Congratulations on your selection of this Lexus. In Lexus vehicles we have invested all our engineering and design resources; all the know−how we have gained in over 60 years of making automobiles; the highest motivation of our most talented employees; and our tradition of incessant striving toward ever greater quality.

This Owner's Manual explains the features of your new Lexus. Please read it and follow the instructions carefully so that you can enjoy many years of safe motoring.

When it comes to service, remember that your Lexus dealer knows your vehicle very well and is interested in your complete satisfaction. Your Lexus dealer will provide quality maintenance and any other assistance you may require.

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

U.S. OWNERS

If you need emergency assistance for any reason, please call the following number:

- When traveling in the U.S. mainland or Canada**:**
  Lexus Roadside Assistance **Toll−free: 1−800−25−LEXUS or 1−800−255−3987**
- HAWAII:
  Servco Automotive Roadside Assistance/Customer Services **Toll−free: 1−800−25−LEXUS or 1−800−255−3987**

CANADIAN OWNERS

- When traveling in Canada or the U.S. mainland**:**
  Lexus Roadside Assistance/Customer Service **Toll−free: 1−800−26−LEXUS or 1−800−265−3987**

Please leave this Owner's Manual in this vehicle at the time of resale. The next owner will need this information also.

All information and specifications 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.

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.

Please access our websites for further information.

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

TOYOTA MOTOR CORPORATION

IMPORTANT INFORMATION ABOUT YOUR LEXUS

Occupant restraint systems

Lexus encourages you and your family to take the time to read Section 1−6 of this Owner's Manual carefully. In terms of helping you understand how you can receive the maximum benefit of the occupant restraint systems this vehicle provides, Section 1−6 of this Owner's Manual is the most important section for you and your family to read.

Section 1−6 describes the function and operation concerning seats, seat belts, SRS airbags and child restraint systems of this vehicle and some potential hazards you should be aware of. These systems work together along with the overall structure of this vehicle in order to provide occupant restraint in the event of a crash. The effect of each system is enhanced when it is used properly and together with other systems. No single occupant restraint system can, by itself, provide you or your family with the equal level of restraint which these systems can provide when used together. That is why it is important for you and your family to understand the purpose and proper use of each of these systems and how they relate to each other.

The purpose of all occupant restraint systems is to help reduce the possibility of death or serious injury in the event of a collision. None of these systems, either individually or together, can ensure that there is no injury in the event of collision. However, the more you know about these systems and how to use them properly, the greater your chances become of surviving an accident without death or serious injury.

Seat belts provide the primary restraint to all occupants of the vehicle, and every occupant of the vehicle should wear seat belts properly at all times. Children should always be secured in child restraint systems that are appropriate for their age and size. SRS (Supplemental Restraint System) airbags are, as their names imply, designed to work with, and be supplemental to, seat belts and are not substitutes for them. SRS airbags can be very effective in reducing the risk of head, chest and knee injuries by preventing contact of the head, chest and knee with interior portions of the vehicle.

In order to be effective, the SRS airbags must deploy with tremendous speed. The rapid deployment of the SRS airbags makes the SRS airbags themselves potential sources of serious injury if an occupant is too close to an airbag, or if an object or some part of his or her body has been placed between the occupant and the airbag at the time of deployment. This is just one example of how the instructions in Section 1−6 of this Owner's Manual will help ensure proper use of the occupant restraint systems, and increase the safety they can provide to you and your family in the event of an accident.

Lexus recommends you to read the provisions in Section 1−6 carefully and refer to them as needed during your time of ownership of this vehicle.

Event data recorder

Your vehicle has computers that monitor and control certain aspects of your vehicle. These computers assist in driving and maintaining optimal vehicle performance. Besides storing data useful for troubleshooting, there is a system to record data in a crash or a near car crash event. This is called an Event Data Recorder (EDR).

The SRS airbag sensor assembly contains the EDR. In a crash or a near car crash event, this device may record some or all of the following information:

- Engine speed
- Whether the brake pedal was applied or not
- Vehicle speed
- To what extent the accelerator pedal was depressed
- Position of the transmission selector lever
- Whether the driver and front passenger wore the seat belts or not
- Driver's seat position
- Front passenger's occupant classification
- SRS airbag deployment data
- SRS airbag system diagnostic data

If your vehicle is equipped with a vehicle stability control (VSC) system, its Electronic Control Unit (ECU) may contain another EDR. There are a variety of driving situations which include activating the VSC under which the VSC EDR will record certain information. The VSC EDR may record some or all of the following information:

- Behavior of the vehicle
- Steering wheel angle
- Vehicle speed
- To what extent the accelerator pedal was depressed
- To what extent the brake pedal was applied
- To what extent the ECU controlled the condition of the 4 wheels
- Vehicle stability control system diagnostic data

The information above is intended to be used for the purpose of improving vehicle safety performance. Unlike general data recorders, the EDR does not record sound data such as conversation between passengers.

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

- An agreement from the vehicle's owner (or the leasing company for a leased vehicle) is obtained
- Officially requested by the police or other authorities
- Used as a defense for Lexus in a law suit
- Ordered by the court

However, if necessary Lexus will:

- Use the data for research on Lexus vehicle safety performance
- Disclose the data to a third party for research purposes without disclosing details of the vehicle owner, and only when it is deemed necessary
- Disclose summarized data cleared of vehicle identification information to a non–Lexus organization for research purposes

New vehicle warranty

Your new vehicle is covered by the following Lexus limited warranties:

- New vehicle warranty
- Emission control systems warranty
- Others

For further information, please refer to the "Owner's Guide", "Owner's Manual Supplement" or "Warranty Booklet".

Your responsibility for maintenance

It is the owner's responsibility to make sure the specified maintenance is performed. Section 5 of this Owner's Manual gives details of these maintenance requirements. Included in Section 6 is general maintenance. For scheduled maintenance information, please refer to the "Owner's Manual Supplement / Scheduled Maintenance".

Important health and safety information about your Lexus

⚠ CAUTION

- **WARNING: Engine exhaust, some of its constituents, and a wide variety of automobile components contain or emit chemicals known to the State of California to cause cancer and birth defects and other reproductive harm. In addition, oils, fuels and fluids contained in vehicles as well as waste produced by component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.**
- **Battery posts, terminals and related accessories contain lead and lead compounds. Wash your hands after handling. Used engine oil contains chemicals that have caused cancer in laboratory animals. Always protect your skin by washing thoroughly with soap and water.**

Accessories, spare parts and modification of your Lexus

A wide variety of non−genuine spare parts and accessories for Lexus vehicles are currently available in the market. You should know that Toyota does not warrant these products and is not responsible for their performance, repair, or replacement, or for any damage they may cause to, or adverse effect they may have on, your Lexus vehicle.

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

Spark ignition system of your Lexus

The spark ignition system in your Lexus meets all requirements of the Canadian Interference−Causing Equipment Standard.

Installation of a mobile two−way radio system

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

Tires and loading on your Lexus

Underinflated or overinflated tire pressure and the excess load may result in the deterioration of steering ability and braking ability, leading to an accident. Check the tire inflation pressure periodically and be sure to keep the load limits given in this Owner's Manual. For details about tire inflation pressure and load limits, see page 539 and 456.

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.

Leak detection pump

This pump performs fuel evaporation leakage check. This check is done several hours after the engine is turned off. So you may hear sound coming from underneath the luggage compartment for several minutes. It does not indicate a malfunction.

HOW TO USE THIS MANUAL

The contents of this manual are explained briefly on this page to help you make the best use of the manual. Please read this page and the rest of the Owner's Manual carefully to make sure you fully understand the operation of your vehicle.

This will help you enjoy safe and comfortable driving.

TABLE OF CONTENTS

The table of contents and the pictorial index provide easy reference to the appropriate pages.

BASIC OPERATION − QUICK REFERENCE

Operation of basic equipment is briefly explained in an easily understandable way for quick reference.

SECTION 1 − INSTRUMENTS AND CONTROLS

The vehicle's equipment is divided into the 8 groups listed below. Use of the equipment is explained, including any points you should pay particular attention to.

1. **Keys and doors**
2. **Switches**
3. **Gauges, meters and service reminder indicators**
4. **Interior equipment**
5. **Exterior equipment**
6. **Occupant restraint systems**
7. **Steering wheel and mirrors**
8. **Touch screen**

SECTION 2 − AIR CONDITIONING AND AUDIO

The features of the vehicle's air conditioning and audio are explained in detail. Be sure to read this section so that you can make full use of them.

SECTION 3 − STARTING AND DRIVING

Starting the engine, driving, stopping, operation of features affecting vehicle handling, hints on vehicle safety and safe driving techniques are all explained. Please read everything in this section, and remember – drive safely!

SECTION 4 − IN CASE OF AN EMERGENCY

This section explains what to do in the event of an urgent situation such as the engine not starting or getting a flat tire, etc. If such a problem occurs, check the contents of this Owner's Manual and follow the instructions given.

SECTION 5 − MAINTENANCE

This section explains the importance of regular maintenance. Regular and periodic inspection and maintenance of your Lexus will help to keep your vehicle in its best condition.

SECTION 6 − SERVICE PROCEDURES AND SPECIFICATIONS

Simple maintenance procedure and service data are provided here for your reference should you wish to perform inspection and maintenance yourself.

INDEX

The page number is listed for each item in the Owner's Manual so that you can rapidly find the item and page you are searching for.

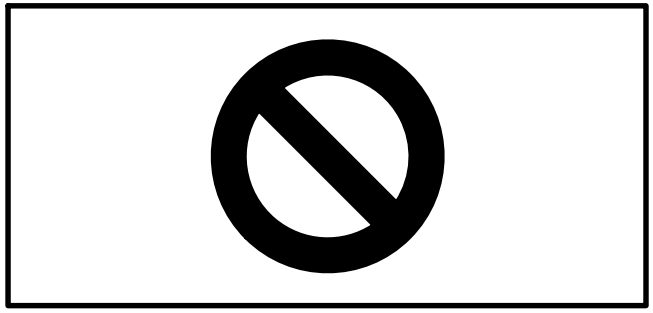
GAS STATION INFORMATION

The information you need to know for appropriate servicing at the gas station is provided here.

QUICK INDEX

This is designed so that you can quickly find the needed information when an urgent situation arises.

Safety symbol



In this manual, you will also see a circle with a slash through it. This means "Do not", "Do not do this", or "Do not let this happen".

