cleaning the hybrid battery (traction battery) air intake vent (→P.406)

If the warning message is shown even if the vent is cleaned, have the vehicle inspected by your Lexus dealer.

● If "12-Volt Battery Charging System Malfunction Stop in a Safe Place See Owner's Manual" is shown

Indicates a malfunction in the vehicle's charging system. Pull over and stop the vehicle as soon as it is safe to do so.

While the message is displayed, the functions of the air conditioning, etc. may be partially limited in order to reduce the power consumption of the 12-volt battery.

● If "Low 12-volt Battery See Owner's Manual" is displayed
- When the display goes off after several seconds*: Maintain the hybrid system operation for more than 15 minutes and charge the 12-volt battery.
- When the display does not go off: Start up the hybrid system using procedures for "If the 12-volt battery is discharged". (→P.456)

*: Displays for about 6 seconds.

■ **If "Engine Oil Level Low Add or Replace" is displayed**

The engine oil level may be low. Check the level of the engine oil, and add engine oil if necessary. This message may be displayed

if the vehicle is stopped on a slope. Move the vehicle to a level surface and check if the message disappears.

■ **If "Hybrid System Stopped Steering Power Low" is displayed**

This message is displayed if the Hybrid system is stopped while driving.

When steering wheel operations are heavier than usual, grip the steering wheel firmly and operate it using more force than usual.

■ **If "Shift to P Before Exiting Vehicle" is displayed**

Message is displayed when the driver's door is opened without turning the power switch off with the shift position in any position other than P.

■ **If "Hybrid System Overheated Output Power Reduced" is shown**

The message may be shown when driving under severe operating conditions. (For example, when driving up a long steep hill or driving up a steep hill in reverse.)

Coping method: →P.462

■ **If "Traction Battery Needs to be Protected Refrain from the Use of N Position" is shown**

This message may be displayed when the shift position is in N.

As the hybrid battery (traction battery) can not be charged when the shift position is in N, shift the shift position to P when the vehicle is stopped.

■ **If "Traction Battery Needs to be Protected Shift into P to Restart" is shown**

This message is displayed when the hybrid battery (traction battery) charge has become extremely low because the shift position has been left in N for a certain amount of time.

When operating the vehicle, shift to P and restart the hybrid system.

■ **If "Shift is in N Release Accelerator Before Shifting" is shown**

Message is displayed when the accelerator pedal has been depressed and the shift position is in N. Release the accelerator pedal and shift the shift position to D or R.

■ **If "Press Brake when Vehicle is Stopped Hybrid System may Overheat" is shown**

Message is displayed when the accelerator pedal is depressed to maintain the vehicle position when stopped on a upward slope, etc.

If this continues, the hybrid system may overheat.

Release the accelerator pedal and depress the brake pedal.

■ **If "Shift System Malfunction Shifting Unavailable Drive to a Safe Place and Stop" or "Shift System Malfunction Driving Unavailable" is displayed**

There is a malfunction in the shift control system. Have the vehicle inspected by your Lexus dealer immediately.

■ **If "Auto Power OFF to Conserve Battery" is shown**

Power was turned off due to the automatic power off function.

Next time when starting the hybrid system, operate the hybrid system for approximately 5 minutes to recharge the 12-volt battery.

■ **If "Parking Assist Unavailable Sensor Blocked" is displayed on the multi-information display**

A sensor may be covered with water drops, ice, snow, dirt, etc. Remove the water drops, ice, snow, dirt, etc., from the sensor to return the system to normal.

Also, due to ice forming on a sensor at low temperatures, a warning message may be displayed or the sensor may not be able to detect an object. Once the ice melts, the system will return to normal.

If a sensor is dirty, the position of the dirty sensor will be shown on the display. If an abnormality is displayed even though there are no water drops, ice, snow or dirt, the sensor may be operating abnormally. Have the vehicle inspected by your Lexus dealer.

■ **If "Parking Assist Unavailable Low Visibility See Owner's Manual" is displayed**

Indicates one of the following systems is disabled.

- RCD (Rear Camera Detection)
- PKSB (Parking Support Brake)

Remove any dirt or foreign matter from the rear cameras.

■ **If "System Malfunction Visit Your Dealer" is displayed**

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- AHB (Automatic High Beam)
- AHS (Adaptive High beam System) (if equipped)
- Dynamic radar cruise control
- RSA (Road Sign Assist)
- BSM (Blind Spot Monitor)
- RCTA (Rear Cross Traffic Alert)
- Safe Exit Assist
- Lexus parking assist-sensor
- PKSB (Parking Support Brake)
- RCD (Rear Camera Detection)

Have the vehicle inspected by your Lexus dealer immediately.

■ **If "System Stopped See Owner's Manual" is displayed**

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- AHB (Automatic High Beam)
- AHS (Adaptive High beam System) (if equipped)
- Dynamic radar cruise control
- RSA (Road Sign Assist)
- BSM (Blind Spot Monitor)
- RCTA (Rear Cross Traffic Alert)
- Safe Exit Assist
- Lexus parking assist-sensor
- PKSB (Parking Support Brake)
- RCD (Rear Camera Detection)

Follow the following correction methods.

- Check the voltage of the 12-volt battery
- Check the sensors that the Lexus Safety System + uses for foreign matter covering them. Remove them if any. (→P.206)
- Vehicles with RCD: Check if the back door is open.
- Check the situations in which the sensors may not operate properly, and improve the situation if applicable. (→P.259, 264, 267, 276, 280)
- Check if there is any foreign matter attached to the rear bumper near the radar sensor and remove it if there is. (→P.256)
- Check the sensors including camera sensors for foreign matter covering them. Remove them if any. (→P.265)
- When problems are solved and the sensors are operational, this indication may disappear by itself.

■ **If "System Stopped Front Camera Low Visibility See Owner's Manual" is displayed**

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- AHB (Automatic High Beam)

- AHS (Adaptive High beam System) (if equipped)
- Dynamic radar cruise control
- RSA (Road Sign Assist)

Follow the following correction methods.

- Using the windshield wipers, remove the dirt or foreign matter from the windshield.
- Using the air conditioning system, defog the windshield.
- Close the hood, remove any stickers, etc. to clear the obstruction in front of the front camera.

■ If "System Stopped Front Camera Out of Temperature Range Wait until Normal Temperature" is displayed

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- AHB (Automatic High Beam)
- AHS (Adaptive High beam System) (if equipped)
- Dynamic radar cruise control
- RSA (Road Sign Assist)

Follow the following correction methods.

- If the front camera is hot, such as after the vehicle is parked in the sun, use the air conditioning system to decrease the temperature around the front camera
- If a sunshade was used when the vehicle was parked, depending on its type, the sunlight reflected from the surface of the sunshade may cause the temperature of the front camera to become excessively high
- If the front camera is cold, such after the vehicle is parked in an extremely cold environment, use the air conditioning system to increase the temperature around the front camera

■ If "System Stopped Front Radar Sensor Blocked Clean Radar Sensor" is displayed

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- AHB (Automatic High Beam)
- AHS (Adaptive High beam System) (if equipped)
- Dynamic radar cruise control

Follow the following correction methods.

- Check if there is any foreign matter attached to the radar sensor or radar sensor cover and clean them if necessary (→P.206)
- This message may be displayed when driving in an open area with few nearby vehicles or structures, such as a desert, grasslands, suburbs, etc.
  The message may be cleared by driving the vehicle in an area with structures, vehicles, etc. nearby.

■ If "System Stopped Front Radar Sensor Out of Temperature Range Wait until Normal Temperature" is displayed

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- AHB (Automatic High Beam)
- AHS (Adaptive High beam System) (if equipped)
- Dynamic radar cruise control

The temperature of the radar sensor is outside of the operating range. Wait for the temperature to become appropriate.

■ If "System Stopped Front Radar In Self Calibration See Owner's Manual" is displayed

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- AHB (Automatic High Beam)
- AHS (Adaptive High beam System) (if equipped)
- Dynamic radar cruise control

Follow the following correction methods.

- Check if there is any foreign matter attached to the radar sensor or radar sensor cover and clean them if necessary (→P.206)
- The radar sensor may be misaligned and will be adjusted automatically while driving. Continue driving for a while.

If "Cruise Control Unavailable See Owner's Manual" is displayed

Indicates one of the following systems is disabled.

- Dynamic radar cruise control
- Cruise control

A message is displayed when the driving assist switch is pushed repeatedly.

Press the driving assist switch quickly and firmly.

If "Oil Maintenance Required Soon" is displayed

Indicates that the engine oil should be scheduled to be changed.

Check the engine oil and change it if necessary.

After changing the engine oil, make sure to reset the message. (→P.380)

If "Oil Maintenance Required" is displayed

Indicates that the engine oil should be changed.

Check and change the engine oil, and oil filter by your Lexus dealer. After changing the engine oil, make sure to reset the message. (→P.380)

WARNING

If a warning light comes on or a warning buzzer sounds when a warning message is shown on the multi-information display

→P.431

NOTICE

If "Maintenance Required For Traction Battery At Your Dealer" is shown

The hybrid battery (traction battery) is scheduled to be inspected or replaced. Have the vehicle inspected by your Lexus dealer immediately.

- Continuing to drive the vehicle without having the hybrid battery (traction battery) inspected will cause the hybrid system not to start.
- If the hybrid system does not start, contact your Lexus dealer immediately.

If "Low 12-volt Battery See Owner's Manual" is displayed

The 12-volt battery may have deteriorated. As the battery may discharged in this state when left unattended, have the battery inspected by your Lexus dealer.

If you have a flat tire

Your vehicle is not equipped with a spare tire, but instead is equipped with an emergency tire puncture repair kit.

A puncture caused by a nail or screw passing through the tire tread can be repaired temporarily using the emergency tire puncture repair kit. (The kit contains a bottle of sealant. The sealant can be used only once to temporarily repair one tire without removing the nail or screw from the tire.) Depending on the damage condition of the flat tire, it may not be able to repaired with the emergency tire puncture repair kit.

After temporarily repairing the tire with the kit, have the tire repaired or replaced by your Lexus dealer.

WARNING

■ If you have a flat tire

Do not continue driving with a flat tire.

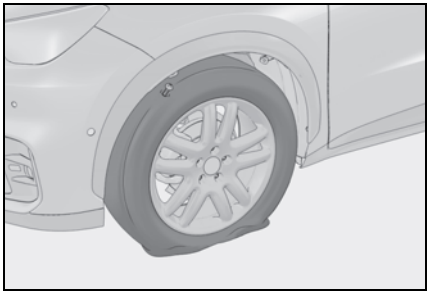
Driving even a short distance with a flat tire can damage the tire and the wheel beyond repair, which could result in an accident.

Before repairing the tire

- Stop the vehicle in a safe place on a hard, flat surface.
- Set the parking brake.
- Shift the shift lever to P.
- Stop the hybrid system.
- Turn on the emergency flashers.
- Check the degree of the tire damage.

A tire should only be repaired with the emergency tire puncture repair kit if the damage is caused by a nail or screw passing through the tire tread.

- Do not remove the nail or screw from the tire. Removing the object may widen the opening and make emergency repair with the repair kit impossible.
- To avoid sealant leakage, move the vehicle until the area of the puncture, if known, is positioned at the top of the tire.



■ A flat tire that cannot be repaired with the emergency tire puncture repair kit

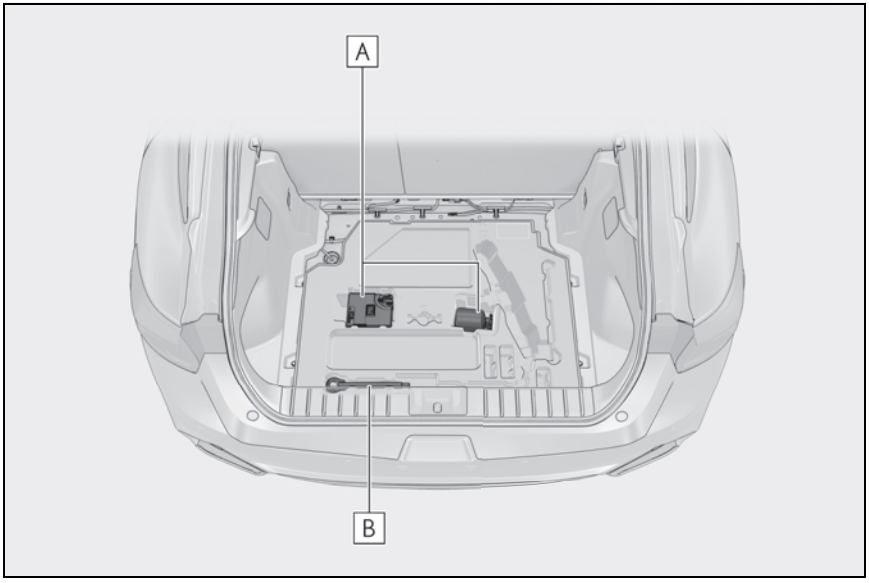
In the following cases, the tire cannot be repaired with the emergency tire puncture repair kit. Contact your Lexus dealer.