Safety and vehicle damage warnings

In this manual you will see CAUTION and NOTICE warnings. These are used in the following ways:

⚠ CAUTION

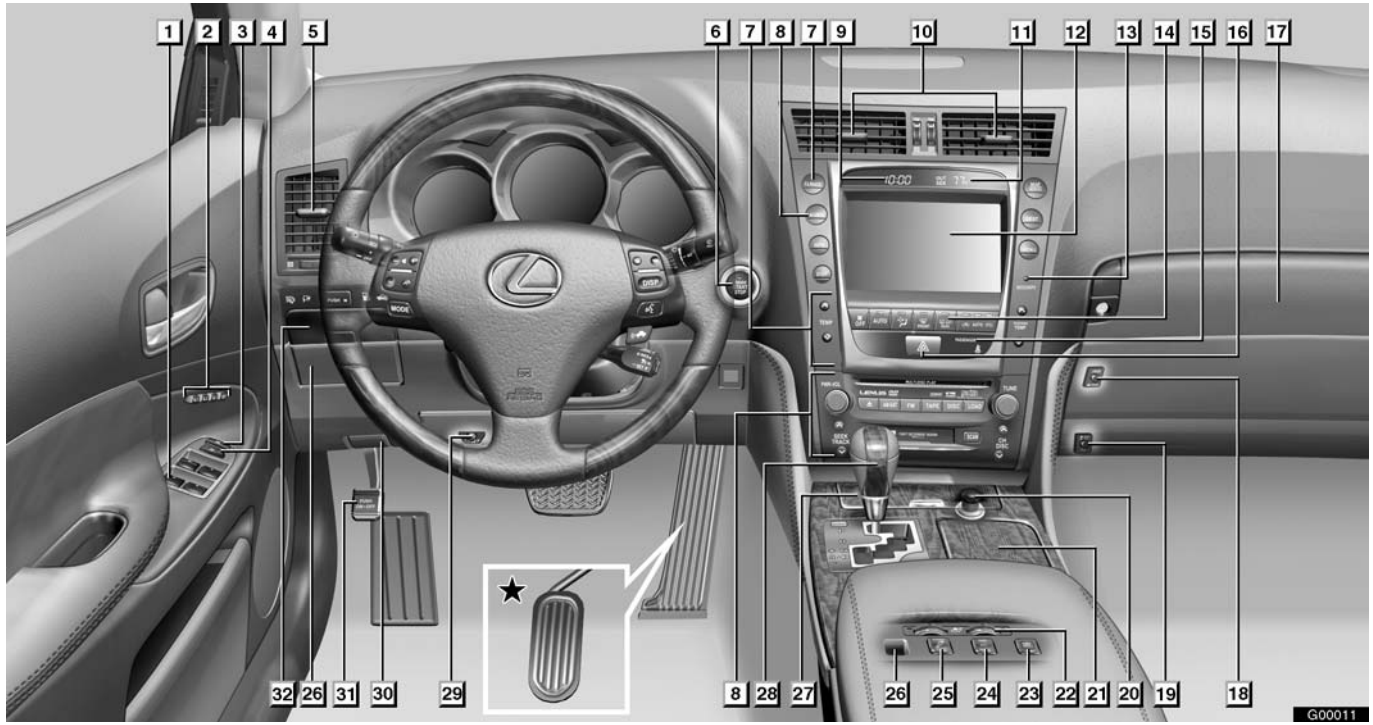
This is a warning against anything which may cause injury to people if the warning is ignored. You are informed about what you must or must not do in order to reduce the risk of injury to yourself and others.

NOTICE

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

Your Lexus Owner's Manual provides you with a considerable amount of information. To use this information most effectively, please take the time to familiarize yourself with the contents and use of the manual.

INSTRUMENT PANEL (Vehicles with navigation system)



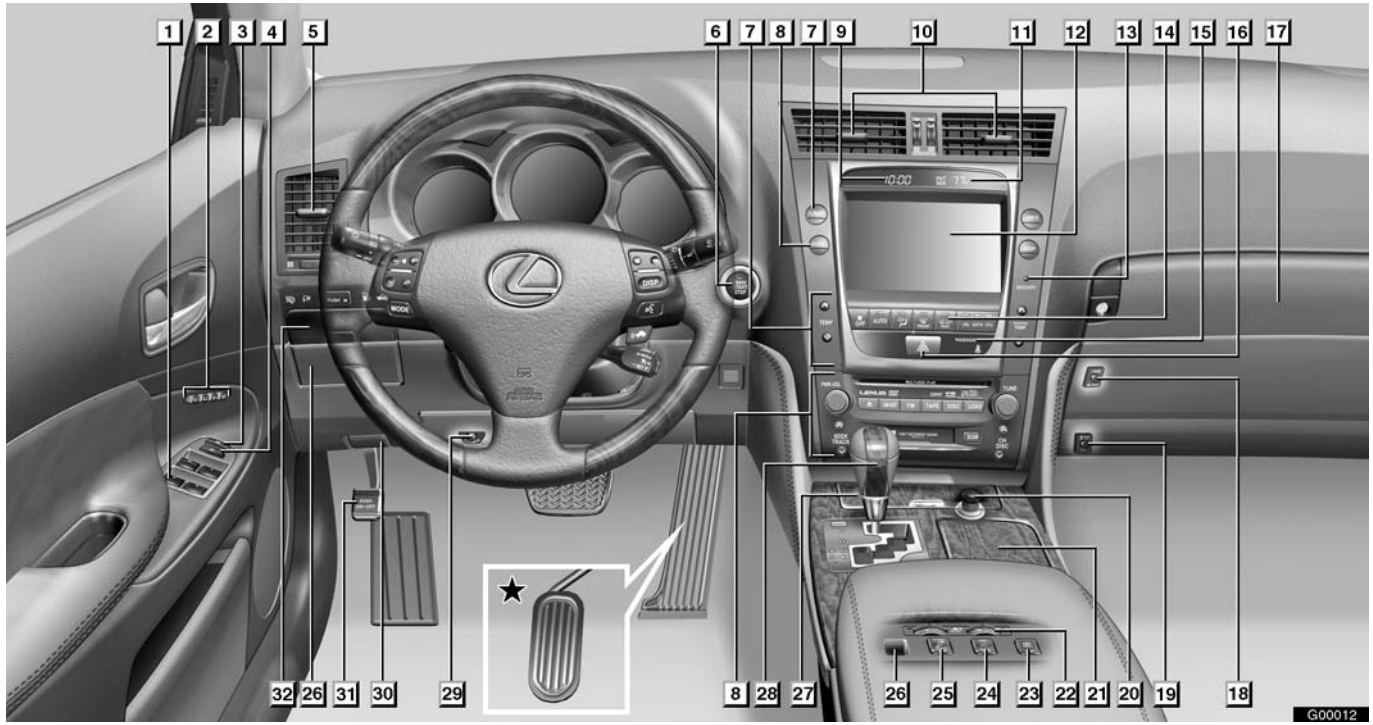
★ **Four−wheel drive models**

PICTORIAL INDEX

		Page
1	*Power window switches*	*37, 57*
2	*Driving position memory switches*	*198*
3	*Window lock switch*	*58*
4	*Door lock switch*	*37*
5	*Side vents*	*268*
6	*Engine switch*	*342*
7	*Automatic air conditioning controls*	*254*
8	*Audio system*	*274*
9	*Clock*	*103*
10	*Center vents*	*268*
11	*Outside temperature display*	*106*
12	*Touch screen*	*215*
	Navigation system display (See the separate "Navigation System Owner's Manual")	
13	*Security indicator light*	*40*
14	*Rear window and outside rear view mirror defogger switch*	*56*
15	*Front passenger's seat belt reminder light*	*76*
16	*Emergency flasher switch*	*60*
17	*Glove box*	*110*
18	*Trunk lid opener main switch*	*126*
19	*Tire selector switch*	*442*
20	*Cigarette lighter*	*107*
21	*Cupholders*	*115*
22	*Seat heater switches or Seat ventilator/heater switches*	*61, 63*
23	*Traction control system off switch (Two−wheel drive models only)*	*419*
24	*Driving pattern selector switch*	*353*
25	*Damping mode select switch (GS430 only)*	*417*
26	*Coin box*	*116*
27	*Ashtray*	*107*
28	*Automatic transmission selector lever*	*353*
29	*Tire pressure warning system reset switch*	*440*
30	*Hood lock release lever*	*124*
31	*Parking brake pedal*	*352*
32	*Switch box*	*xix*

For detailed information, refer to the description given in each Section.

INSTRUMENT PANEL (Vehicles without navigation system)



★ **Four−wheel drive models**

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6	*Engine switch*	*342*
7	*Automatic air conditioning controls*	*254*
8	*Audio system*	*274*
9	*Clock*	*103*
10	*Center vents*	*268*
11	*Outside temperature display*	*106*
12	*Touch screen*	*215*
13	*Security indicator light*	*40*
14	*Rear window and outside rear view mirror defogger switch*	*56*
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23	*Traction control system off switch (Two−wheel drive models only)*	*419*
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25	*Damping mode select switch (GS430 only)*	*417*
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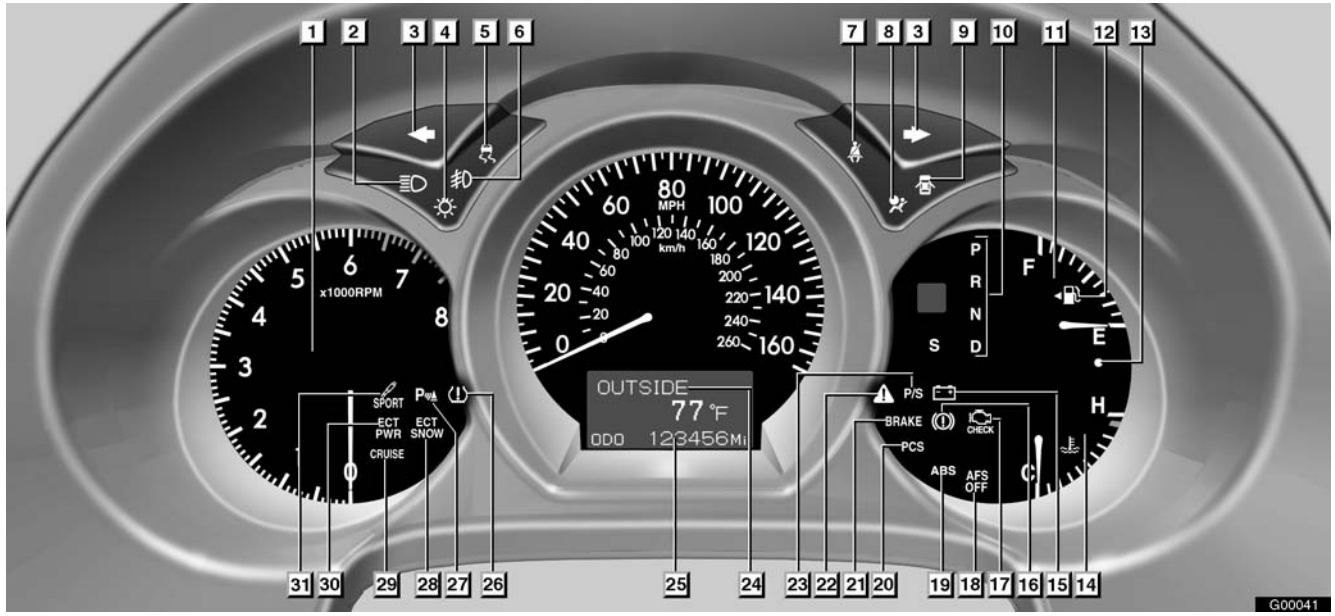
30	*Hood lock release lever*	*124*
31	*Parking brake pedal*	*352*
32	*Switch box*	*xix*

For detailed information, refer to the description given in each Section.

INSTRUMENT CLUSTER (Vehicles sold in U. S. A.)



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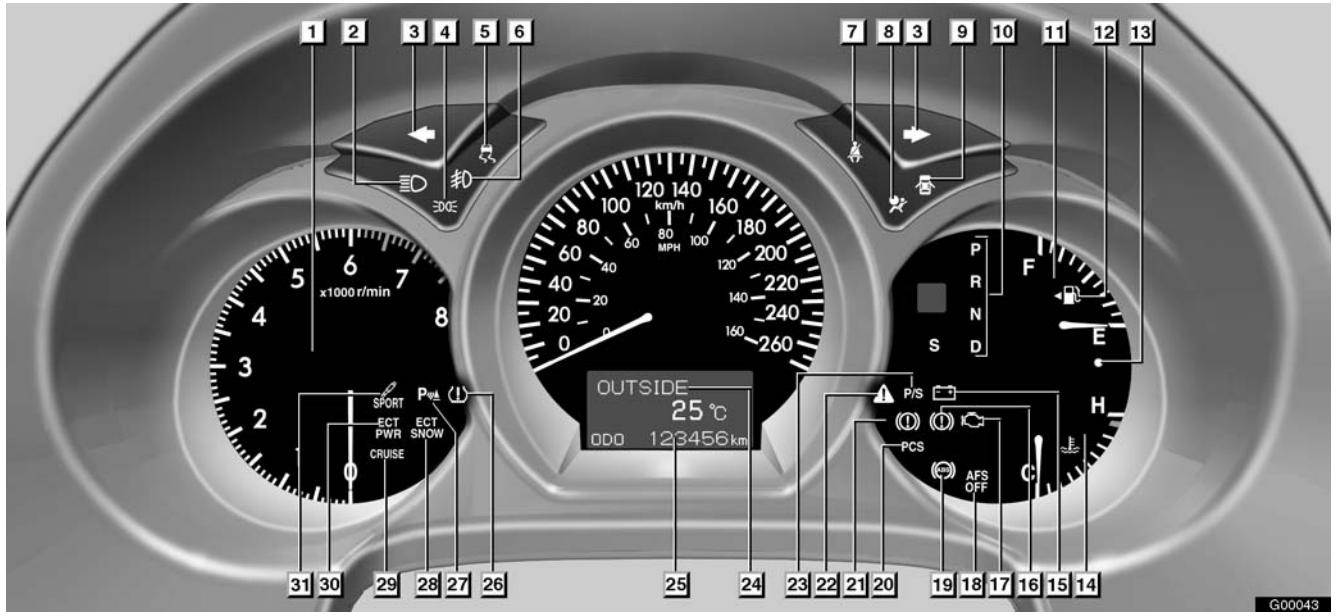
1	*Tachometer*	*69*
2	*Headlight high beam indicator light*	*47*
3	*Turn signal indicator light*	*47*
4	*Headlight indicator light*	*44*
5	*Slip indicator light*	*418, 420*
6	*Fog light indicator light*	*48*
7	*Driver's seat belt reminder light*	*75*
8	*SRS warning light*	*76*
9	*Open door warning light*	*79*
10	*Automatic transmission indicator lights*	*353*
11	*Fuel gauge*	*68*
12	*Fuel filler door indicator*	*128*
13	*Low fuel level warning light*	*80*
14	*Engine coolant temperature gauge*	*68*
15	*Discharge warning light*	*77*
16	*Brake system warning light (yellow)*	*75*
17	*Malfunction indicator lamp*	*77*
18	*Adaptive front−lighting system off indicator light*	*46*
19	*Anti−lock brake system warning light*	*78*
20	*Pre−collision system warning light*	*80*
21	*Brake system warning light (red)*	*74*
22	*Master warning light*	*78*
23	*Electric power steering system warning light*	*80*
24	*Multi−information display*	*82*
25	*Odometer and trip meter*	*70*
26	*Low tire pressure warning light*	*79*
27	*Intuitive parking assist indicator light*	*366*
28	*Snow mode indicator light*	*364*
29	*Cruise control indicator light*	*392*
30	*Power mode indicator light*	*364*
31	*Damping mode indicator light*	*417*

For detailed information, refer to the description given in each Section.

INSTRUMENT CLUSTER (Vehicles sold in Canada)



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8	*SRS warning light*	*76*
9	*Open door warning light*	*79*
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28	*Snow mode indicator light*	*364*
29	*Cruise control indicator light*	*392*
30	*Power mode indicator light*	*364*
31	*Damping mode indicator light*	*417*

For detailed information, refer to the description given in each Section.

FRONT SEAT

Page

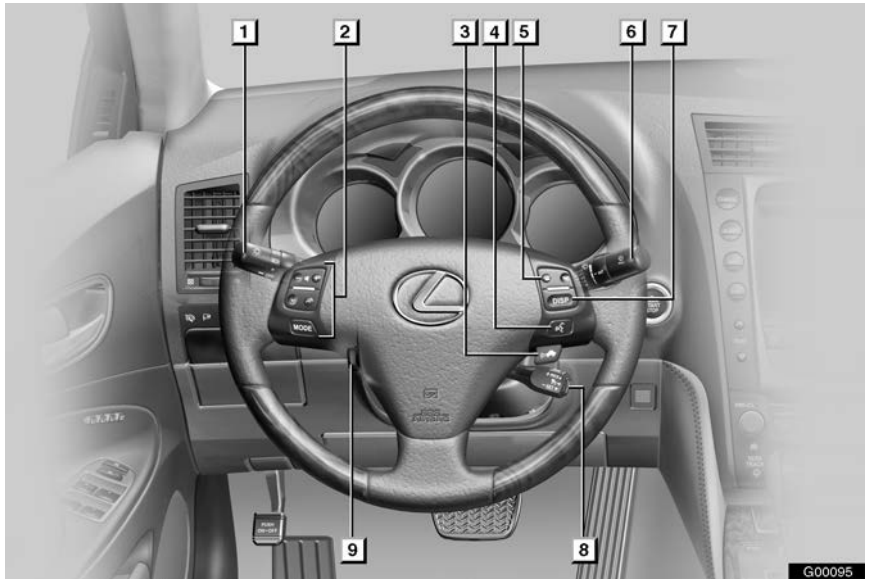
1 *Seat position, seat cushion angle and height control switch 141, 142*

2 *Seatback angle control switch 142*

3 *Lumbar support control switch 143*

For detailed information, refer to the description given in each Section.

STEERING WHEEL AND COLUMN



Page

1 *Headlight, turn signal and fog light switches 44, 47, 48*

2 *Audio remote control switches 331*

3 *Distance switch 406*

4 *Speech command button (See the separate "Navigation System Owner's Manual".)*

5 *Telephone button 220*

6 *Windshield wiper and washer switches 49*

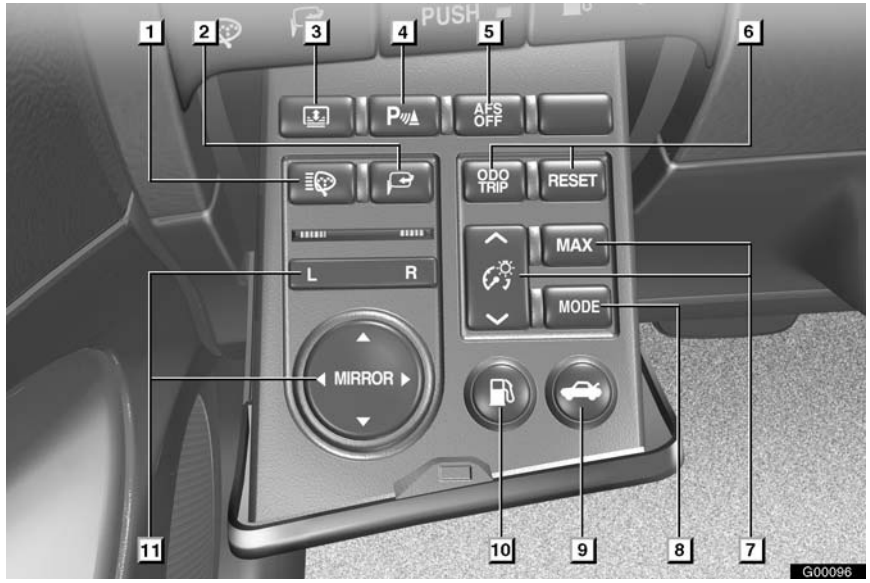
7 *Multi−information change switch 82*

8 *Cruise control switch 392, 395*

9 *Tilt and telescopic steering adjustment switch 204*

For detailed information, refer to the description given in each Section.

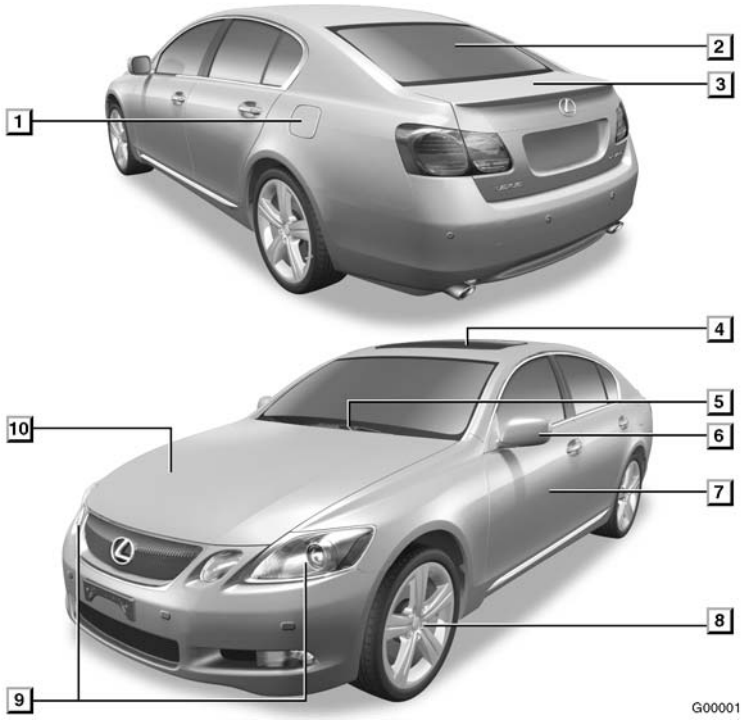
SWITCH BOX



		Page
1	*Headlight cleaner switch*	*55*
2	*Rear view mirror folding switch*	*207*
3	*Rear electric sunshade switch*	*120*
4	*Intuitive parking assist switch*	*365*
5	*Adaptive Front Lighting system cancel switch*	*46*
6	*"ODO TRIP" and "RESET" switches*	*70*
7	*Instrument panel light control switches*	*96*
8	*Light sensitive optitron meter mode change switch*	*71*
9	*Trunk lid opener*	*125*
10	*Fuel filler door opener*	*128*
11	*Power rear view mirror control switches*	*206*

For detailed information, refer to the description given in each Section.

EXTERIOR VIEW



		Page
1	*Fuel filler door*	*128*
2	*Rear window defogger*	*56*
3	*Trunk lid*	*125*
4	*Moon roof*	*132*
5	*Windshield wiper and washer*	*49, 579*
6	*Outside rear view mirror*	*205*
7	*Door*	*35*
8	*Tire and wheel*	*539*
9	*Headlights*	*44, 584*
10	*Hood*	*124*

For detailed information, refer to the description given in each Section.

BASIC OPERATION

QUICK REFERENCE

Driver's seat 2
Steering wheel 2
Automatic transmission 3
Headlight and turn signal switches 5
Windshield wiper switch 6

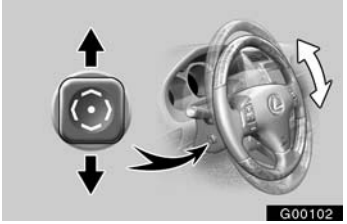
1. DRIVER'S SEAT

	Seat position		
	Seat cushion angle		
	Seat cushion height		
	Seatback angle		
	Lumbar support		
	Head restraint height		
—	Head restraint angle		

G00151

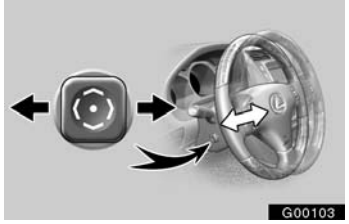
2. STEERING WHEEL

● TILT STEERING COLUMN



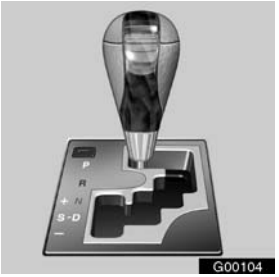
To tilt the steering column up or down to the desired angle, push the control switch in the required direction and release the button when the steering column reaches the desired angle.