- When the tire is damaged due to driving without sufficient air pressure
- When there are any cracks or damage at any location on the tire, such as on the side wall, except the tread
- When the tire is visibly separated from the wheel
- When the cut or damage to the tread is 4 mm (0.16 in.) long or more
- When the wheel is damaged

- When two or more tires have been punctured
- When more than one sharp objects such as nails or screws have passed through the tread on a single tire

Location of the emergency tire puncture repair kit

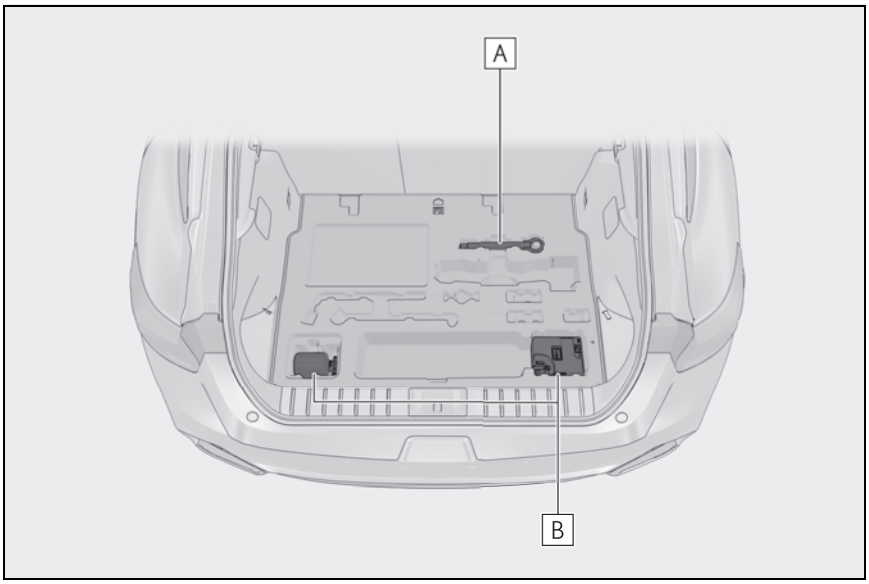
▶ 2WD models



A Emergency tire puncture repair kit

B Towing eyelet

▶ AWD models

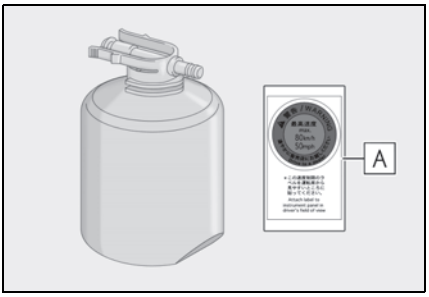


A Towing eyelet

B Emergency tire puncture repair kit

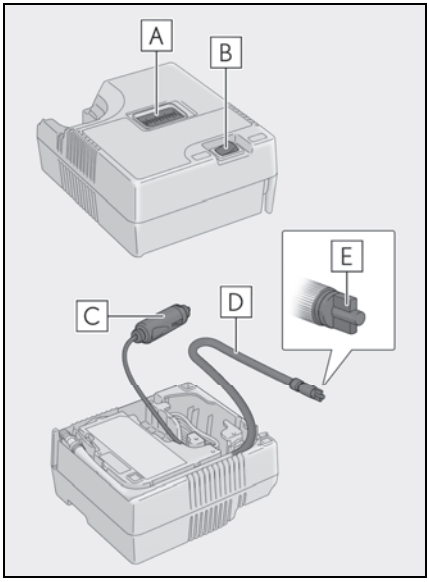
Emergency tire puncture repair kit components

■ Bottle



A Sticker

■ Compressor



A Air pressure gauge

B Compressor switch

C Power plug

D Hose

E Air release cap

■ Emergency tire puncture repair kit

- The sealant stored in the emergency tire puncture repair kit can be used only once to temporarily repair a single tire. If the sealant in the bottle and other parts of the kit have been used and need to be replaced, contact your Lexus dealer.
- The compressor can be used repeatedly.
- The sealant can be used when the outside temperature is from -30°C (-22°F) to 60°C (140°F).
- The kit is exclusively designed for size and type of tires originally installed on your vehicle. Do not use it for tires that a different size than the original ones, or for any other purposes.
- If the sealant gets on your clothes, it may stain.
- If the sealant adheres to a wheel or the surface of the vehicle body, the stain may not be removable if it is not cleaned at once. Immediately wipe away the sealant with a wet cloth.
- During operation of the repair kit, a loud operation noise is produced. This does not indicate a malfunction.
- Do not use to check or to adjust the tire pressure.

■ Note for checking the emergency tire puncture repair kit

- Check the sealant expiry date occasionally. The expiry date is shown on the bottle.
- Do not use sealant whose expiry date has already passed. Otherwise, repairs conducted using the emergency tire puncture repair kit may not be performed properly.
- The sealant should be replaced before the expiry date. Contact Lexus dealer.

WARNING

■ If you have a flat tire

Driving even a short distance with a flat tire can damage the tire and the wheel beyond repair.

Driving with a flat tire may cause a circumferential groove on the side wall. In such a case, the tire may explode when using a repair kit.

■ Caution while driving

- Store the repair kit in the luggage compartment. Injuries may result in the event of an accident or sudden braking.
- The repair kit is exclusively only for your vehicle.

Do not use repair kit on other vehicles, which could lead to an accident causing death or serious injury.

- Do not use repair kit for tires that are different size than the original ones, or for any other purpose. If the tires have not been completely repaired, it could lead to an accident causing death or serious injury.

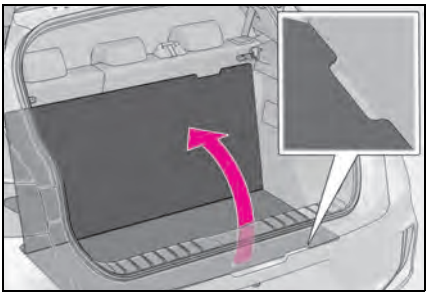
■ Precautions for use of the sealant

- Ingesting the sealant is hazardous to your health. If you ingest sealant, consume as much water as possible, and then immediately consult a doctor.
- If sealant gets in eyes or adheres to skin, immediately wash it off with water. If discomfort persists, consult a doctor.

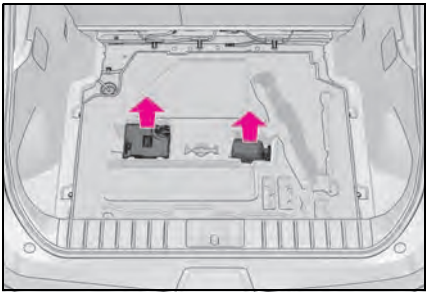
Taking out the emergency tire puncture repair kit

▶ 2WD models

1 Remove the deck board.

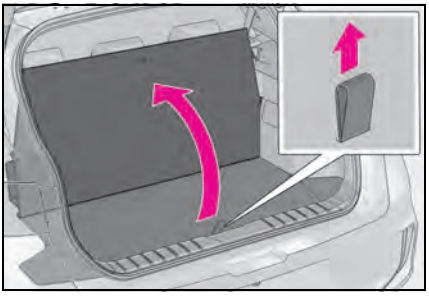


2 Take out the emergency tire puncture repair kit.

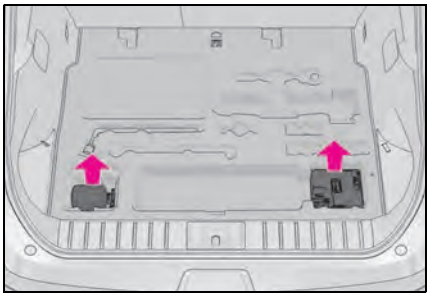


▶ AWD models

1 Pull the strap upwards to lift up the deck board and fold it forward.



2 Take out the emergency tire puncture repair kit.

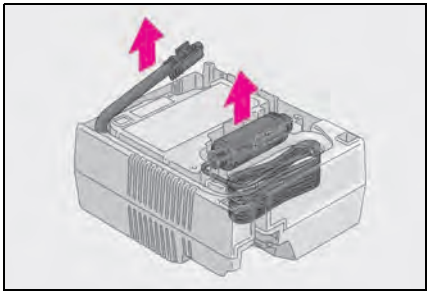


Emergency repair method

1 Take out the repair kit from the plastic bag.

Attach the sticker enclosed with the bottle on the specified locations. (See step **10**.)

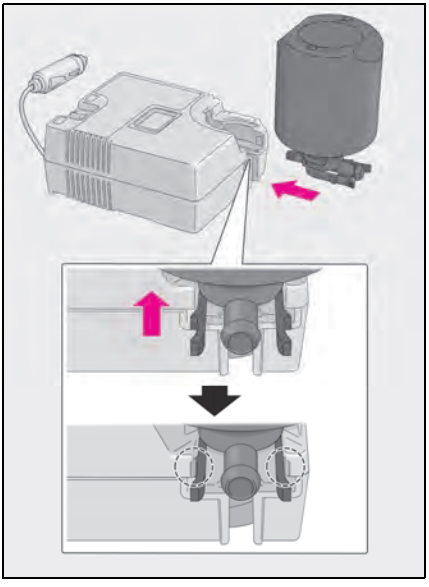
2 Remove the hose and take out the power plug from the compressor.



3 Connect the bottle to the compressor.

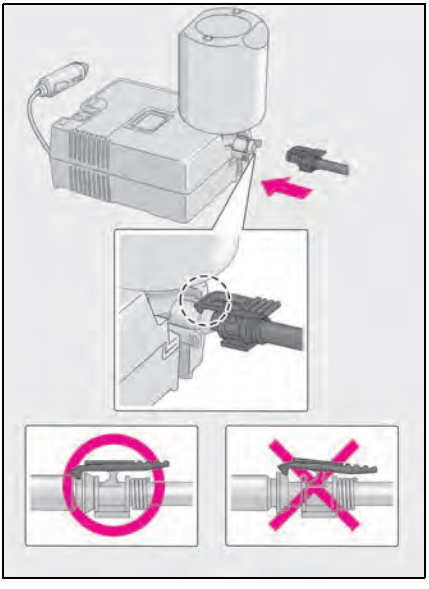
Insert and connect the bottle straight into the compressor as shown in the illustration, and check that the claws of the bottle are

concealed in the holes.

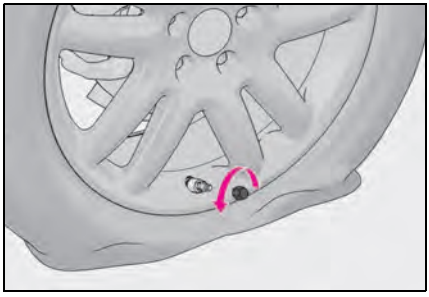


4 Connect the hose to the bottle.

As shown in the illustration, make sure the hose is connected securely to the bottle.

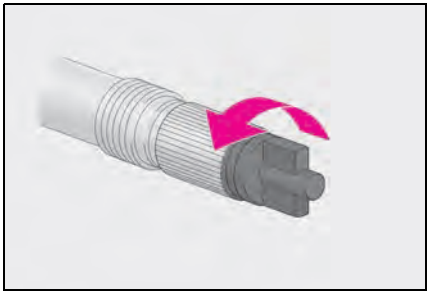


5 Remove the valve cap from the valve of the punctured tire.



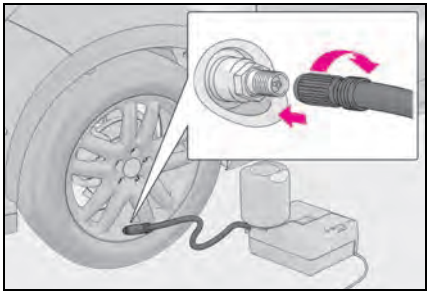
6 Extend the hose. Remove the air release cap from the hose.

You will use the air release cap again. Therefore keep it in a safe place.

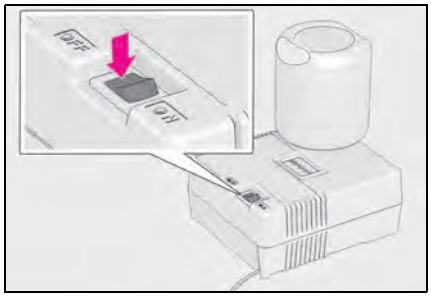


7 Connect the hose to the valve.

Screw the end of the hose clockwise as far as possible.