● TELESCOPIC STEERING COLUMN



To move the steering column to the desired position, push the control switch away from you or pull it toward you until the steering column reaches the desired position.

3. AUTOMATIC TRANSMISSION



SELECTOR LEVER POSITION

P: Parking and engine starting

R: Reverse position

N: Neutral position

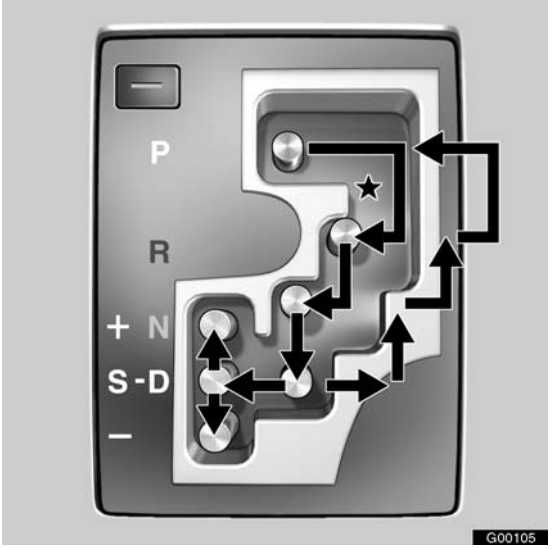
D: Normal driving position
(Shifting into overdrive possible)

S: “S” mode driving

+: Upshifting

–: Downshifting

OPERATION OF SELECTOR LEVER

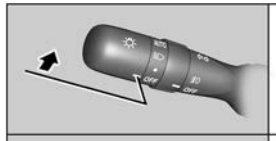
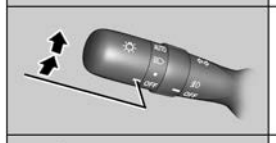
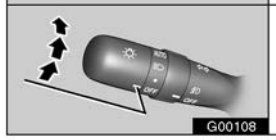


★ Shift while pressing the brake pedal. (Engine switch must be selected in “IG–ON” mode.)

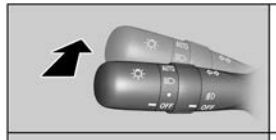
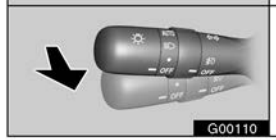
NOTE:
Vehicles with the cruise control: When the cruise control is being used, even if you downshift from “D” or “6” (sixth range) to “5” (fifth range), or “D” or “5” (fifth range) to “4” (fourth range), engine braking will not be enabled because the cruise control is not cancelled. For vehicle speed reduction, see page 394. Vehicles with the dynamic radar cruise control: When the cruise control is being used in the conventional (fixed speed) cruise control mode or in the vehicle−to−vehicle distance control mode, even if you downshift from “D” or “6” (sixth range) to “5” (fifth range) or “D”, or “5” (fifth range) to “4” (fourth range), engine braking will not be enabled because the cruise control is not cancelled. For vehicle speed reduction, see pages 416.

4. HEADLIGHT AND TURN SIGNAL SWITCHES

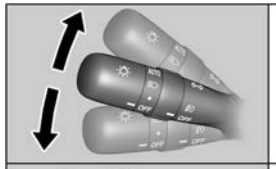
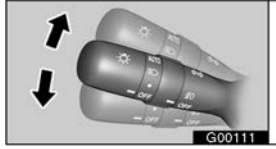
● HEADLIGHT SWITCH

	Parking, tail, license plate, side marker and instrument panel lights turn on.
	Headlights also turn on.
 G00108	Automatic light control

● HEADLIGHT DIMMER SWITCH

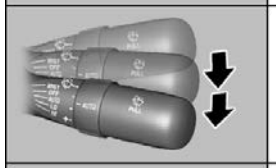
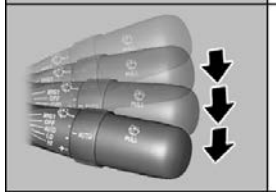
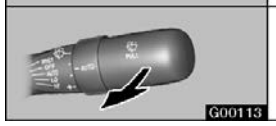
	High beam
 G00110	Headlight flasher

● TURN SIGNAL SWITCH

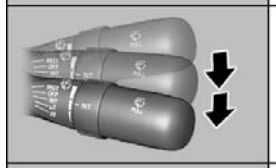
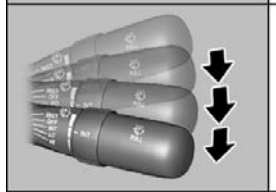
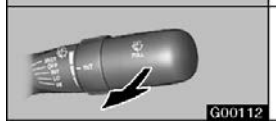
	Right or left turn
 G00111	Lane change (Right or left)

5. WINDSHIELD WIPER SWITCH

Rain−sensing windshield wipers

	Mist wiper operation
	Automatic operation
	Low speed operation
	High speed operation
 G00113	Washer on

Variable intermittent wipers

	Mist wiper operation
	Variable intermittent operation
	Low speed operation
	High speed operation
 G00112	Washer on

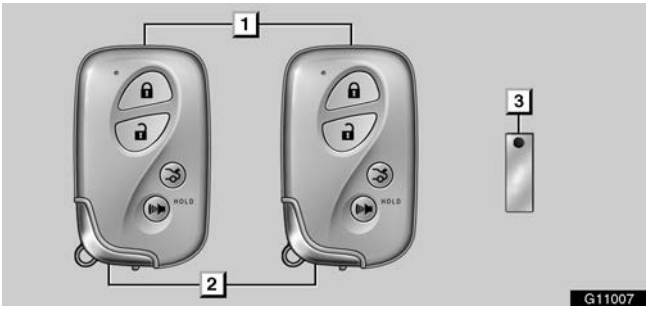
SECTION 1 – 1

INSTRUMENTS AND CONTROLS

Keys and doors

Keys 8
Smart access system with push–button start 10
Doors 35
Theft deterrent system 40

KEYS



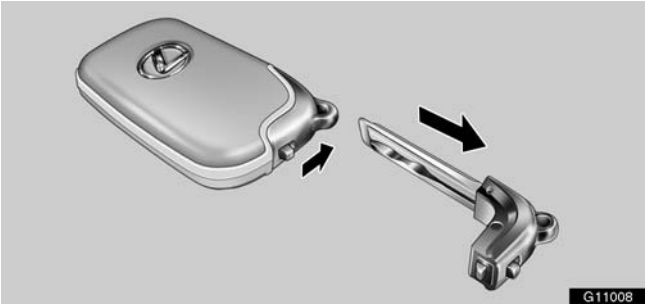
1 **Electronic keys − These keys will work for the doors, trunk and can start the engine. They will not work for glove box and trunk storage extension door. Your dealer will need one of them to make a new key.**

Before you use these keys, be sure to read “Smart access system with push−button start” on page 10.

2 **Mechanical keys − These keys work for the doors, trunk, glove box and trunk storage extension door, but cannot start the engine.**

3 **Key number plate − Keep the plate in a safe place such as your wallet, not in the vehicle.**

Using a mechanical key



When you use the mechanical key included on the side of the electronic key, slide the lock knob in the arrow direction and take out the key as shown. To put the key back, slide the key gently until it locks, paying attention to the angle and position of the key. Be sure to put the key back when not in use.

NOTICE

When using an electronic key, observe the following precautions:

- ***Do not affix any material that cuts off electromagnetic waves (such as a metal seal) on the electronic key.***
- ***Do not knock the electronic key hard against other objects.***
- ***Do not leave the electronic key exposed to high temperatures for a long period, such as on the dashboard or hood under direct sunlight.***

- ***Do not put the electronic key in water or wash it in an ultrasonic washer.***
- ***Do not keep the electronic key together with the products emitting electromagnetic waves such as a cellular phone.***
- ***Do not disassemble the electronic key.***
- ***Do not place the electronic key near electrical appliances (e.g. television, computer or stereo) or electrical medical equipment such as low frequency medical appliances.***
- ***If gasoline, polishing agents or oil adheres to the electronic key, it may deform or crack over time.***

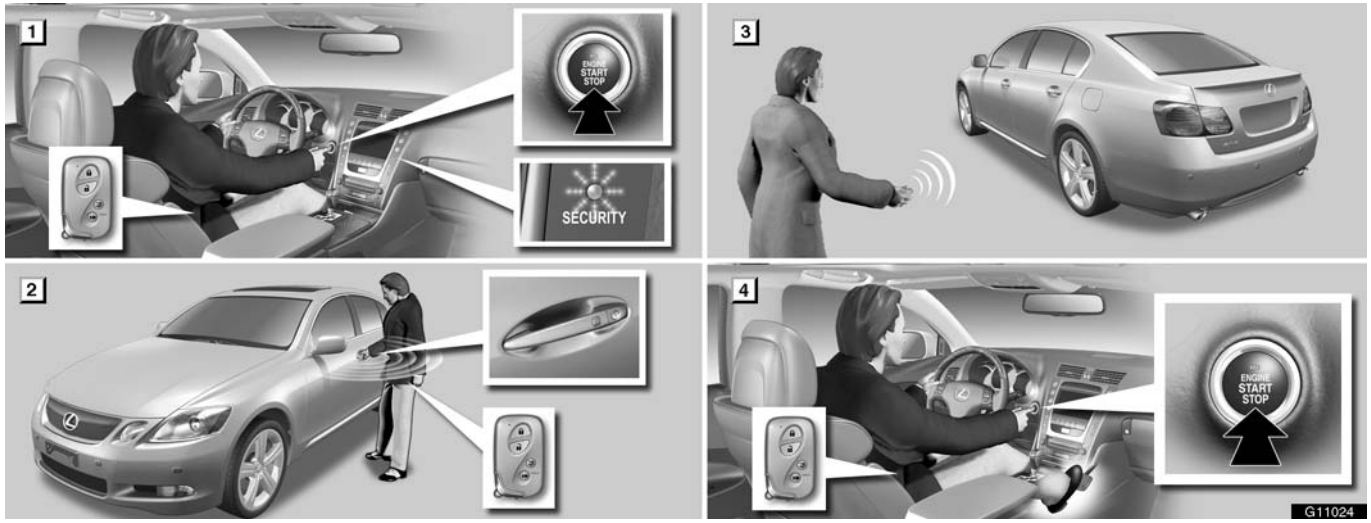
The electronic keys are required to deactivate the engine immobilizer, and are essential for the engine immobilizer to function correctly, so be careful not to lose these keys. If you make your own duplicate key, you will not be able to cancel the system or start the engine.

To protect items when using valet parking, turn the trunk lid opener main switch to inoperative or lock the glove box if necessary, and leave the electronic key (with the mechanical key removed) with the attendant. For details, see “Trunk lid opener main switch” on page 126.

If you should lose your electronic keys or if you need additional electronic keys, duplicates can be made by a Lexus dealer using the key number.

We recommend writing down the key number and storing it in a safe place.

SMART ACCESS SYSTEM WITH PUSH−BUTTON START



▶ 1 *Engine immobilizer* 2 *Entry function* 3 *Wireless remote control* 4 *Push−button starting*

The smart access system with push−button start comprises 4 kinds of functions; engine immobilizer, entry function, wireless remote control and push−button starting.

For engine immobilizer, see page 11.

For entry function, see page 13.

For wireless remote control, see page 28.

For push−button starting, see page 342.

If the electronic key battery is discharged, the entry function and wireless remote control cannot be used. Use the mechanical key integrated into the electronic key by inserting it in the door keyhole to lock or unlock doors and into the trunk lid keyhole to unlock the trunk lid. To start the engine, see “Starting the engine when the electronic key battery is discharged” on page 27. In order to activate the entry function and wireless remote control, the battery should be replaced. For details, see “Replacing the battery” on page 33.