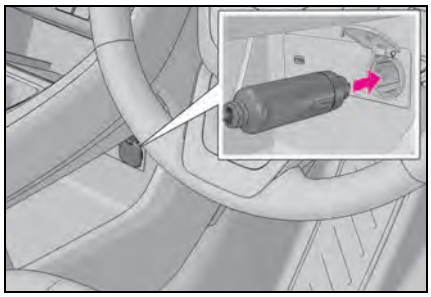


8 Make sure that the compressor switch is off.

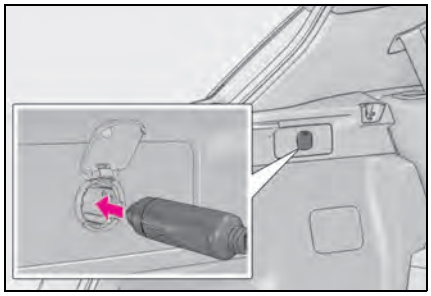


9 Connect the power plug to the power outlet socket. (→P.352)

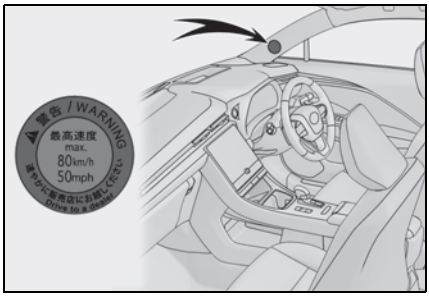
▶ Auxiliary tray



▶ Rear



10 Attach the sticker provided with the tire puncture repair kit to a position easily seen from the driver's seat.



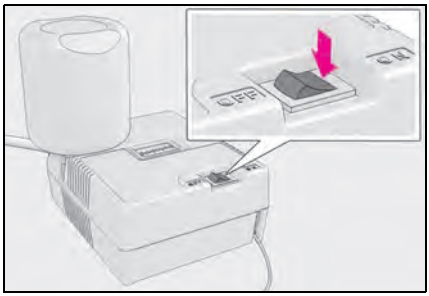
11 Check the specified tire inflation pressure.

Tire inflation pressure is specified on the label on the driver's side pillar as shown. (→P.474)

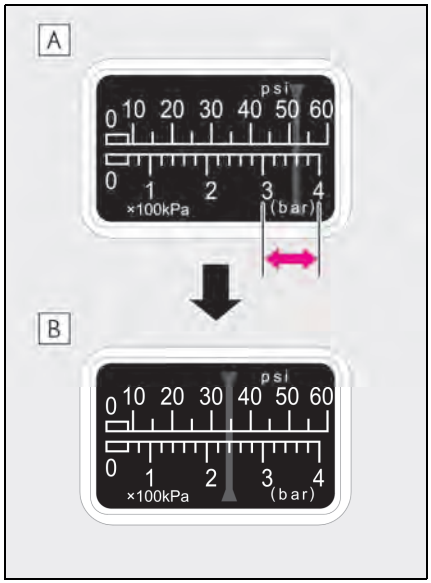


12 Start the hybrid system. (→P.168)

13 To inject the sealant and inflate the tire, turn the compressor switch on.



14 Inflate the tire until the specified air pressure is reached.



A The sealant will be injected and the pressure will spike to between 300 kPa (3.0 kgf/cm^2 or bar, 44 psi) and 400 kPa (4.0 kgf/cm^2 or bar, 58 psi), then gradually decrease.

B The air pressure gauge will display the actual tire inflation pressure about 1 to 5 minutes after the switch is turned on.

- Turn the compressor switch off and then check the tire inflation pressure. Being careful not to over inflate, check and repeat the inflation procedure until the specified tire inflation pressure is reached.
- The tire can be inflated for about 5 to 20 minutes (depending on the outside temperature). If the tire inflation pressure is still lower than the specified point after inflation for 25 minutes, the tire is too damaged to be repaired. Turn the compressor switch off and contact your Lexus dealer.
- If the tire inflation pressure exceeds the specified air pressure, let out some air to adjust the tire inflation pressure. (→P.447, 474)

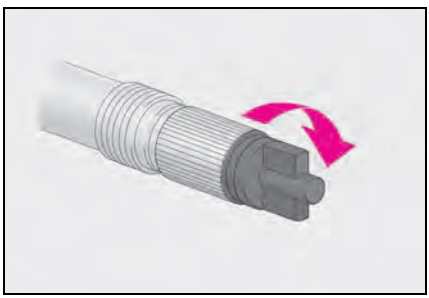
15 With the compressor switch off, pull out the power plug from the power outlet socket and then disconnect the hose from the valve on the tire.

Some sealant may leak when the hose is removed.

16 Install the valve cap onto the valve of the emergency repaired tire.

17 Attach the air release cap to the end of the hose.

If the air release cap is not attached, the sealant may leak and the vehicle may get dirty.

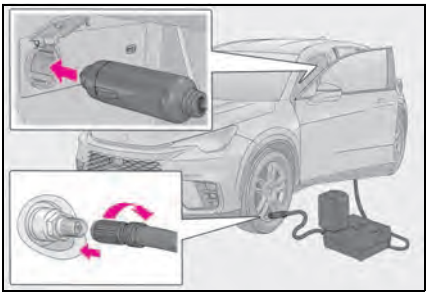


18 Temporarily store the bottle in the luggage compartment while it is connected to the compressor.

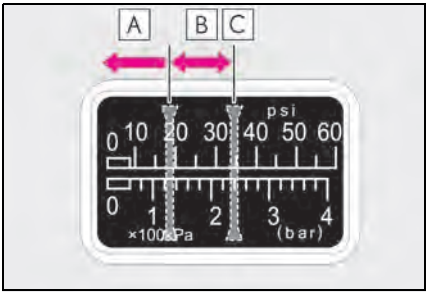
19 To spread the liquid sealant evenly within the tire, immediately drive safely for about 5 km (3 miles) below 80 km/h (50 mph).

20 After driving, stop your vehicle in a safe place on a hard, flat surface and reconnect the repair kit.

Remove the air release cap from the hose before reconnecting the hose.



21 Turn the compressor switch on and wait for several seconds, then turn it off. Check the tire inflation pressure.



A If the tire inflation pressure is under 130 kPa (1.3 kgf/cm^2 or bar, 19 psi): The puncture cannot be repaired. Contact your Lexus dealer.

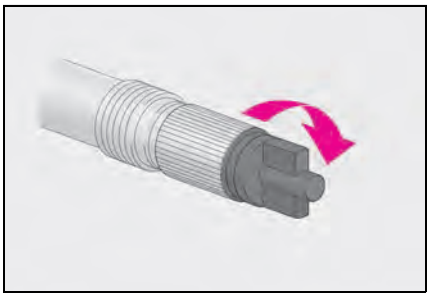
B If the tire inflation pressure is 130 kPa (1.3 kgf/cm^2 or bar, 19 psi) or higher, but less than the specified air pressure: Proceed to step **22**.

C If the tire inflation pressure is the specified air pressure (→P.474): Proceed to step **23**.

22 Turn the compressor switch on to inflate the tire until the specified air pressure is reached. Drive for about 5 km (3 miles) and then perform step **20**.

23 Attach the air release cap to the end of the hose.

If the air release cap is not attached, the sealant may leak and the vehicle may get dirty.



24 Store the bottle in the luggage compartment while it is connected to the compressor.

25 Taking precautions to avoid sudden braking, sudden acceleration and sharp turns, drive carefully at under 80 km/h (50 mph) to the nearest Lexus dealer that is less than 100 km (62 miles) away for tire repair or replacement.

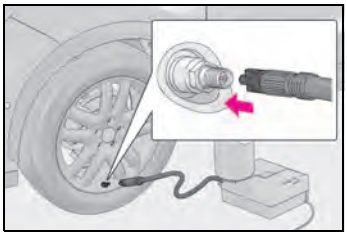
For repair and replacement of a tire or disposal of a tire puncture repair kit, contact your Lexus dealer.

When having the tire repaired or replaced, make sure to tell the Lexus dealer that the sealant is injected.

■ If the tire is inflated to more than the specified air pressure

1 Disconnect the hose from the valve.

2 Install the air release cap to the end of the hose and push the protrusion on the air release cap into the tire valve to let some air out.



3 Disconnect the hose from the valve, remove the air release cap from the hose and then reconnect the hose.

4 Turn the compressor switch on and wait for several seconds, and then turn it off. Check that the air pressure indicator shows the specified air pressure. (→P.474)

If the air pressure is under the designated pressure, turn the compressor switch on again and repeat the inflation procedure until the specified air pressure is reached.

■ **After a tire is repaired with the emergency tire puncture repair kit**

- The tire pressure warning valve and transmitter should be replaced.
- Even if the tire inflation pressure is at the recommended level, the tire pressure warning light may come on/flash.

WARNING

■ **When fixing the flat tire**

- Stop your vehicle in a safe and flat area.
- Do not touch the wheels or the area around the brakes immediately after the vehicle has been driven.

After the vehicle has been driven, the wheels and the area around the brakes may be extremely hot. Touching these areas with hands, feet or other body parts may result in burns.

- Connect the valve and hose securely with the tire installed on the vehicle.

If the hose is not properly connected to the valve, air leakage may occur as sealant may be sprayed out.

- If the hose comes off the valve while inflating the tire, there is a risk that the hose will move abruptly due to air pressure.
- After inflation of the tire has completed, the sealant may splatter when the hose is disconnected or some air is let out of the tire.
- Follow the operation procedure to repair the tire. If the procedures not followed, the sealant may spray out.
- Keep back from the tire while it is being repaired, as there is a chance of it bursting while the repair operation is being performed. If you notice any cracks or deformation of the tire, turn off the compressor switch and stop the repair operation immediately.
- The repair kit may overheat if operated for a long period of time. Do not operate the repair kit continuously for more than 40 minutes.
- Parts of the repair kit become hot during operation. Be careful handling the repair kit during and after operation. Do not touch the metal part connecting the bottle and the compressor. It will be extremely hot.
- Do not attach the vehicle speed warning sticker to an area other than the one indicated. If the sticker is attached to an area where an SRS airbag is located, such as the pad of the steering wheel, it may prevent the SRS airbag from operating properly.

WARNING

■ Driving to spread the liquid sealant evenly

Observe the following precautions to reduce the risk of accidents.

Failing to do so may result in a loss of vehicle control and cause death or serious injury.

- Drive the vehicle carefully at a low speed. Be especially careful when turning and cornering.
- If the vehicle does not drive straight or you feel a pull through the steering wheel, stop the vehicle and check the following.
  - Tire condition. The tire may have separated from the wheel.
  - Tire inflation pressure. If the tire inflation pressure is 130 kPa (1.3 kgf/cm^2 or bar, 19 psi) or less, the tire may be severely damaged.

NOTICE

■ When performing an emergency repair

- Perform the emergency repair without removing the nail or screw that has punctured the tread of the tire. If the object that has punctured the tire is removed, repair by the emergency tire puncture repair kit may not be possible.
- The repair kit is not waterproof. Make sure that the repair kit is not exposed to water, such as when it is being used in the rain.
- Do not put the repair kit directly onto dusty ground such as sand at the side of the road. If the repair kit vacuums up dust etc., a malfunction may occur.
- Make sure the sealant bottle of the repair kit is in a vertical position. The repair kit does not operate properly when it is laid.

■ Precautions for the emergency tire puncture repair kit

- The repair kit power source should be 12 V DC suitable for vehicle use. Do not connect the repair kit to any other source.
- If fuel splatters on the repair kit, the repair kit may deteriorate. Take care not to allow fuel to contact it.
- Place the repair kit in a storage to prevent it from being exposed to dirt or water.
- Store the repair kit in the luggage compartment out of reach of children.
- Do not disassemble or modify the repair kit. Do not subject parts such as the air pressure indicator to impacts. This may cause a malfunction.

■ To avoid damage to the tire pressure warning valves and transmitters

When a tire is repaired with liquid sealants, the tire pressure warning valve and transmitter may not operate properly. If a liquid sealant is used, contact your Lexus dealer or other qualified service shop as soon as possible. After use of liquid sealant, make sure to replace the tire pressure warning valve and transmitter when repairing or replacing the tire.
(→P.389)

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.168)

One of the following may be the cause of the problem:

- The electronic key may not be functioning properly. (→P.452)
- There may not be sufficient fuel in the vehicle's tank.
  Refuel the vehicle. (→P.63)
- There may be a malfunction in the immobilizer system. (→P.66)
- There may be a malfunction in the shift control system.* (→P.170)
- The hybrid system may be malfunctioning due to an electrical problem such as electronic key battery depletion or a blown fuse. However, depending on the type of malfunction, an interim measure is available to start the hybrid system. (→P.450)

*: It may not be possible to shift the shift position from P.

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.456)
- The 12-volt battery terminal connections may be loose or corroded. (→P.385)

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:

- The 12-volt battery may be discharged. (→P.456)
- One or both of the 12-volt battery terminals may be disconnected. (→P.385)

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.

Do not use this starting procedure except in cases of emergency.

1 Pull the parking brake switch to check that the parking brake is set. (→P.182)

Parking brake indicator will come on.

2 Turn the power switch to ACC.*1, 2

3 Press and hold the power switch for 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.

*1: ACC mode can be enabled/disabled on the customize menu. (→P.488)

*2: When ACC is disabled, turn the power switch to ON then OFF, and perform the following step within 5 seconds.

If you lose your keys

New genuine mechanical keys can be made by your Lexus dealer using the other mechanical key and the key number stamped on your key number plate. Keep the plate in a safe place such as your wallet, not in the vehicle.

NOTICE

■ When an electronic key is lost

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

If the electronic key does not operate properly

If communication between the electronic key and vehicle is interrupted (→P.129) or the electronic key cannot be used because the battery is depleted, the smart entry & start system and wireless remote control cannot be used. In such cases, the doors can be opened and the hybrid system can be started by following the procedure below.

When the electronic key does not work properly

- Make sure that the smart entry & start system has not been deactivated in the customization setting. If it is off, turn the function on. (Customizable features: →P.480)
- Check if battery-saving mode is set. If it is set, cancel the function. (→P.128)
- The electronic key function may be suspended. (→P.129)

NOTICE

In case of a smart entry & start system malfunction, or other key related problems

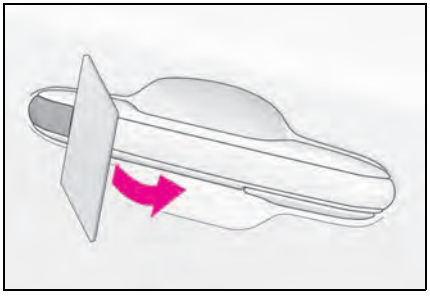
Take your vehicle with all the electronic keys provided with your vehicle to your Lexus dealer.

Locking and unlocking the doors

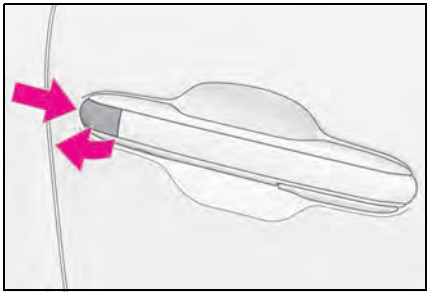
Use the mechanical key (→P.110) in order to perform the following operations.

1 Insert a plastic card, etc. into the gap in the door handle to pry up the cover.

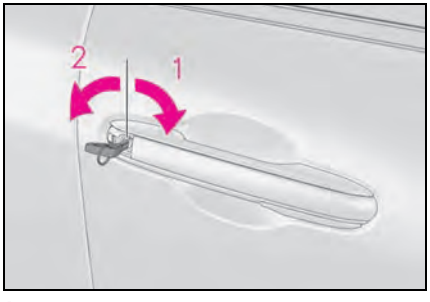
To avoid damage, do not apply excessive force to the cover.



2 Remove the cover by pressing it on the rear.

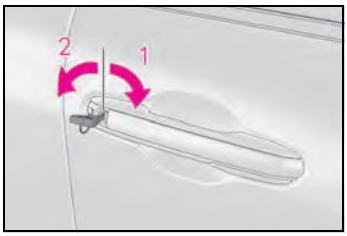


3 Use the mechanical key in order to perform the following operations:



1 Locks all the doors
2 Unlocks all the doors

■ Key linked functions



1 Closes the windows (turn and hold)*

2 Opens the windows (turn and hold)*

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

WARNING

■ When using the mechanical key and operating the power windows

Operate the power window after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the window. Also, do not allow children to operate the mechanical key. It is possible for children and other passengers to get caught in the power window.

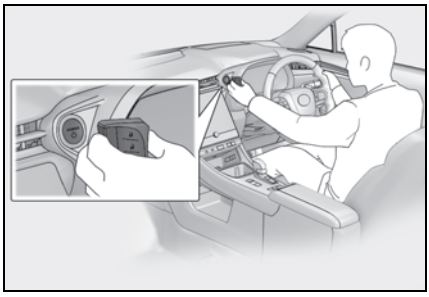
Starting the hybrid system

1 Ensure that the shift position is in P and depress the brake pedal.

2 Touch the Lexus emblem side of the electronic key to the power switch.

When the electronic key is detected, a buzzer sounds and the power switch will turn to ON.

When the smart entry & start system is deactivated in customization setting and ACC customization is in on, the power switch will turn to ACC.



3 Firmly depress the brake pedal and check that  and a message are shown on the multi-information display.

4 Press the power switch shortly and firmly.

In the event that the hybrid system still cannot be started, contact your Lexus dealer.

■ Stopping the hybrid system

Set the parking brake, shift the shift position 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.409)

■ Changing power switch modes

Release the brake pedal and press the power switch in step **3** above.
The hybrid system does not start and modes will be changed each time the switch is pressed. (→P.170)

If a door cannot be opened using the door opener switch

If a door cannot be opened using the door opener switch, it can be opened using a manual release handle.

NOTICE

■ Operating a manual release handle

Normally, the manual release handles cannot be used to open the doors. To enable manual release handle operation, perform the following. If the following is not performed and/or a manual release handle is operated with force, it may deform or be damaged.

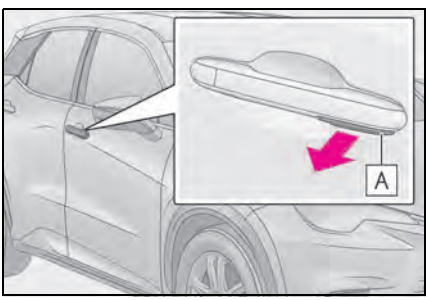
Opening a door using the manual release handle

■ Opening a door using the manual release handle from outside the vehicle

Pull the manual release handle [A] to open the door.

Normally, the manual release handles cannot be used to open the doors.

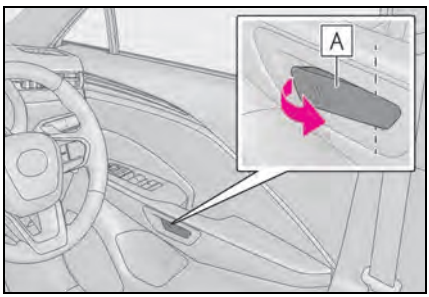
To open a door, enable manual release handle operation. (→P.455)



■ Opening a door using the manual release handle from inside the vehicle

Pull the manual release handle [A] twice to open the door.

Pulling the handle once will enable operation. Pulling the handle again will open the door.



■ Manual release handle operating conditions

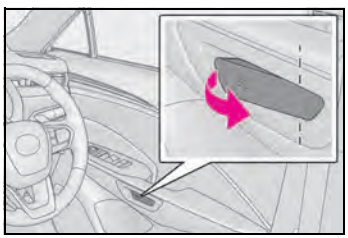
● When the vehicle is involved in a collision

The manual release handle may not become operable depending on the force of the impact and conditions of the collision.

● When the 12-volt battery voltage drops slowly while a door was unlocked

It may not work depending on how it is lowered.

● When manual release handle operation is enabled from inside the vehicle



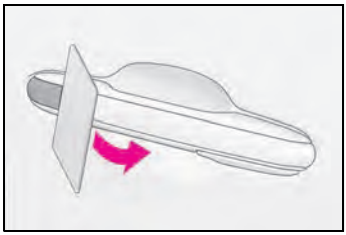
● When manual release handle operation is enabled from outside the vehicle using the mechanical key

■ Enabling outside manual release handle operation using the mechanical key

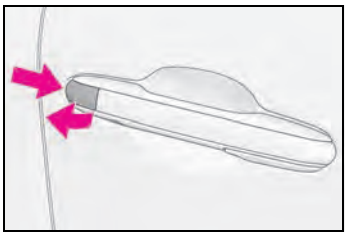
Operation of a manual release handle can be enabled by unlocking a door with the mechanical key.

1 Insert a plastic card, etc. into the gap in the door handle to pry up the cover.

To avoid damage, do not apply excessive force to the cover.



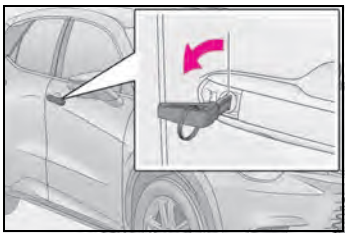
2 Remove the cover by pressing it on the rear.



3 Using the mechanical key, turn the lock cylinder to the unlock side to enable the manual release handle operation.

The mechanical key can only be inserted in one direction, as the key only has a groove on one side.

If the key cannot be inserted in a lock cylinder, turn it over and re-attempt to insert it.



■ Conditions which manual release handle operation is disabled

- Normally, operation of the outside manual release handles is disabled, and they cannot be used to open the doors.

When operation is enabled by operating a manual release handle or using a mechanical key, operation will be disabled automatically if the door is opened using the door opener switch or locked.

- Operation of the inside manual release handles is disabled when the power switch is in ON, and they cannot be used to open the doors.

When operation is enabled by operating a manual release handle or using a mechanical key, operation will be disabled automatically if the door is opened using the door opener switch or locked.

- To prevent a door from being opened accidentally, when the power switch is in ON, after an inside manual release handle is operated once, operation will automatically be disabled after approximately 1 second.

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.

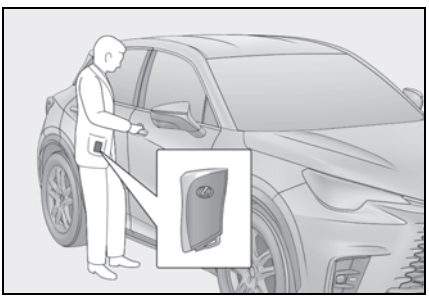
You can also call your Lexus dealer or a qualified repair shop.

Restarting the hybrid system

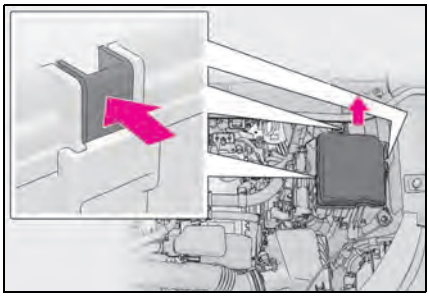
If you have a set of jumper (or booster) cables and a second vehicle with a 12-volt battery, you can jump start your vehicle by following the steps below.

1 Confirm that the electronic key is being carried.

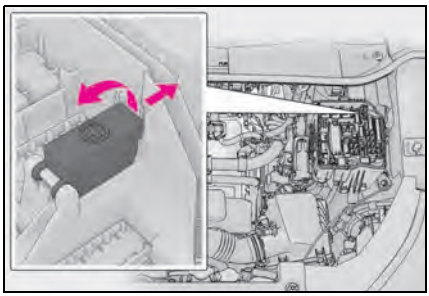
When connecting the jumper (or booster) cables, depending on the situation, the alarm may activate and the doors may lock. (→P.68)



2 Open the hood (→P.375) and fuse box cover.

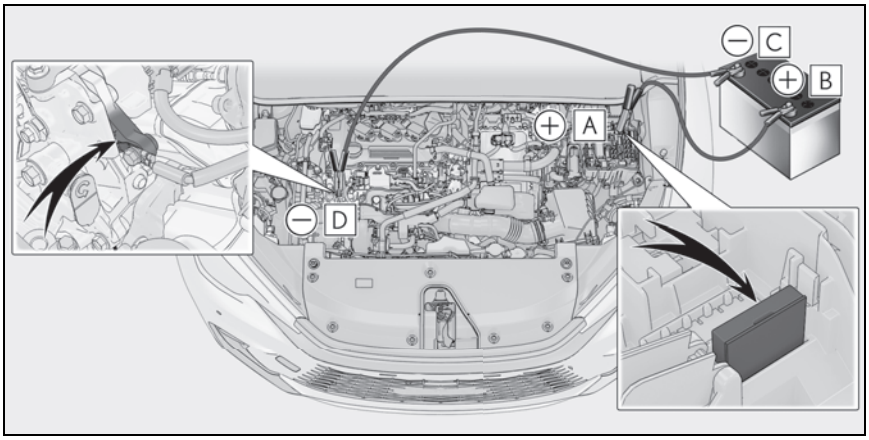


3 Open the exclusive jump starting terminal cover.



4 Connect a positive jumper cable clamp to A on your vehicle and connect the clamp on the other end of the positive cable to B on the second vehicle. Then, connect a negative cable clamp to C on the second vehicle and connect the clamp at the other end of the negative cable to D.

Use jumper cables that can reach the specified terminals and connecting point.