(a) Engine immobilizer

The engine immobilizer is a theft prevention function. When you enter the vehicle carrying an electronic key and press the engine switch, the electronic code in the key is automatically checked to determine whether it corresponds to the registered ID code for the vehicle. If the ID code is verified, you can start the engine.

The system is automatically set when the engine switch is off. The indicator light will start flashing to show the system is set.

If any of the following indicator conditions occurs, contact your Lexus dealer.

- The indicator light stays on except when the theft deterrent system is setting or activating. (See “Theft deterrent system” on page 40.)
- The indicator light does not start flashing when the engine switch is off.
- The indicator light flashes inconsistently.

For your Lexus dealer to make you a new key with a built–in transponder chip, your dealer will need your key number and electronic key. However, there is a limit to the number of additional keys your Lexus dealer can make for you.

If you make your own duplicate key, you will not be able to cancel the function or start the engine.

NOTICE

Do not modify, remove or disassemble the engine immobilizer. If any unauthorized changes or modifications are made, proper operation of this function cannot be guaranteed.

For vehicles sold in U.S.A.

FCC ID: NI4TMIMB−1

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

CAUTION

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

For vehicles sold in Canada

This device complies with RSS–210 of Industry Canada.
Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

(b) Entry functions*

Entry functions are as follows:

- Locking the doors
  (For details, see page 19.)
- Unlocking the door(s)
  (For details, see page 22.)
- Changing the doors to be unlocked
  (For details, see page 23.)
- Unlocking the trunk lid
  (For details, see page 24.)
- Battery power saving
  (For details, see page 26.)
- Starting the engine when the electronic key battery is discharged
  (For details, see page 27.)

  NOTE:
  **These functions can be deactivated.*
  Ask your Lexus dealer for details.

INFORMATION

- ***Be sure to take the electronic key with you.***
- ***In the following cases, the entry function, wireless remote control or push−button starting feature may not operate properly. If this happens, use a mechanical key to lock or unlock the doors and trunk lid. If you are unable to use push−button starting, follow the procedure for starting the engine on page 27.***
  - ***When facilities issuing strong electromagnetic waves such as TV towers, electric power stations, broadcasting stations are nearby.***
  - ***In places where automated payment facilities are installed (such as gas stations).***
  - ***When you are carrying an electronic key together with a mobile communications system such as a two−way radio or cellular phone.***
  - ***When the electronic key is in contact with or covered by a metallic object.***
  - ***When in proximity to a number of electronic keys***
  - ***When placed in proximity to electrical appliances e.g. computer***
  - ***When another person is operating a wireless remote control function on another vehicle near your vehicle.***
  - ***When the electronic key is in close contact with one's body.***

- ***If you do not drive your vehicle, store the electronic key, keeping it at least 5 m (15 ft.) away from the vehicle.***

ALARMS AND WARNING MESSAGES

Your Lexus is equipped with alarms inside and outside, as well as warning messages in the multi−information display, that remind you if there is a problem involving the entry function.

Cases which are expected to happen frequently are shown in the illustrations and the other cases are described in the table. If an alarm or warning message comes on, check to see what the problem is referring to the illustrations and table, and take the appropriate measure.

If a warning message appears, the master warning light will blink.

▶***When a door is opened and closed with the engine switch in "ACC" or "IG−ON" mode and with the selector lever in the "P" position, and then the electronic key is carried outside of the vehicle.***

Inside alarm: One chime

Outside alarm: 3 beeps

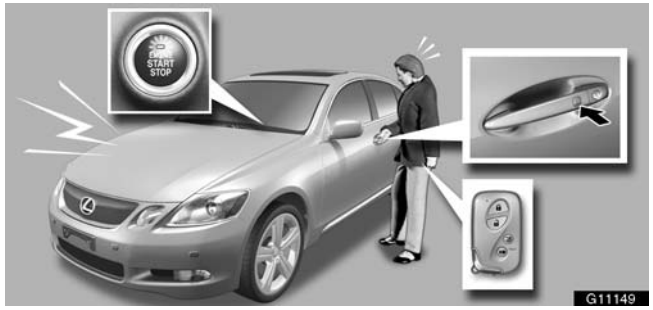
Multi−information display: "KEY IS NOT DETECTED"

See page 91 for details.

▶***When you attempted to lock the door(s) with the electronic key still in the vehicle.***

Outside alarm: One beep (sounds for 2 seconds)

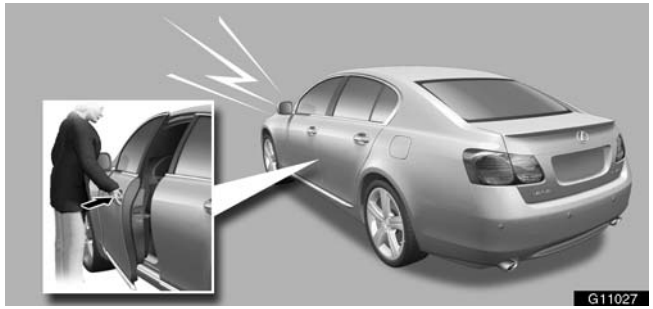
See page 20 and 21 for details.



▶***When you pushed the lock button on the outside door handle while carrying the electronic key with the engine switch not to be turned off.***

Outside alarm: One beep (sounds for 2 seconds)

See page 20 and 21 for details.



▶***When you attempted to lock a door which is not completely closed while carrying an electronic key with the engine switch off.***

Outside alarm: One beep (sounds for 10 seconds)

See page 21 for details.

Inside warning alarm	Outside warning alarm	Warning message on the multi–information display	Causes
Chimes	None	None	The driver's door was opened when the engine switch is selected in "ACC" mode and the selector lever was in "P", or when the steering lock is not activated.
Beep (sounds continuously)	Beep (sounds continuously)	"SHIFT TO P RANGE" and "KEY IS NOT DETECTED" appear alternately.	The electronic key was not in the vehicle, the driver's door was opened and closed when the engine switch was selected in "ACC" or "IG–ON" mode and the selector lever was in a position other than "P".
Beeps (sound intermittently)	None	None	The driver's door was opened when the engine switch was selected in "ACC" or "IG–ON" mode and the selector lever was in a position other than "P".
One chime	None	"KEY IS NOT DETECTED" (shown for about 8 seconds)	The engine switch was pushed while the electronic key was not in the vehicle or the electronic key battery was discharged.
One chime	None	"LOW KEY BATTERY"	Electronic key battery is low.

LOCKING THE DOORS WITH ENTRY FUNCTION

When the engine switch is off and you push the lock button on the outside door handle while carrying an electronic key, all the doors will be locked. At this time, one beep will sound and the turn signal lights will flash once.

The entry function will be activated within about 1m (3ft.) from each outside door handle.

However, when you push the lock button on the outside door handle with any door not closed securely, a beep sounds for 10 seconds. (For details, see page 21.)

If outer foot lights are illuminated, you can turn off the lights by pushing the lock button on the outside door handle. (For details, see “Outer foot lights” on page 208.)

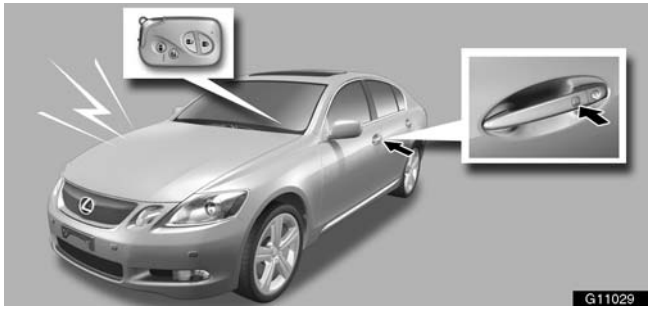
NOTICE

If the key is in the vehicle, do not perform door locking operation, or you might lock your keys inside the vehicle.

INFORMATION

- ***When locking the doors, be sure to push the lock button on the outside door handle slowly and firmly. If you push the button quickly, the doors may not lock.***
- ***When opening or closing a door, do not touch the lock button on the outside door handle.***
- ***When an electronic key is used to lock the doors and an electronic key is left in the effective range of the entry function in the vehicle, the doors cannot be unlocked using the entry function. In this case, use the wireless remote control function to unlock the doors.***
- ***You cannot activate unlocking function within 3 seconds after the locking function is activated.***

The doors cannot be locked using the entry function in the following conditions:



▶*Key reminder alarm*

If you push the lock button on the outside door handle with an electronic key left in the vehicle, an alarm sounds for 2 seconds and the doors will not lock.

Before you push the lock button, make sure you are carrying the electronic key.

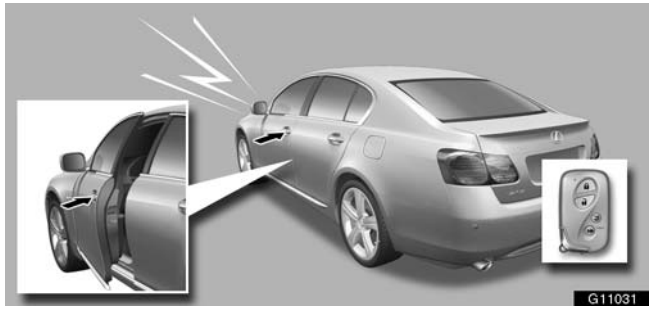
INFORMATION

- ***Do not put an electronic key on the instrument panel, rear package tray or floor, or in the glove box or auxiliary box near the selector lever, which falls outside of the effective range of the entry function. As the alarm does not sound when a key is left in such a place, you might accidentally lock the doors by pushing the lock button on the outside door handle and be locked out of the vehicle. Be sure to take the electronic key with you.***
- ***If you have the electronic key but bring it very close to the window or outside door handle, the alarm might activate. In this case, keep the electronic key a certain distance away from the window or outside door handle and then push the lock button again.***
- ***If the electronic key is left in the vehicle, attempting to lock the door by pushing in the lock button located in the inside door handle and closing the door will unlock all the doors and activate the alarm for 2 seconds.***

▶*Engine switch on/off reminder alarm*

If you push the lock button on the outside door handle without turning off the engine switch, an alarm sounds for 2 seconds and the doors will not lock.

Before you push the lock button, make sure you have an electronic key and that the engine switch is off.



▶*Open door warning*

If you push the lock button on the outside door handle while any door is not completely closed, an alarm sounds for 10 seconds and the doors will not lock.

To stop the alarm, close all the doors securely or push the “UNLOCK” button on the electronic key.

Before you push the lock button, make sure you have an electronic key and all the doors are securely closed.

UNLOCKING THE DOOR(S) WITH ENTRY FUNCTION

When you take hold the back side of the outside door handle on the driver's door carrying an electronic key, the driver's door will be unlocked. When you take hold the back side of the outside door handle except on the driver's door, carrying an electronic key, all the doors will be unlocked. At this time, two beeps will sound and turn signal lights flash twice.

When you get close to your vehicle (about 1 m (3 ft.) from each outside door handle), and are carrying the electronic key, the electronic code emitted from the key is automatically checked to determine if it corresponds to the registered ID code for the vehicle. After this, the outer foot lights come on. (For outer foot lights, see "Outer foot lights" on page 208.)

You can select the doors to be unlocked. For details, see "Changing the doors to be unlocked" on page 23.

When the door(s) is(are) unlocked, the interior lights come on for 15 seconds if the interior light switch is in the "DOOR" position. However, the interior lights go out when you push the power door lock switch in the lock position or select the engine switch in "ACC" or "IG–ON" mode. For further information, see "Interior lights" on page 98.

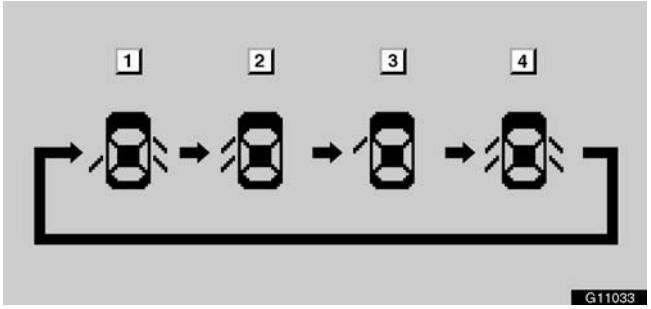
You have 30 seconds to open a door after operating the unlocking function. If a door is not opened by then, all the doors will be automatically locked again.

INFORMATION

- ***When unlocking the door(s), be sure to take hold of the back side of the outside door handle firmly as shown in the illustration. Taking hold of the handle with a gloved hand might cause a delay in unlocking or may not unlock.***
- ***When you take hold of the handle to unlock the door(s), be sure to confirm that the door(s) has(have) been unlocked. If the turn signal lights flash twice, two beeps sound outside the vehicle, the doors are unlocked. At this time, you can pull the outside door handle to open the door. If you quickly move closer to the vehicle or pull the outside door handle quickly, the doors might not unlock. If you cannot open the door by pulling the outside door handle at this time, push it back to the original position and then pull it out again.***

- ***If you bring the electronic key very close to the outside door handle, the doors might not unlock.***
- ***If the electronic key is within effective range, even persons not carrying an electronic key may lock or unlock the doors.***
- ***If a large amount of water is applied to the outside door handle during heavy rain or a car wash, and someone carrying an electronic key is near the vehicle, the door(s) might be unlocked. However, if the outside door handle is not pulled out, the doors will lock automatically after about 30 seconds.***

CHANGING THE DOORS TO BE UNLOCKED



When you push the "LOCK" button together with the "UNLOCK", "TRUNK" or "PANIC" button on the electronic key for about 5 seconds with the engine switch off, you can change the settings for door unlocking.

The settings will change in the following order:

1. **Unlocking driver's door**
2. **Unlocking the side doors**
3. **Unlocking a single door**
4. **Unlocking all the doors**

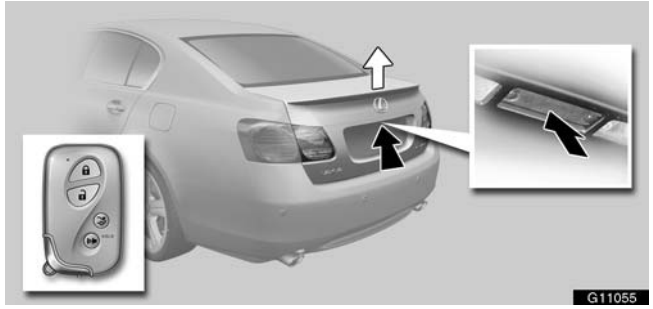
After setting, a tone sounds and the multi–information display shows which setting is selected. Outside the vehicle, one beep sounds when the single door is set to be unlocked, 2 beeps sound when all the doors are set, 3 beeps sound when the driver's door is set, and 4 beeps sound when side doors are set.

When you set the driver's door to be unlocked, if you perform unlocking operation by the driver's door handle, the driver's door only will be unlocked. If you do using other door handle, all the doors will be unlocked.

INFORMATION

If you get in the vehicle from the driver's door using an electronic key while the side doors or one door is set to be unlocked, all the unlocking controls activated by the electronic key will be stopped for security. If you get out of the vehicle from the driver's door carrying the electronic key and reaches out of the effective range of the entry function, unlocking control by the electronic key will be possible. However, unlocking control may not be carried out for 5 seconds after you get out from the vehicle. In this case, perform unlocking operation again after 5 seconds.

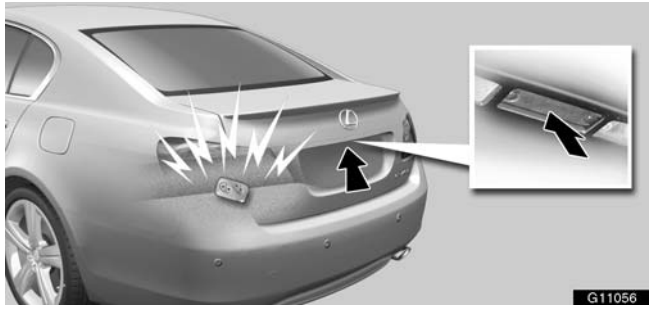
UNLOCKING THE TRUNK LID WITH ENTRY FUNCTION



When you push the trunk button on the trunk lid while carrying an electronic key, the trunk lid will unlock.

INFORMATION

If you bring the electronic key close to the center of the bumper, or it is close to the ground or in a high place, the trunk lid might not unlock.



▶*Key reminder alarm*

If you lock your electronic key in the trunk when all doors are locked, an alarm sounds for about 2 seconds to remind you that the electronic key is in the trunk.

At this time, the trunk lid is unlocked. Even after the alarm stops sounding, pushing the trunk button will unlock the trunk lid.

INFORMATION

- ***If you close the trunk lid while an electronic key is left in the trunk and all doors are locked, an alarm should be activated. However, if the electronic key is placed near the spare tire or at the edge of the trunk, or if the electronic key is in a metallic bag, the trunk lid might not be unlocked.***
- ***If you accidentally lock an electronic key in the trunk when all doors are locked, be aware that anyone can unlock the trunk by pushing the trunk button.***
- ***Even when the electronic key is outside the trunk, an alarm still might be activated if the electronic key is near the trunk. However, if you have the electronic key, there is no problem.***

BATTERY POWER SAVING

If the electronic key is left within the effective range of the outside of the vehicle for more than 10 minutes without locking or unlocking the doors, the entry function is disabled.

If the electronic key does not enter the effective range of the outside of the vehicle for 4 days, the output interval of the electromagnetic signal is extended. If this situation continues for 14 days, the entry function is disabled.

To reactivate the entry function properly, perform any of the following:

(a) Press the lock button on the outside door handle while carrying the electronic key.

(b) Perform a wireless remote control function.

(c) Insert and turn the mechanical key in the keyhole of the door.

INFORMATION

- ***To maintain communication with the vehicle, electronic keys use built−in battery power. The battery service life is about 1 to 2 years on average. If battery power becomes insufficient, replace the battery with a new one.***
- ***The electronic key continually receives electromagnetic waves, and if it receives strong electromagnetic waves over a period of time, the battery can be drastically run down. Therefore, avoid storing electronic keys near any electrical appliances.***

  Here is a list of electrical appliances which may have adverse effects on the electronic key performance: TVs, personal computers, cellular phone or cordless phone recharger units, electric light stands and fluorescent desk lights

  Note that you should always keep such electrical appliances at least 1 m (3 ft.) away from the electronic key.

STARTING THE ENGINE WHEN THE ELECTRONIC KEY BATTERY IS DISCHARGED

If the electronic key battery is discharged, the engine can be started using the following procedure.

1. Unlock the door with the mechanical key and bring the electronic key into the vehicle.

2. While the brake pedal is depressed, hold the ornament side of the electronic key about 10 mm (0.4 in.) over the engine switch as shown.

3. Within 5 seconds of the chime sounding, push the engine switch with the brake pedal depressed to start the engine.

When you push the engine switch with the brake pedal not depressed at this time, the engine will not start, but it is possible to select “ACC”, “IG−ON” and “OFF” mode.

If it is not possible to start the engine or change the mode using this procedure, contact your Lexus dealer.

In addition, we recommend that the electronic key battery be changed as soon as possible.

For vehicles sold in U.S.A.

FCC ID: NI4TMLF−1

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

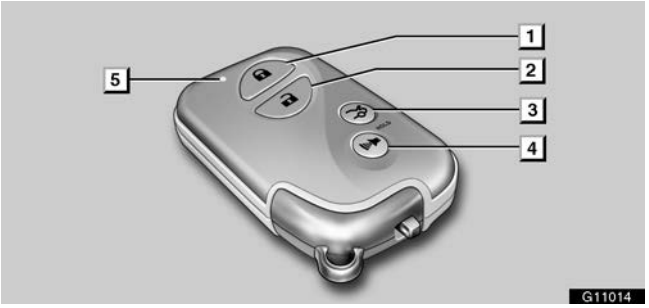
CAUTION

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

For vehicles sold in Canada

This device complies with RSS–210 of Industry Canada.
Operation is subject to the following two conditions:
(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

(c) Wireless remote control*



1 **Locking the doors**

2 **Unlocking the doors and opening the windows and moon roof**

3 **Unlocking the trunk lid**

4 **Sounding an alarm**

5 **Indicator light**

NOTE:
**This feature can be deactivated as vehicle theft deterrent measure in case of the loss of the electronic key.*
Ask your Lexus dealer for details.

When you operate any button on the electronic key, push it slowly and firmly. At this time, the indicator light flashes once.

The operational range of the wireless remote control is approximately 1 meter (3 ft.). The effective range may vary with different conditions. To activate the wireless remote control without fail, do it approximately 1 meter (3 ft.) from your Lexus.

In the following cases, the battery in the electronic key may be discharged.

- The message “LOW KEY BATTERY” appears on the multi–information display.
- The remote control does not work.
- The operational range of wireless remote control becomes extremely short.
- The indicator light on the electronic key is dimmed or does not come on.

For the replacement of the battery, see ”Replacing the battery” on page 33. You can also have the battery of the key replaced by your Lexus dealer.

If you lose the electronic key, contact your Lexus dealer immediately to avoid the possibility of theft, or an accident.

You can use up to 7 electronic keys for the same vehicle. Contact your Lexus dealer for detailed information.

The electronic key is an electronic component. Observe the following instructions in order not to cause damage to the electronic key.

- Do not leave the electronic key in places where the temperature becomes high such as on the dashboard.
- Avoid knocking it hard against other objects or dropping it.
- Avoid putting it in water.

LOCKING/UNLOCKING THE DOORS

The wireless remote control will not operate when the engine switch is selected in “ACC” or “IG−ON” mode.

When you push the ”LOCK” button on the electronic key briefly, all the doors can be locked from outside the vehicle.

When they are locked securely, the turn signal lights will flash and one beep will sound.* However, when you push the ”LOCK” button with any door not closed securely, the buzzer sounds for 10 seconds.** To stop the buzzer, close all the doors securely or push the ”UNLOCK” button. If the electronic key is left in the vehicle, locking cannot be done.

Make sure all the doors are locked when you leave the vehicle. Push the ”LOCK” button once again. If they were already locked, the turn signal lights will flash and one beep will sound.***

NOTE:
**The turn signal lights can be set not to flash and beep can be set not to sound. **The buzzer can be set not to sound if a door is not closed securely. ***The turn signal lights can be set not to flash.*
Ask your Lexus dealer for details.

When you push the ”UNLOCK” button, the driver’s door is unlocked. Pushing that button once again within 3 seconds from the first push, all other doors are also unlocked.*

NOTE:
**The 2−step unlocking function can be changed.*
Ask your Lexus dealer for details.

At this time, the turn signal lights will flash twice and two beeps will sound.* Together with the activation of unlocking, the interior lights come on for 15 seconds if the interior light switch is in ”DOOR” position.** For further information, see ”Interior lights” on page 98.

You have 30 seconds to open a door after using the wireless remote unlock feature.*** If a door is not opened by then, all the doors will be automatically locked again.