A Exclusive jump starting terminal (your vehicle)

B Positive (+) battery terminal (second vehicle)

C Negative (-) battery terminal (second vehicle)

D Metallic point shown in the illustration

5 Start the engine of the second vehicle. Increase the engine speed slightly and maintain at that level for approximately 5 minutes to recharge the 12-volt battery of your vehicle.

6 Maintain the engine speed of the second vehicle and start the hybrid system of your vehicle by turning the power switch to ON.

7 Make sure the "READY" indicator comes on. If the indicator light does not come on, contact your Lexus dealer.

8 Once the hybrid system has started, remove the jumper cables in the exact reverse order from which they were connected.

9 Close the exclusive jump starting terminal cover, and reinstall the fuse box cover to its original position.

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.

■ **If the doors cannot be unlocked using the smart entry & start system or wireless remote control**

The doors can be opened by enabling its respective manual release handle operation. (→P.455)

■ **Locking the doors after the 12-volt battery was discharged**

The doors cannot be locked using the smart

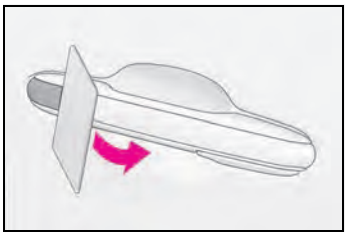
entry & start system or wireless remote control.

By locking the door using the mechanical key, the operation of the manual release handle can be disabled.

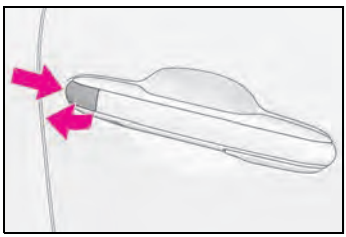
▶ Driver's door

1 Insert a plastic card, etc. into the gap in the door handle to pry up the cover.

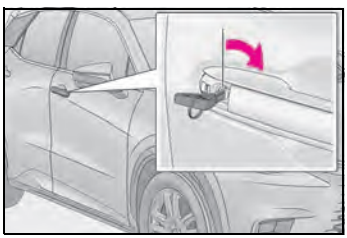
To avoid damage, do not apply excessive force to the cover.



2 Remove the cover by pressing it on the rear.



3 Using the mechanical key, turn the lock cylinder to the lock side to lock the door.

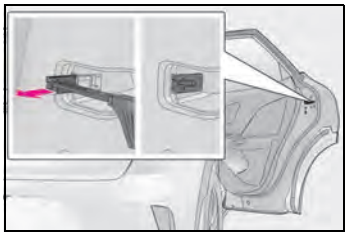


4 Check that the door cannot be opened.

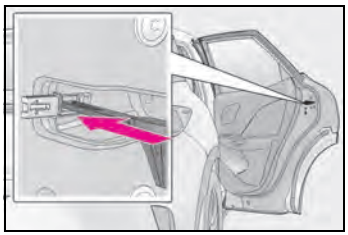
▶ Doors other than the driver's door

1 Open the door. Using the mechanical key, slide the cover in the direction shown in the illustration.

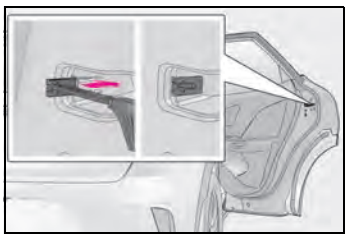
To avoid damage, do not apply excessive force to the cover.



2 Insert the mechanical key into the opening.



3 Remove the mechanical key and slide the cover back to its original position.



4 Check that all of the doors cannot be opened.

■ To prevent 12-volt battery discharge

- Turn off the headlights and the air conditioning system while the hybrid system is stopped.
- 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 ACC customization is in off, power is still provided to the multimedia system even though the power switch is off.
  To turn off the multimedia system, use the multimedia system power switch. For details, refer to the Multimedia Owner's

Manual.

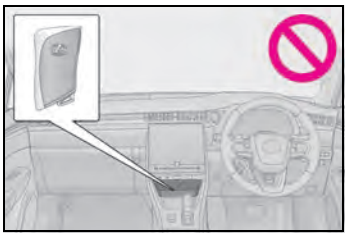
■ **When the 12-volt battery is removed or discharged**

- Information stored in the ECU is cleared. When the 12-volt battery is depleted, have the vehicle inspected at your Lexus dealer.
- Some systems may require initialization. (→P.491)

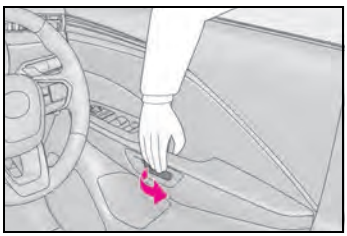
■ **When removing the 12-volt battery terminals**

- When the 12-volt battery terminals are removed, the information stored in the ECU is cleared. Before removing the 12-volt battery terminals, contact your Lexus dealer.
- If a 12-volt battery terminal is disconnected, the doors will not be able to be opened using the door opener switches and the electronic key may become trapped in the vehicle.

To prevent the electronic key (mechanical key) from being locked inside the vehicle, make sure to remove it from the vehicle before disconnecting a 12-volt battery terminal



- If the electronic key (mechanical key) is to be left in the vehicle, make sure to open a window so an inside manual release handle can be operated.



■ **Charging the 12-volt battery**

The electricity stored in the 12-volt battery will discharge gradually even when the vehicle is not in use, due to natural discharge and the draining effects of certain electrical appliances. If the vehicle is left for a long time, the 12-volt battery may discharge, and the hybrid system may be unable to start. (The 12-volt battery recharges automatically during driving.)

■ **When recharging or replacing the 12-volt battery**

- In some cases, it may not be possible to unlock the doors using the smart entry & start system when the 12-volt battery is discharged. Use the wireless remote control or the mechanical key to lock or unlock the doors.
- The hybrid system may not start on the first attempt after the 12-volt battery has recharged but will start normally after the second attempt. This is not a malfunction.
- The power switch mode is memorized by the vehicle. When the 12-volt battery is reconnected, the system will return to the mode it was in before the 12-volt battery was discharged. Before disconnecting the 12-volt battery, turn the power switch off.
  If you are unsure what mode the power switch was in before the 12-volt battery discharged, be especially careful when reconnecting the 12-volt battery.
- If the 12-volt battery discharges, it may not be possible to shift the shift position to other positions. In this case, the vehicle cannot be towed without lifting both front wheels because the front wheels will be locked.
- Some systems may require initialization. (→P.476)

■ **When replacing the 12-volt battery**

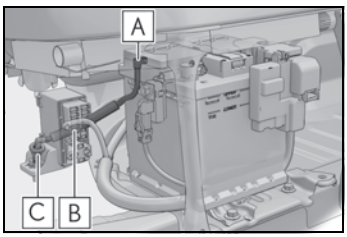
- Use a Central Degassing type 12-volt battery (European Regulations).
- Use a 12-volt battery that the case size is same as the previous one (LN0), 20 hours rate capacity (20HR) is equivalent (39Ah) or greater, and performance rat-

ing (CCA) is equivalent (240A) or greater.
- If the sizes differ, the 12-volt battery cannot be properly secured.
- If an improper 12-volt battery is used, 12-volt battery performance may decrease and the hybrid system may not be able to restart.
- If the 20 hour rate capacity is low, even if the time period where the vehicle is not used is a short time, the 12-volt battery may discharge and hybrid system may not be able to start.

● Use a ventilation type calcium battery.

● Use a 12-volt battery with a handle. If a 12-volt battery without a handle is used, removal is more difficult.

● After exchanging, firmly attach the following items to the exhaust hole of the 12-volt battery.
- Use the exhaust hose that was attached to the 12-volt battery before replacing and confirm that it is firmly connected to the hole section of the vehicle.
- Use the exhaust hole plug included with the 12-volt battery replaced or the one installed on the 12-volt battery prior to the replacement. (Depending on the 12-volt battery to be replaced, the exhaust hole may be plugged.)



A Exhaust hole

B Exhaust hose

C Hole section of the vehicle

For details, consult your Lexus dealer.

WARNING

■ When removing the 12-volt battery terminals

Always remove the negative (-) terminal first. If the positive (+) terminal contacts any metal in the surrounding area when the positive (+) terminal is removed, a spark may occur, leading to a fire in addition to electrical shocks and death or serious injury.

■ Avoiding 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 and that it is not unintentionally in contact with any other than the intended terminal.

● Do not allow the other end of the jumper cable connected to the "+" terminal to come into contact with any other parts or metal surfaces in the area, such as brackets or unpainted metal.

● Do not allow the + and - clamps of the jumper cables to come into contact with each other.

● Do not smoke, use matches, cigarette lighters or allow open flame near the 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 12-volt battery fluids (acid) to come into contact with skin, clothing or the vehicle body.

● Do not lean over the 12-volt battery.

WARNING

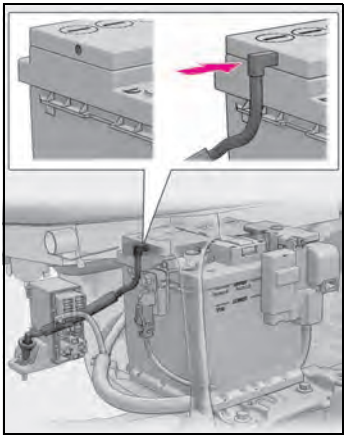
- In the event that 12-volt battery fluid (acid) comes into contact with the skin or eyes, immediately wash the affected area with water and seek medical attention. Place a wet sponge or cloth over the affected area until medical attention can be received.
- Always wash your hands after handling the 12-volt battery and other battery-related parts.
- Do not allow children near the 12-volt battery.

■ After recharging the 12-volt battery

Have the 12-volt battery inspected at your Lexus dealer as soon as possible. If the 12-volt battery is deteriorating, continued use may cause the 12-volt battery to emit a malodorous gas, which may be detrimental to the health of passengers.

■ When replacing the 12-volt battery

- For information regarding 12-volt battery replacement, contact your Lexus dealer.
- After replacing, securely attach the exhaust hose and exhaust hole plug to the exhaust hole of the replaced 12-volt battery. If not properly installed, gases (hydrogen) may leak into the vehicle interior, and there is the possible danger of the gas igniting and exploding.



NOTICE

■ When handling jumper cables

When connecting the jumper cables, ensure that they do not become entangled in the cooling fans or belt.

■ When connecting jumper cables

Make sure to connect jumper cables to the specified terminals and connecting point. Failure to do so may adversely affect the electronic devices or damage to them.

■ To prevent damaging the vehicle

The exclusive jump starting terminal is to be used when charging the 12-volt battery from another vehicle in an emergency. It cannot be used to jump start another vehicle.

If your vehicle overheats

The following may indicate that your vehicle is overheating.

- The engine coolant temperature gauge (→P.77, 83) enters the red zone, or a loss of hybrid system power is experienced. (For example, the vehicle speed does not increase.)
- "Engine Coolant Temp High Stop in a Safe Place See Owner's Manual" or "Hybrid System Overheated Reduced Output Power" is shown on the multi-information display.
- Steam comes out from under the hood.

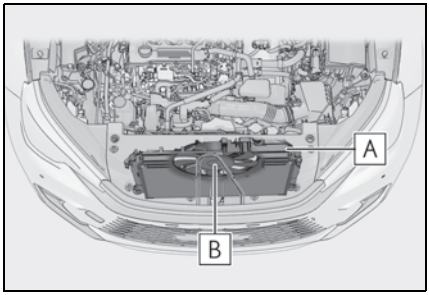
Correction procedures

▶ If the engine coolant temperature gauge enters the red zone or "Engine Coolant Temp High Stop in a Safe Place See Owner's Manual" is shown on the multi-information display.

1 Stop the vehicle in a safe place and turn off the air conditioning system, and then stop the hybrid system.

2 If you see steam:
Carefully lift the hood after the steam subsides.
If you do not see steam:
Carefully lift the hood.

3 After the hybrid system has cooled down sufficiently, inspect the hoses and radiator core (radiator) for any leaks.

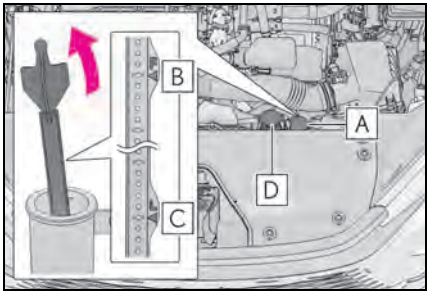


A Radiator

B Cooling fans

If a large amount of coolant leaks, immediately contact your Lexus dealer.

4 The coolant level is satisfactory if it is between the "F" and "L" lines on the reservoir.



A Reservoir

B "F" line

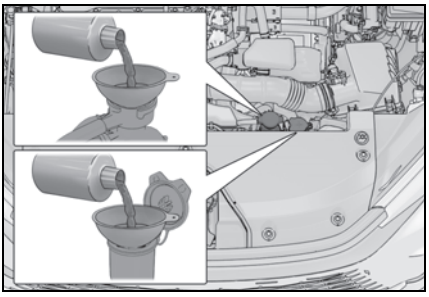
C "L" line

D Radiator cap

5 Add coolant if necessary.

Water can be used in an emergency if

coolant is unavailable.