Even if the ”LOCK” or ”UNLOCK” button is kept pressed in, the locking or unlocking operation is not repeated. Release the button and then push again.

NOTE:
**The turn signal lights can be set not to flash and beep can be set not to sound. **The interior light can be set not to come on or the duration of lighting can be changed. ***The time before automatic re−locking can be changed.*
Ask your Lexus dealer for details.

UNLOCKING THE TRUNK LID

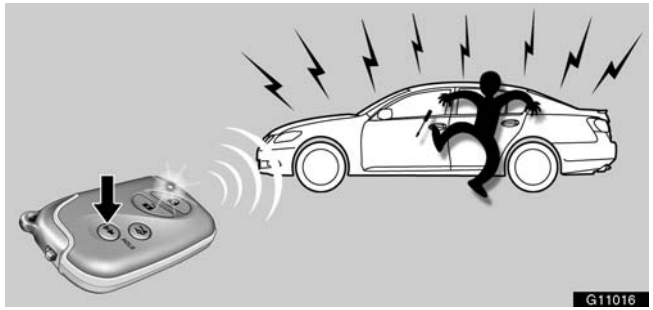
When you keep the button pushed for about 1 second, you can unlock the trunk lid.* One beep sounds.

This function does not work in either of the following conditions.

- When the engine switch is selected in “ACC” or “IG−ON” mode.
- When the trunk opener main switch is deactivated.

NOTE:
**The operation method can be changed.*
Ask your Lexus dealer for details.

SOUNDING AN ALARM*



When you push the ”PANIC” button for about 1 second, an alarm sounds to deter any person trying to break into or damage your vehicle.

If you want to stop the alarm, push any button.

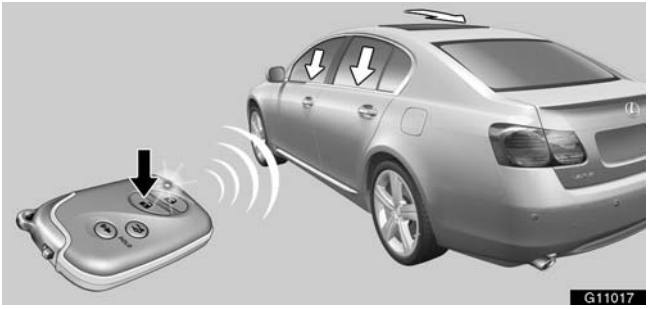
This function does not work when the engine switch is selected in “IG−ON” mode.

NOTE:
**The alarm can be set not to sound.*
Ask your Lexus dealer for details.

OPERATING THE WINDOWS AND MOON ROOF

The windows and moon roof can be operated using an electronic key from outside the vehicle.*

NOTE:
**The windows can be deactivated. The moon roof can be set to slide open, tilt up or deactivated.*
Ask your Lexus dealer for details.



Push the “UNLOCK” button until the windows and moon roof start to move. When you release the button, the windows and moon roof stop operating.

This function will work even with the window lock switch pressed in.

For vehicles sold in U.S.A.

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

NOTICE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio / TV technician for help.

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

For vehicles sold in Canada

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

REPLACING THE BATTERY

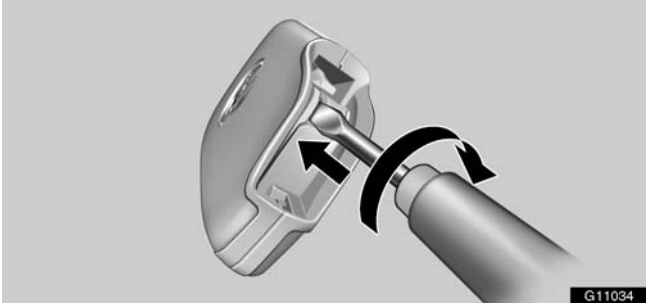
When you replace the battery, prepare a lithium battery CR1632 or equivalent and flathead screwdrivers. However, if the inner parts are touched or the electronic key is dropped, it will not function properly. We recommend you to have an electronic key battery replaced by your Lexus dealer.

CAUTION

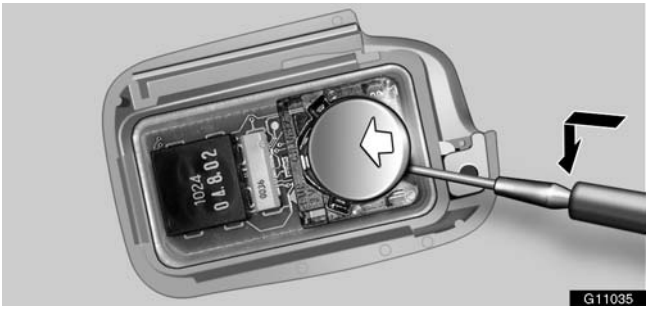
Special care should be taken to prevent small children from swallowing the removed battery or components.

NOTICE

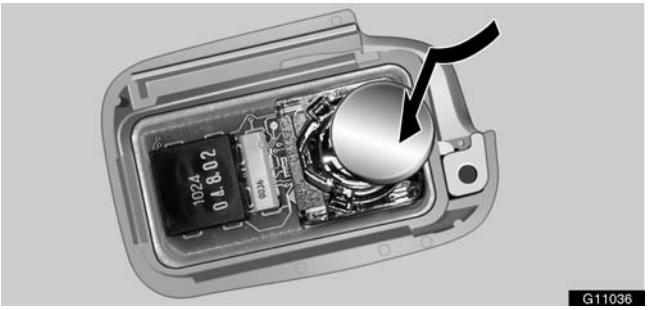
- ***Do not touch the components in an electronic key with your hand. It may cause static electricity to occur, and an electronic key will be broken.***
- ***When replacing the electronic key battery, be careful not to lose components.***
- ***Replace only with the same or equivalent type recommended by a Lexus dealer.***
- ***Dispose of used batteries according to the local laws.***



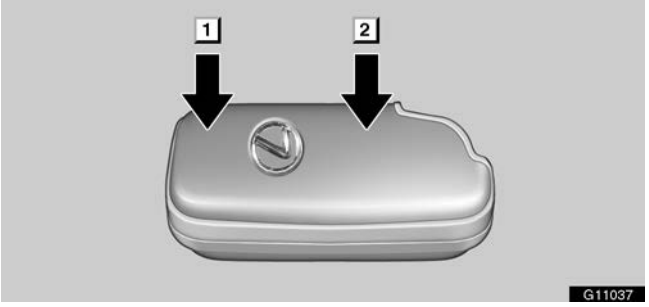
1. After taking out the mechanical key, insert the flathead screwdriver into the space, and turn it.



2. Using a screwdriver of smaller diameter, insert the screwdriver with the gap and remove the battery.



3. After placing the battery in the slot at an angle, with the positive side facing up, press down on the battery and ensure it is properly in place.



4. Replace the cover by pressing down in the order of 1 and 2 as shown in the illustration.

NOTICE

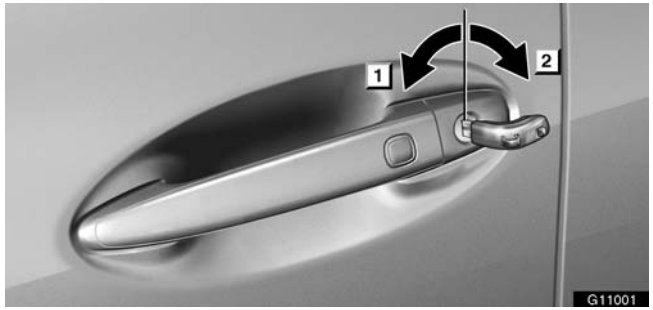
- ***Make sure the positive side and negative side of the battery are faced correctly.***
- ***Do not replace the battery with wet hands. Water may cause unexpected rust.***
- ***Do not touch or move any components inside the transmitter, or it may interfere with proper operation.***
- ***Be careful not to bend the electrode when inserting the battery and that dust or oils do not adhere to the inside of the module.***

5. After replacing the battery, be sure to return the mechanical key to its original position.

DOORS

See page 19 for locking the doors with entry function and page 22 for unlocking them with entry function.

Locking with a mechanical key



▶ 1 ***Lock*** 2 ***Unlock***

Turn the mechanical key towards the front of the vehicle to lock and towards the back to unlock.

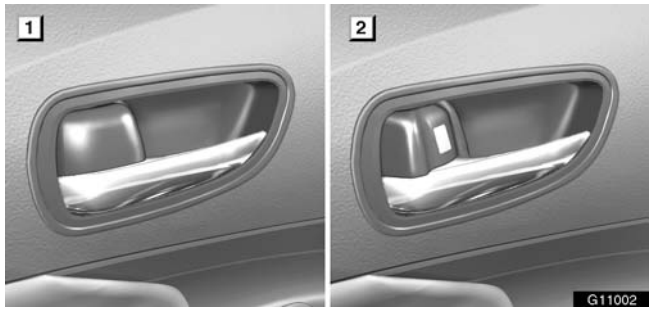
The doors lock and unlock simultaneously with the driver's door. Turning the mechanical key once will unlock the driver's door and twice in succession will unlock all doors simultaneously.*

NOTE:
**The 2−step unlocking function can be changed. Ask your Lexus dealer for details.*

If a wrong key is used, the key cylinder rotates freely to isolate inside mechanism. So, door locking is protected from thieves.

The windows and moon roof can be opened and closed from outside the vehicle using a mechanical key. For details, see “Power window switches” on page 57 and “Moon roof” on page 132.

Locking with inside lock button



▶ 1 *Lock* 2 *Unlock*

Push in the lock button to lock and unlock the door.

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

⚠ CAUTION

Do not pull the inside handle of the front doors while driving. The doors will open and an accident may occur. Lexus strongly recommends that all children be placed in the rear seat of the vehicle.

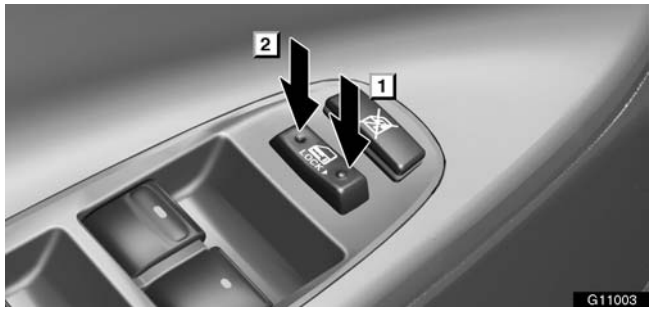
Closing the door with the lock button pushed in will also lock the door. If the electronic key is left in the vehicle, locking cannot be done.

If the vehicle is subjected to a severe frontal, rear or side impact with the engine switch in “IG–ON” mode, all the doors will unlock automatically after a few seconds.

⚠ CAUTION

Before driving, make sure the doors are closed and locked, especially when small children are in the vehicle. Along with the proper use of seat belts, locking the doors helps prevent the driver and passengers from being thrown out from the vehicle during an accident. It also helps prevent the doors from being opened unintentionally.

Locking with power door lock switch



▶ 1 *Lock* 2 *Unlock*

To lock all the doors simultaneously, push the power door lock switch down on the lock side. Pushing down on the unlock side will unlock them.

When you push the power door lock switch on the unlock side to unlock the doors to allow a passenger to get in, the outer foot lights come on. To turn off the lights, push the power door lock switch on the lock side. (For details, see “Outer foot lights” on page 208.)

The same switch is also found on the front passenger’s side. However, pushing this switch will neither turn on nor off the outer foot lights.

Automatic door locking and unlocking functions

AUTOMATIC DOOR LOCKING

You can select the following functions:

- **Locking linked with the shift position**

All doors are automatically locked when the selector lever is moved out of “P” position.