6 Start the hybrid system and turn the air conditioning system on to check that the radiator cooling fans operate and to check for coolant leaks from the radiator or hoses.

The fans operate when the air conditioning system is turned on immediately after a cold start. Confirm that the fans are operating by checking the fan sound and air flow. If it is difficult to check these, turn the air conditioning system on and off repeatedly. (The fans may not operate in freezing temperatures.)

7 If the fans are not operating:
Stop the hybrid system immediately and contact your Lexus dealer.
If the fans are operating:
Have the vehicle inspected at the nearest Lexus dealer.

8 Check if "Engine Coolant Temp High Stop in a Safe Place See Owner's Manual" is shown on the multi-information display.
If the message does not disappear:
Stop the hybrid system and contact your Lexus dealer.
If the message is not displayed:
Have the vehicle inspected at the nearest your Lexus dealer.

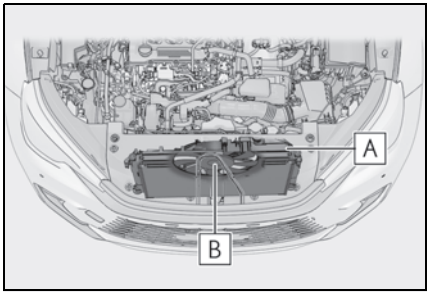
▶ If "Hybrid System Overheated Reduced Output Power" is shown on the multi-information display

1 Stop the vehicle in a safe place.

2 Stop the hybrid system and carefully lift the hood.

3 After the hybrid system has cooled down, inspect the hoses and radiator core (radiator) for any leaks.

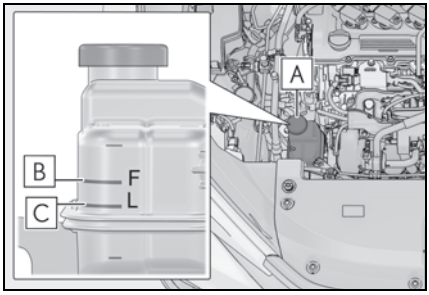
If a large amount of coolant leaks, immediately contact your Lexus dealer.



A Radiator

B Cooling fans

4 The coolant level is satisfactory if it is between the "F" and "L" lines on the reservoir.



A Reservoir

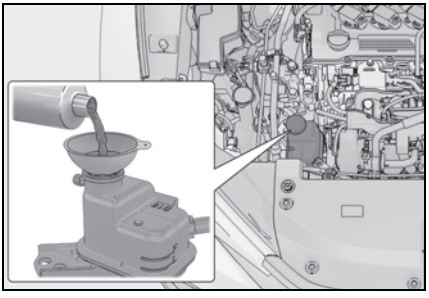
B "F" line

C "L" line

5 Add coolant if necessary.

Water can be used in an emergency if coolant is unavailable.

If water has been added in an emergency, have the vehicle inspected by your Lexus dealer as soon as possible.



6 After stopping the hybrid system and waiting for 5 minutes or more, start the hybrid system again and check if "Hybrid System Overheated Reduced Output Power" is shown on the multi-information display.

If the message does not disappear: Stop the hybrid system and contact your Lexus dealer.

If the message is not displayed: The hybrid system temperature has dropped and the vehicle may be driven normally.

However, if the message appears again frequently, contact your Lexus dealer.

WARNING

■ To prevent an accident or injury when inspecting under the hood of your vehicle

Observe the following precautions.

Failure to do so may result in serious injury such as burns.

- If steam is seen coming from under the hood, do not open the hood until the steam has subsided. The engine compartment may be very hot.
- After the hybrid system has been turned off, check that the "READY" indicator is off. When the hybrid system is operating, the gasoline engine may automatically start, or the cooling fans may suddenly operate even if the gasoline engine stops. Do not touch or approach rotating parts such as the fans, which may lead to fingers or clothing (especially a tie, a scarf or a muffler) getting caught, resulting in serious injury.
- Do not loosen the radiator cap or the coolant reservoir cap while the hybrid system and radiator are hot.

High temperature steam or coolant could spray out.

NOTICE

■ When adding engine/power control unit coolant

Add coolant slowly after the hybrid system has cooled down sufficiently. Adding cool coolant to a hot hybrid system too quickly can cause damage to the hybrid system.

■ To prevent damage to the cooling system

Observe the following precautions:

- Avoid contaminating the coolant with foreign matter (such as sand or dust, etc.).
- Do not use any coolant additive.

If the vehicle becomes stuck

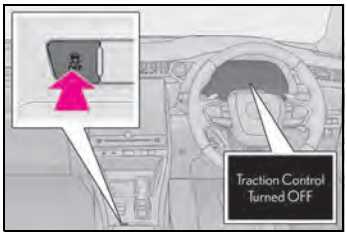
Carry out the following procedures if the tires spin or the vehicle becomes stuck in mud, dirt or snow:

Recovering procedure

1. Stop the hybrid system. Shift the shift position to P and set the parking brake.
2. Remove the mud, snow or sand from around the front wheels.
3. Place wood, stones or some other material under the front wheels to help provide traction.
4. Restart the hybrid system.
5. Shift the shift position to D or R and release the parking brake. Then, while exercising caution, depress the accelerator pedal.

■ When it is difficult to free the vehicle

Press the OFF switch to turn off TRC. (→P.319)



WARNING

■ When attempting to free a stuck vehicle

If you choose to push the vehicle back and forth to free it, make sure the surrounding area is clear to avoid striking other vehicles, objects or people. The vehicle may also lunge forward or lunge back suddenly as it becomes free. Use extreme caution.

■ When shifting the shift position

Be careful not to shift the shift position with the accelerator pedal depressed.

This may lead to unexpected rapid acceleration of the vehicle that may cause an accident resulting in death or serious injury.

NOTICE

■ To avoid damage to the hybrid transmission and other components

- Avoid spinning the tires and depressing the accelerator pedal more than necessary.
- If the vehicle remains stuck even after these procedures are performed, the vehicle may require towing to be freed.

Vehicle specifications

8

8-1. Specifications

Maintenance data (fuel, oil level, etc.) 468

Fuel information 475

8-2. Customization

Customizable features 476

8-3. Initialization

Items to initialize 491

Maintenance data (fuel, oil level, etc.)

Dimensions

Overall length		4190 mm (165.0 in.)
Overall width		1825 mm (71.9 in.)
Overall height*1		1550 mm (61.0 in.)*2 1560 mm (61.4 in.)*3
Wheelbase		2580 mm (101.6 in.)
Tread	Front	1570 mm (61.8 in.)
	Rear	1570 mm (61.8 in.)

*1: Unladen vehicle

*2: Vehicles with 215/60R17 tires

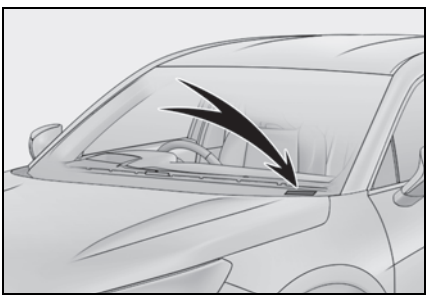
*3: Vehicles with 225/60R17 tires or 225/55R18 tires

Vehicle identification

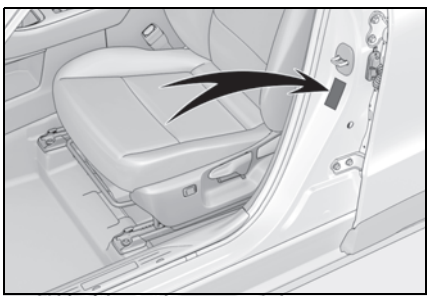
Vehicle identification number

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 on the top left of the instrument panel.



This number is also on the manufacturer's label.

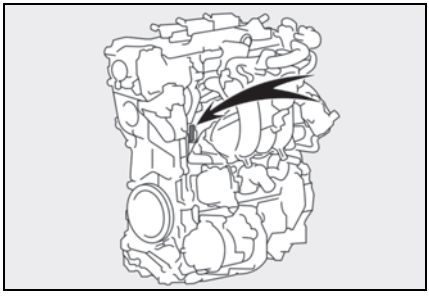


This number is also stamped under the right-hand front seat.



■ Engine number

The engine number is stamped on the engine block as shown.



Engine

Model	M15A-FXE
Type	3-cylinder in line, 4-cycle, gasoline
Bore and stroke	80.5 x 97.6 mm (3.17 x 3.84 in.)
Displacement	1490 cm^3 (90.9 cu.in.)
Valve clearance	Automatic adjustment

Fuel

Fuel type	Unleaded gasoline only
Research Octane Number	91 or higher
Fuel tank capacity (Reference)	36 L (9.5 gal., 7.9 Imp.gal.)

Electric motor (traction motor)

▶ Front

Type	Permanent magnet synchronous motor
Maximum output	69 kW
Maximum torque	185 N•m (18.9 kgf•m, 136.4 ft•lbf)

▶ Rear (AWD models)

Type	Induction asynchronous motor
Maximum output	4.7 kW
Maximum torque	52 N•m (5.3 kgf•m, 38.4 ft•lbf)

Hybrid battery (traction battery)

Type	Nickel-Metal hydride battery
Voltage	1.2 V/cell
Capacity	5 Ah
Quantity	168 cells
Nominal voltage	201.6 V

Lubrication system

■ Oil capacity (Drain and refill—reference*)

With filter	3.3 L (3.5 qt., 2.9 Imp.qt.)
Without filter	3.1 L (3.3 qt., 2.7 Imp.qt.)

*: The engine oil capacity is a reference quantity to be used when changing the engine oil. When actually adding the engine oil, make sure that the oil level is between the low level mark and refill upper limit mark (→P.380). Warm up the engine and turn off the hybrid system, wait about 5 minutes, and check the oil level on the dipstick.

■ Engine oil selection

"Toyota Genuine Motor Oil" is used in your Lexus vehicle. Use Lexus approved "Toyota Genuine Motor Oil" or equivalent to satisfy the following grade and viscosity.

Oil grade:

0W-8:

JASO GLV-1

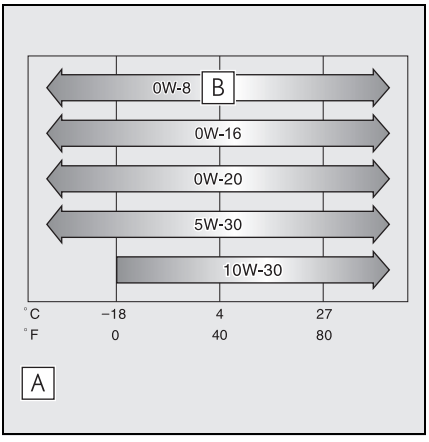
0W-16:

API grade SN "Resource-Conserving", SN PLUS "Resource-Conserving" or SP "Resource-Conserving"; or ILSAC GF-6B multigrade engine oil

0W-20, 5W-20, 5W-30 and 10W-30:

API grade SL "Energy-Conserving", SM "Energy-Conserving", SN "Resource-Conserving", SN PLUS "Resource-Conserving" or SP "Resource-Conserving"; or ILSAC GF-6A multigrade engine oil

Recommended viscosity (SAE):



A Temperature range anticipated before next oil change

B Preferred

SAE 0W-8 is filled into your Lexus vehicle at manufacturing, and the best choice for good fuel economy and good starting in cold weather.

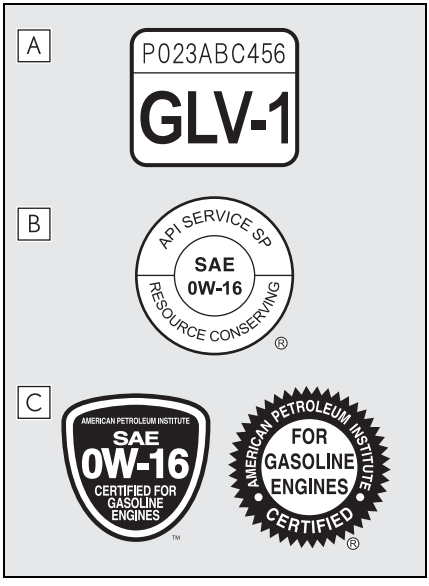
If you use SAE 10W-30 engine oil in extremely low temperatures, the engine may become difficult to start, so SAE 0W-8, 0W-16, 0W-20 or 5W-30 engine oil is recommended.

Oil viscosity (0W-8 is explained here as an example):

- The 0W in 0W-8 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 8 in 0W-8 indicates the viscosity characteristic of the oil when the oil is at high temperature.

How to read oil container labels:

Either one or two of following marks are added to some oil containers to help you select the oil you should use.



A JASO GLV-1 Mark

The Japanese Automotive Standards Organization (JASO) GLV-1 Mark is displayed on the container.

B API Service Symbol

Top portion: "API SERVICE SP" means the oil quality designation by American Petroleum Institute (API).
Center portion: "SAE 0W-16" means the SAE viscosity grade.

Lower portion: "Resource-Conserving" means that the oil has fuel-saving and environmental protection capabilities.

C ILSAC Certification Mark

The International Lubricant Specification Advisory Committee (ILSAC) Certification Mark is displayed on the front of the container.

Cooling system

Capacity*	Gasoline engine	5.0 L (5.3 qt., 4.4 Imp.qt.)
	Power control unit	1.7 L (1.8 qt., 1.5 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.

*: The coolant capacity is the quantity of reference.
If replacement is necessary, contact your Lexus dealer.

Ignition system

Spark plug

Make	DENSO FC16HR-Q8 NGK DILKAR6T8
Gap	0.8 mm (0.031 in.)

NOTICE

Iridium-tipped spark plugs

Use only iridium-tipped spark plugs. Do not adjust the spark plug gap.

Electrical system

12-volt battery

Open voltage at 20°C (68°F):	12.0 V or higher (Turn the power switch to OFF and turn on the high beam headlights for 30 seconds.) If the voltage is lower than the standard value, charge the battery.
Charging rates (Slow charge)	5 A max.

Hybrid transmission

Fluid capacity*	3.0 L (3.2 qt., 2.6 Imp.qt.)
Fluid type	Toyota Genuine e-Transaxle Fluid TE

*: The fluid capacity is a reference quantity.
If replacement is necessary, contact your Lexus dealer.

NOTICE

■ Hybrid transmission fluid type

Using transmission fluid other than the above type may cause abnormal noise or vibration, or ultimately damage the transmission of your vehicle.

Rear differential (rear electric motor) (AWD models)

Fluid capacity*	1.3 L (1.4 qt., 1.1 Imp.qt.)
Fluid type	Toyota Genuine ATF WS

*: The fluid capacity is the quantity of reference.
If replacement is necessary, contact your Lexus dealer.

NOTICE

■ Transmission fluid type

Using transmission fluid other than the above type may cause abnormal noise or vibration, or ultimately damage the transmission of your vehicle.

Brakes

Pedal clearance*1	81 mm (3.19 in.) Min.
Pedal free play	1.0 — 6.0 mm (0.04 — 0.24 in.)
Parking brake indicator*2	When pulling the parking brake switch for 1 to 2 seconds: comes on When pushing the parking brake switch for 1 to 2 seconds: turns off
Fluid type	• SAE J1703 or FMVSS No. 116 DOT 3 • SAE J1704 or FMVSS No. 116 DOT 4

*1: Minimum pedal clearance when depressed with a force of 300 N (30.6 kgf, 67.4 lbf) while the hybrid system is operating.

*2: Make sure to confirm that the brake system warning light (yellow) does not illuminate. (If the brake system warning light illuminates, refer to P.424)

Steering

Free play	Less than 30 mm (1.2 in.)

Tires and wheels

▶ 17-inch tires

Tire size	215/60R17 96H 225/60R17 99H
Tire inflation pressure (Recommended cold tire inflation pressure)	Front: 240 kPa (2.4 kgf/cm^2 or bar, 35 psi) Rear: 240 kPa (2.4 kgf/cm^2 or bar, 35 psi)
Wheel size	17 × 7 J
Wheel bolt torque	140 N•m (14.3 kgf•m, 103 ft•lbf)

▶ 18-inch tires

Tire size	225/55R18 98H
Spare tire inflation pressure (Recommended cold tire inflation pressure)	Front: 230 kPa (2.3 kgf/cm^2 or bar, 33 psi) Rear: 230 kPa (2.3 kgf/cm^2 or bar, 33 psi)
Wheel size	18 × 7J
Wheel bolt torque	140 N•m (14.3 kgf•m, 103 ft•lbf)

Fuel information

You must only use unleaded gasoline.
Select unleaded gasoline with a Research Octane Number of 91 or higher for optimum engine performance.

Use of ethanol blended gasoline in a gasoline engine

Lexus allows the use of ethanol blended gasoline where the ethanol content is up to 10%. Make sure that the ethanol blended gasoline to be used has a Research Octane Number that follows the above.

If your engine knocks

- Consult your Lexus dealer.
- You may occasionally notice light knocking for a short time while accelerating or driving uphill. This is normal and there is no need for concern.

NOTICE

Notice on fuel quality

- Do not use improper fuels. If improper fuels are used, the engine will be damaged.
- Do not use gasoline with metallic additives, for example manganese, iron or lead, otherwise it may cause damage on your engine or emission control system.
- Do not add aftermarket fuel additives which contain metallic additives.
- Do not use the methanol blended gasoline such as M15, M85, M100. The use of gasoline containing methanol may cause engine damage or failure.

Customizable features

Your vehicle includes a variety of electronic features that can be personalized to suit your preferences. The settings of these features can be changed by using the Center Display or at your Lexus dealer.

Some of the customizable features are changed in conjunction with the settings of My Settings. (→P.150)

Customizing vehicle features

■ **To change setting with**

1 Select on the Center Display.
2 Select "Vehicle customise" or "Driving assist".
3 Select the item to change the settings of from the list.

For functions that can be turned on/off, select (ON) / (OFF).

For functions whose level can be adjusted, such as volume, sensor sensitivity, etc., slide the icon on the bar.

■ **To change setting with**

1 Select on the Center Display.
2 Select "Driving assist".
3 Select the item to change the settings of from the list.

Each time the switch is selected, the setting will be enabled/disabled.

When enabling is selected, the item display will be emphasized.

■ **During customization**

Stop the vehicle in a safe place, apply the parking brake, and shift the shift position to P. Also, to prevent 12-volt battery discharge, leave the hybrid system operating while customizing the features.

■ **Using the icon**

Some vehicle customise settings can also be changed through the icon.

WARNING

■ **During customization**

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

NOTICE

■ **During customization**

To prevent 12-volt battery discharge, ensure that the hybrid system is operating while customizing features.

Customizable Features

Some function settings are changed simultaneously with other functions being customized. Contact your Lexus dealer for further details.

A Settings that can be changed using the Center Display

B Settings that can be changed by your Lexus dealer

Definition of symbols: O = Available, — = Not available

■ **Gauges, meters and multi-information display (→P.77, 83, 88, 90)**

The language, units of measure, etc. of some items displayed on the meter or multi-information display will be changed according to settings on the Center Display. Refer to "Multimedia Owner's Manual".

Function	Customized setting	A	B
Meter display type*	• Type 1 • Type 2 • Type 3	O	—
Tachometer setting	• Change according to driving mode • Always tachometer • Always Hybrid System Indicator	O	—
EV indicator*	• On • Off	O	—
Suggestion function*	• On • On (when the vehicle is stopped) • Off	O	—
Stop light indicator	• On • Off	O	—

*: This setting changes in accordance with My Settings

■ **Head-up Display*1 (→P.91)**

Function	Customized setting	A	B
Head-up display*2	• On • Off	O	—
Head-up display brightness	• Desired brightness	O	—
Head-up display type*2	• Minimum • Standard • Full	O	—

*1: If equipped

*2: This setting changes in accordance with My Settings

■ **Steering wheel switches (vehicles with head-up display) (→P.95)**

Function	Customized setting	A	B
Right steering wheel switch favorite functions*	• Display control • Custom	○	—
Left steering wheel switch favorite functions*	• Audio • Climate • Custom	○	—
Switch sensor high sensitivity mode (winter glove mode)*	• On • Off	○	—
Sensitivity of steering wheel switches for head-up display	• Standard • High • Off	—	○
Time-out period	• Short • Standard • Long	—	○

*: This setting changes in accordance with My Settings

■ **Door lock (→P.111, 452)**

Function	Customized setting	A	B
Door lock switch indicator illumination time	• 30 seconds • 60 seconds • 600 seconds • 1200 seconds	—	○
Inside door opener switch operation adjustment (door opening function adjustment)	• Short • Mid • Long	—	○
Multi-information display/buzzer operation when a door opener switch inside the vehicle is operated	• On • Off	—	○

Function	Customized setting	A	B
Inside/outside door opener switch operating method	• Unlatch while Pushing switch • 0.6 seconds • Operating from inside the cabin: 0.6 Seconds Operating from outside: Unlatch while Pushing switch • Operating from inside the cabin: Unlatch while Pushing switch Operating from outside: 0.6 Seconds	—	○
Unlocking using a mechanical key	• All doors unlocked in one step • Driver's door unlocked in one step, all doors unlocked in two step	—	○
Shift position linked door locking function*	• On • Off	○	○
Shift position linked door unlocking function*	• On • Off	○	○
Driver's door linked door unlocking function*	• On • Off	○	○

*: This setting changes in accordance with My Settings

■ Power back door*1 (→P.119)

Function	Customized setting	A	B
Power back door	• On • Off	○	—
Power back door opening position	• 1 to 5*	○	—
Buzzer volume	• Level 1 to Level 3	○	—
The function that validates the switch of the wireless remote control when locking the door	• On • Off	—	○
Close & lock (walk away) function	• On • Off	—	○

*1: If equipped

*2: Configured by operating the switch of the back door.

■ **Smart entry & start system and wireless remote control (→P.109, 127)**

Function	Customized setting	A	B
Operation buzzer volume*	• 1 to 7	○	○
Operation signal (Emergency flashers)*	• On • Off	○	○
Time elapsed before automatic door lock function is activated if door is not opened after being unlocked*	• 30 seconds • 60 seconds • 120 seconds	○	○
Open door warning buzzer	• On • Off	—	○

*: This setting changes in accordance with My Settings

■ **Smart entry & start system (→P.127)**

Function	Customized setting	A	B
Smart entry & start system	• On • Off	○	○
Smart door unlocking	• All the doors • Driver's door	○	○
Number of consecutive door lock operations	• 2 times • As many as desired	—	○
Time elapsed before unlocking all the door when gripping and holding the driver's door handle	• 1.5 seconds • 2 seconds • 2.5 seconds • Off	—	○

■ **Wireless remote control (→P.109)**

Function	Customized setting	A	B
Unlocking operation*	• All doors unlocked in one step • Driver's door unlocked in one step, all doors unlocked in two step	○	○
Power back door unlocking operation	• Press and hold • One short press • Press twice • Off	—	○

*: This setting changes in accordance with My Settings

■ **Driving position memory*1 (→P.146)**

Function	Customized setting	A	B
Driver's seat movement when exiting the vehicle*2	• Partial • Standard • Off	○	○

*1: If equipped

*2: This setting changes in accordance with My Settings

■ **Outside rear view mirrors (→P.140)**

Function	Customized setting	A	B
Automatic mirror folding and extending operation	• Linked to the locking/unlocking of the doors • Linked to operation of the power switch • Off	—	○

■ **Power windows (→P.143)**

Function	Customized setting	A	B
Mechanical key linked operation	• On • Off	—	○
Wireless remote control linked operation	• On • Off	—	○

■ Reverse warning buzzer

Function	Customized setting	A	B
Signal (buzzer) when the shift position is in R	• On • Off	—	○

■ Automatic light control system (→P.187)

Function	Customized setting	A	B
Light sensor sensitivity*	• Darker • Dark • Normal • Bright • Brighter	○	○
Time elapsed before headlights automatically turn off after doors are closed*	• 30 seconds • 60 seconds • 90 seconds • Off	○	○

*: This setting changes in accordance with My Settings

■ Lights (→P.187)

Function	Customized setting	A	B
Welcome lighting	• On • Off	—	○

■ AHS (Adaptive High-beam System)*1 (→P.190)

Function	Customized setting	A	B
Adaptive High-beam System	• On • Off*2	—	○
Brightness and illuminated area adjustment of the high beams according to the vehicle speed	• 15 km/h (9 mph) • 30 km/h (19 mph) • 80 km/h (50 mph)	—	○
Intensity adjustment of the high beams when driving around a curve (illuminates the area in the direction vehicle is turning more brightly)	• On • Off	—	○

Function	Customized setting	A	B
Projection distance adjustment of the low beams according to the distance to a preceding vehicle	• On • Off	—	○
High beam light distribution control for rain	• On • Off	—	○
Upper level high beam light distribution control	• On • Off	—	○
Light distribution control for urban areas	• On • Off	—	○

*1: If equipped

*2: Operating as the Automatic High Beam. (→P.193)

■ **Rear window wiper (→P.201)**

Function	Customized setting	A	B
Rear window wiper operation when the back door is opened	• On • Off	—	○
Washer linked rear window wiper operation	• On • Off	—	○
Shift position linked rear window wiper operation	• Once • Continuous • Off	—	○

■ **PCS (Pre-Collision System) (→P.213)**

Function	Customized setting	A	B
Pre-Collision System	• On • Off	○	—
Warning timing*	• Later • Default • Earlier	○	—

*: This setting changes in accordance with My Settings

■ LDA (Lane Departure Alert) (→P.229)

Function	Customized setting	A	B
Lane Departure Alert system*	• On • Off	○	—
Alert timing*	• Default • Earlier	○	—
Alert options*	• Vibration • Audible	○	—

*: This setting changes in accordance with My Settings

■ Dynamic radar cruise control (→P.236)

Function	Customized setting	A	B
Acceleration setting*	• Low • Mid • High	○	—
Speed setting (short press)*	• 1 km/h (1 mph) • 5 km/h (5 mph) • 10 km/h (10 mph)	○	—
Speed setting (long press)*	• 1 km/h (1 mph) • 5 km/h (5 mph) • 10 km/h (10 mph)	○	—
DRCC(RSA)*	• On • Off	○	—
Speed limit offset*	• -5 to 5	○	—
Guide message*	• On • Off	○	—
Curve speed reduction*	• Low • Mid • High • Off	○	—

*: This setting changes in accordance with My Settings

■ RSA (Road Sign Assist) (→P.234)

Function	Customized setting	A	B
Road Sign Assist*	• On • Off	○	—
Excess speed notification method*	• Visual • Visual and Audible • None	○	—
Excess speed notification level*	• 5 km/h (3 mph) • 3 km/h (2 mph) • 1 km/h (1 mph)	○	—

*: This setting changes in accordance with My Settings

■ Driver break suggestion (→P.231)

Function	Customized setting	A	B
Driver break suggestion	• On • Off	○	—

■ Driver monitor (→P.212)

Function	Customized setting	A	B
Warning function*	• On • Off	○	—

*: This setting changes in accordance with My Settings

■ BSM (Blind Spot Monitor) (→P.255)

Function	Customized setting	A	B
BSM (Blind Spot Monitor)	• On • Off	○	—
Outside rear view mirror indicator brightness*	• Dim • Bright	○	—
Alert timing for presence of approaching vehicle (sensitivity)*	• Late • Default • Early	○	—
Buzzer warning*	• On • Off	○	—

*: This setting changes in accordance with My Settings

■ **Lexus parking assist-sensor (→P.265)**

Function	Customized setting	A	B
Lexus parking assist-sensor*1	• On • Off	○	—
Buzzer volume of Lexus parking assist-sensor when operating*1, 2	• Soft • Normal • Loud	○	—

*1: This setting changes in accordance with My Settings

*2: The sound volume is linked to RCTA and RCD.

■ **RCTA (Rear Cross Traffic Alert) function (→P.273)**

Function	Customized setting	A	B
RCTA (Rear Cross Traffic Alert)	• On • Off	○	—
Buzzer volume of RCTA when operating*1, 2	• Soft • Normal • Loud	○	—

*1: This setting changes in accordance with My Settings

*2: The sound volume is linked to Lexus parking assist-sensor and RCD.

■ **RCD (Rear Camera Detection) (→P.278)**

Function	Customized setting	A	B
RCD (Rear Camera Detection) function	• On • Off	○	—

*: This setting changes in accordance with My Settings

■ **PKSB (Parking Support Brake) (→P.282)**

Function	Customized setting	A	B
PKSB (Parking Support Brake) function*	• On • Off	○	—

*: This setting changes in accordance with My Settings

■ Lexus Teammate Advanced Park[*1, 2] (→P.293)

Function	Customized setting	A	B
Vehicle speed during operation	• Slow • Standard • Fast	○	—
Distance to objects	• Standard • Far	○	—
Preferred parking method	• Parallel • Perpendicular	○	—
Preferred parking direction	• Forward • Reverse	○	—
Preferred exit direction (perpendicular)	• Right • Left	○	—
Preferred exit direction (parallel)	• Left • Right	○	—
Camera view when parking	• Standard • Wide	○	—
Camera view when exiting	• Wide • Standard	○	—
Parking path adjustment	• -3 (Inward) to +3 (Outward)	○	—
Road width adjustment	• Narrow • Slightly narrow • Standard	○	—
Park position adjustment (forward)	• -3 (Rearward) to +3 (Frontward)	○	—
Park position adjustment (reverse)	• -3 (Rearward) to +3 (Frontward)	○	—
Rear accessory setting	• 10 cm (3.9 in.) • 20 cm (7.9 in.) • 30 cm (11.8 in.) • 40 cm (15.7 in.) • Off	○	—
Clear registered parking space	—	○	—

*1: If equipped

*2: This settings can be changed on the Advanced Park guidance screen. (→P.299)

■ **Safe Exit Assist (→P.260)**

Function	Customized setting	A	B
Safe Exit Assist	• On • Off	○	—
Outside rear view mirrors display*	• On • Off	○	—
Detection sensitivity*	• Low • Mid • High	○	—

*: This setting changes in accordance with My Settings

■ **Power switch (→P.170)**

Function	Customized setting	A	B
ACC customization Enabling/Disabling ACC mode	• On • Off	○	○

■ **Passenger and rear seat reminder (→P.113)**

Function	Customized setting	A	B
Passenger and rear seat reminder function*	• On • Off	—	○

*: This setting changes in accordance with My Settings

■ **Automatic air conditioning system (→P.335)**

Function	Customized setting	A	B
Switching between outside air and recirculated air mode linked to "AUTO" switch operation*	• On • Off	○	○
A/C auto switch operation*	• On • Off	○	○

*: This setting changes in accordance with My Settings

■ **Seat heaters**[*1] (→P.341)

Function	Customized setting	A	B
Driver's seat temperature preference in automatic mode[*2]	• -2 (cooler) to 2 (warmer)	○	○
Front passenger's seat temperature preference in automatic mode[*2]	• -2 (cooler) to 2 (warmer)	○	○

[*1]: If equipped

[*2]: This setting changes in accordance with My Settings

■ **Heated steering wheel**[*1] (→P.341)

Function	Customized setting	A	B
Steering wheel heating preference in automatic mode[*2]	• -2 (low) to 2 (high)	○	○

[*1]: If equipped

[*2]: This setting changes in accordance with My Settings

■ **Illumination** (→P.343)

Function	Customized setting	A	B
Time elapsed before the interior lights turn off[*1]	• 7.5 seconds • 15 seconds • 30 seconds • Off[*2]	○	—
Operation after the power switch is turned off	• On • Off	—	○
Operation when you approach the vehicle with the electronic key on your person	• On • Off	—	○
Operation when the doors are unlocked	• On • Off	—	○
Door-trim ornament lights and auxiliary tray lights[*3]	• On • Off	—	○

Function	Customized setting	A	B
Color selection*1, 3	• Silky white • Custom	○	—
Brightness control*1	• 0 (off) to 9	○	—

*1: This setting changes in accordance with My Settings

*2: The illuminated entry system will be disabled. (→P.343)

*3: If equipped

■ **Vehicle customization**

- When the smart entry & start system is off, smart door unlocking cannot be customized.
- When the doors remain closed after unlocking the doors and the timer activated automatic door lock function activates, signals will be generated in accordance with the operational signal (Emergency flashers) function setting.

Items to initialize

The following item must be initialized for normal system operation after such cases as the 12-volt battery being reconnected, or maintenance being performed on the vehicle:

Items to initialize

Item	When to initialize	Reference
Tire pressure warning system	• When the specified tire inflation pressure has changed, such as due to carried load, etc. • When the tire inflation pressure is changed such as when the tire size is changed.	P.391
Oil maintenance	• After the maintenance is performed	P.380
Power back door*	• After reconnecting or changing the 12-volt battery • After changing a fuse	P.123
Power window	• When functioning abnormally	P.143
Lexus parking assist-sensor	• If the 12-volt battery was discharged or has been removed and installed	P.265
Parking Support Brake function (static objects around the vehicle)	• If the 12-volt battery was discharged or has been removed and installed	P.286

*: If equipped

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What to do if... (Troubleshooting)

If you have a problem, check the following before contacting your Lexus dealer.

The doors cannot be locked, unlocked, opened or closed



You lose your keys

- If you lose your mechanical keys, new genuine mechanical keys can be made by your Lexus dealer. (→P.451)
- If you lose your electronic keys, the risk of vehicle theft increases significantly. Contact your Lexus dealer immediately. (→P.451)



The doors cannot be locked or unlocked

- Is the electronic key battery weak or depleted? (→P.409)
- Vehicles with entry function: Is the power switch in ON?
  When locking the doors, turn the power switch off. (→P.170)
- Vehicles with entry function: Is the electronic key left inside the vehicle?
  When locking the doors, make sure that you have the electronic key on your person.
- The function may not operate properly due to the condition of the radio wave. (→P.129)



The rear door cannot be opened

- Is the child-protector lock set?
  The rear door cannot be opened from inside the vehicle when the lock is set. Open the rear door from outside and then unlock the child-protector lock. (→P.115)

If you think something is wrong



The hybrid system does not start

- Did you press the power switch while firmly depressing the brake pedal? (→P.168)
- Is the shift position in P? (→P.168)
- Is the electronic key anywhere detectable inside the vehicle? (→P.128)
- Is the electronic key battery weak or depleted?
  In this case, the hybrid system can be started in a temporary way. (→P.453)
- Is the 12-volt battery discharged? (→P.456)



The windows do not open or close by operating the power window switches

- Is the window lock switch pressed?
  The power window except for the one at the driver's seat cannot be operated if the window lock switch is pressed. (→P.145)



The power switch is turned off automatically

- The auto power off function will be operated if the vehicle is left in ACC or ON (the hybrid system is not operating) for a period of time. (→P.171)



A warning buzzer sounds during driving

- The seat belt reminder light is flashing
  Are the driver and the passengers wearing the seat belts? (→P.427)
- The parking brake indicator is on
  Is the parking brake released? (→P.182)

Depending on the situation, other types of warning buzzer may also sound. (→P.424, 432)



An alarm is activated and the horn sounds

- Did anyone inside the vehicle open a door during setting the alarm?
  The sensor detects it and the alarm sounds. (→P.67)

To stop the alarm, turn the power switch to ON or start the hybrid system.



A warning buzzer sounds when leaving the vehicle

- Is the message displayed on the multi-information display?
  Check the message on the multi-information display. (→P.432)



A warning light turns on or a warning message is displayed

- When a warning light turns on or a warning message is displayed, refer to →P.424, 432.

When a problem has occurred



If you have a flat tire

- Stop the vehicle in a safe place and repair the flat tire temporarily with the emergency tire puncture repair kit. (→P.439)



The vehicle becomes stuck

- Try the procedure for when the vehicle becomes stuck in mud, dirt, or snow. (→P.465)

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For information regarding the equipment listed below, refer to the "Multimedia Owner's Manual".

- Audio/video system
- Navigation system
- Lexus parking assist monitor
- Panoramic view monitor

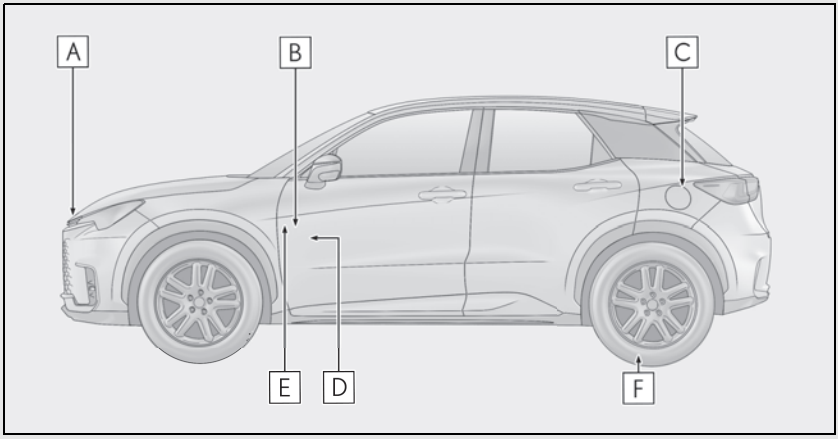
Certifications

BSM (Blind Spot Monitor)



C5-057

GAS STATION INFORMATION



A Auxiliary catch lever (→P.375)

B Power back door switch* (→P.120)

C Fuel filler door (→P.204)

D Hood lock release lever (→P.375)

E Fuel filler door opener switch (→P.204)

F Tire inflation pressure (→P.474)

*: If equipped

Fuel tank capacity (Reference)	36 L (9.5 gal., 7.9 Imp.gal.)	
Fuel type	Unleaded gasoline only	P.469
Cold tire inflation pressure		P.474
Engine oil capacity (Drain and refill — reference)		P.470
Engine oil type		P.470

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