- **Locking linked with vehicle speed**

All doors are automatically locked when the vehicle speed goes above about 20 km/h (12 mph).

You can set or cancel the automatic door locking functions:

Be sure to apply the parking brake when performing the following operations.

To select the locking linked with the shift position:

1. Close all doors and select the engine switch in “IG−ON” mode.
2. Shift the selector lever to the “P” position.
3. Within 10 seconds of selecting the engine switch in “IG−ON” mode, press and hold the driver’s side power door lock switch in the lock position for 5 seconds and then release.

The doors will be locked and unlocked to indicate that the function is set.

To cancel the function, do the above operation again.

To select the locking linked with the vehicle speed:

1. Close all doors and select the engine switch in “IG−ON” mode.
2. Shift the selector lever from “P” to the “N” position.
3. Within 10 seconds of selecting the engine switch in “IG−ON” mode, press and hold the driver’s side power door lock switch in the lock position for 5 seconds and then release.

The doors will be locked and unlocked to indicate that the function is set.

To cancel the function, do the above operation again.

AUTOMATIC DOOR UNLOCKING

You can select the following functions:

- **Unlocking linked with the engine switch**

All doors are automatically unlocked when the the driver's door is opened within 10 seconds after the engine switch is selected in "ACC" or "OFF" mode.

- **Unlocking linked with the shift position**

All doors are automatically unlocked when the selector lever is moved to "P" position.

You can set or cancel the automatic unlocking functions:

Be sure to apply the parking brake when performing the following operations.

To select the unlocking linked with the engine switch:

1. Close all doors and select the engine switch in "IG–ON" mode.
2. Shift the selector lever from "P" to the "N" position.
3. Within 10 seconds of selecting the engine switch in "IG–ON" mode, press and hold the driver's side power door lock switch in the unlock position for 5 seconds and then release.

The doors will be locked and unlocked to indicate that the function is set.

To cancel the function, do the above operation again.

To select the unlocking linked with the shift position:

1. Close all doors and select the engine switch in "IG–ON" mode.
2. Shift the selector lever to the "P" position.
3. Within 10 seconds of selecting the engine switch in "IG–ON" mode, press and hold the driver's side power door lock switch in the unlock position for 5 seconds and then release.

The doors will be locked and unlocked to indicate that the function is set.

To cancel the function, do the above operation again.

Locking with rear door child−protector

▶ 1 *Unlock* 2 *Lock*

Whenever small children are in the vehicle, lock the rear door so that it does not open by the inside door handle. To do this, turn the knob to the lock position as shown and then close the door.

THEFT DETERRENT SYSTEM

To deter theft of the vehicle, this system is designed to sound an alarm if any of the doors, trunk or hood is forcibly unlocked or opened, or the battery terminal is disconnected and then reconnected while the vehicle is locked.

The alarm blows the horn intermittently, flashes the headlights, tail lights, turn signal lights and other exterior lights. When the interior light switch is in the “DOOR” position, the interior lights also turn on.

After the alarm is activated, when you unlock any door or the trunk using a entry function, wireless remote control or mechanical key, the tail lights turn on for about 2 seconds to inform you that the system was activated.

▶*Security indicator light*

Setting the system

1. Turn the engine switch off.

The engine immobilizer causes the indicator light to flash.

2. Close and lock all the doors, trunk and hood using entry function, wireless remote control or a mechanical key.

If you lock them with entry function or wireless remote control, the turn signal lights flash once and one beep will sound.*

NOTE:
** The turn signal lights can be set not to flash and beep can be set not to sound.*
Ask your Lexus dealer for details.

3. At this time, the system is set.

Cancelling the system

When you unlock any door or trunk using entry function, wireless remote control or a mechanical key, the system is cancelled.

If you unlock them with entry function or wireless remote control, the turn signal lights flash twice and two beeps will sound.*

NOTE:
** The turn signal lights can be set not to flash and beep can be set not to sound.*
Ask your Lexus dealer for details.

Activating the system

The alarm sounds for 60 seconds if any of the following are operated:

- Unlocking any door or trunk without using entry function, wireless remote control or a mechanical key.
- Opening the hood forcibly.
- Reconnecting the battery.

If any door is unlocked during the alarm sounding, its door is automatically locked.

To stop the alarm: Use either of the following methods.

- Unlock the door or trunk using entry function, wireless remote control or a mechanical key.
- Turn the engine switch to “IG–ON” mode.

Testing the system

1. Open all the windows.

2. Set the system as described above.

The front doors should be locked with entry function, wireless remote control or a mechanical key. Make sure the indicator light flashes.

3. Unlock one of the doors from the inside through one of the opened windows.

The system should activate the alarm.

4. Unlock any of the doors with entry function, the wireless remote control or a mechanical key to cancel the system.

5. Repeat this operation for the other doors, trunk and hood.

When testing the hood, also check that the system is activated when the battery terminal is disconnected and then reconnected.

If the system does not work properly, have it checked by your Lexus dealer.

NOTICE
When disconnecting the battery, be sure to cancel the theft deterrent system. Otherwise, the system could activate an alarm and lock the unlocked door(s) automatically.

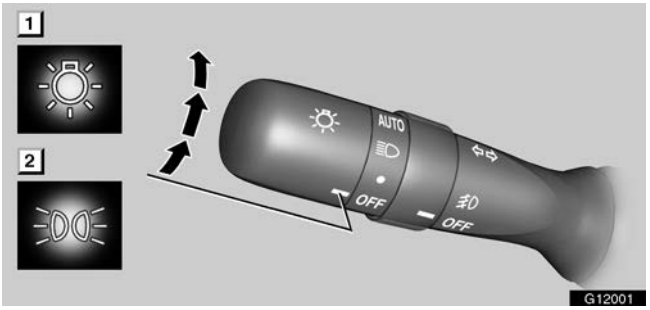
SECTION 1 – 2

INSTRUMENTS AND CONTROLS

Switches

Headlight switch 44
Headlight dimmer and turn signal switches 47
Fog light switch 48
Windshield wiper and washer switches 49
Headlight cleaner switch 55
Rear window and outside rear view mirror defogger switch 56
Power window switches 57
Emergency flasher switch 60
Seat heater switches 61
Seat ventilator/heater switches 63

HEADLIGHT SWITCH



▶ 1 ***U.S.A.*** 2 ***Canada***

To turn the lights on, twist the knob on the end of the lever.

FIRST CLICKSTOP: Only the parking, tail, license plate, side marker and instrument panel lights turn on.

SECOND CLICKSTOP: Headlights also turn on.

THIRD CLICKSTOP (”AUTO”): The headlights and all other lights automatically turn on depending on the darkness of the surroundings.*

NOTE:
**The operating condition or sensitivity can be changed. Ask your Lexus dealer for details.*

Vehicles sold in U.S.A.: When the headlights are on, the headlight indicator lights up in the instrument cluster.

Vehicles sold in Canada: When the tail lights are on, the tail light indicator lights up in the instrument cluster.

With the knob in the “AUTO” position, there may be a case that the headlights do not turn on immediately, even when the vehicle enters a dark place such as a tunnel or parking lot according to lighting conditions. In this case, we recommend you to twist the knob manually to the second clickstop to turn on the headlights immediately.

When the headlight switch is turned to the first or second clickstop, the brightness of the instrument cluster will be reduced slightly unless the maximum brightness is provided by pushing the “MAX” button.

However, the brightness of the instrument cluster will not be reduced in daytime even when the headlight switch is turned to first or second clickstop.

The automatic light control sensor is on top center of the instrument panel.

Do not place anything on the instrument panel, and/or do not affix anything on the windshield to block this sensor.

When the headlights come on, the lights automatically turn off about 30 seconds after any of the doors is opened and closed with the engine switch off.* To turn them on again, select the engine switch in “IG–ON” mode, or turn the headlight switch off and then twist the knob until the first or second clickstop.

If you are going to park for over one week, make sure the headlight switch is off.

When the headlight switch is on with all the doors locked and the trunk closed, pushing the ”LOCK” button on the electronic key turns off the headlights.

NOTE:
**The time before turning off the lights can be changed. Ask your Lexus dealer for details.*

Daytime Running Light System

The headlights turn on at reduced intensity when the parking brake is released with the engine started, even with the light switch in the ”OFF” position. They will not go off until the engine switch is turned off.

To turn on the other exterior lights and instrument panel lights, twist the knob to the first clickstop.

Twist the knob to the second clickstop to turn on the headlights to full intensity for driving at night.

When setting the knob to the third clickstop (”AUTO”), the headlights will automatically adjust to full intensity and/or turn on the other lights depending on the darkness of the surroundings. Likewise, as the surroundings become brighter, the headlights will turn to reduced intensity, ultimately turning off the other lights.

NOTICE

To prevent the battery from being discharged, do not leave the lights on longer than necessary when the engine is not running.

Automatic headlight leveling system

The headlight beam level is always maintained automatically at the proper level in all loading conditions so that your headlights do not dazzle other road users.

If there is a problem somewhere in this system, the message “CHECK HEADLIGHT” appears on the multi–information display. At this time, the master warning light comes on and a warning tone sounds. If the warning message appears, have your vehicle checked by your Lexus dealer as soon as possible.

Adaptive Front Lighting System (AFS)

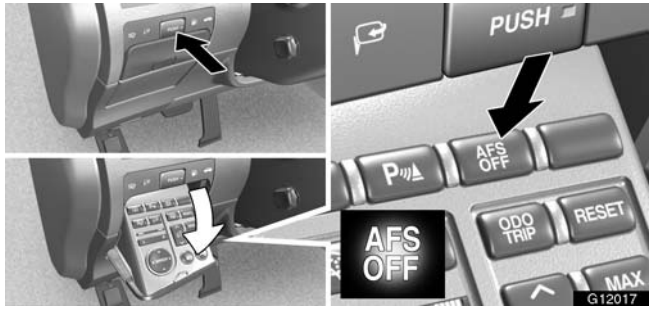
Adaptive Front Lighting System (AFS) provides the proper headlight beam level according to the current driving conditions. This system moves the headlight beam left or right according to the turning angle of the tires. The synergy of this system and the automatic headlight leveling system improves visibility at the intersections and curves.

The system operates when the vehicle speed increases above 10 km/h (6 mph), and stops when the vehicle speed drops below 10 km/h (6 mph).

The system can operate within the limited range of the tires turning angle.

If you do not want to activate the system, you can cancel the system.

Adaptive Front Lighting System cancel switch is located in the switch box.



Push the button to use the switch box. To cancel the system, push the “AFS” switch. To turn it on, push it again.

When the system is canceled, the “AFS OFF” indicator lights up in the instrument cluster.

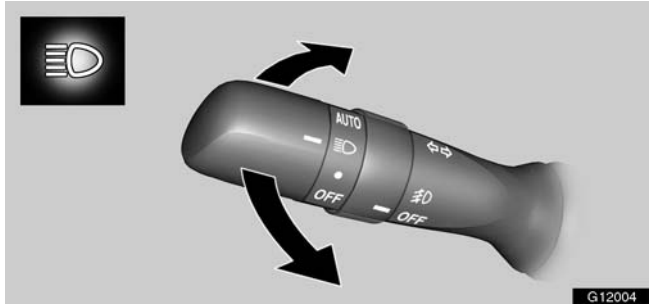
If the system fails, the indicator light in the instrument cluster will flash. If this occurs, have your vehicle checked by your Lexus dealer.

After operation, be sure to close the switch box to its original position.

⚠ CAUTION

To reduce the chance of injury in case of an accident or a sudden stop, keep the switch box closed when not in use while driving.

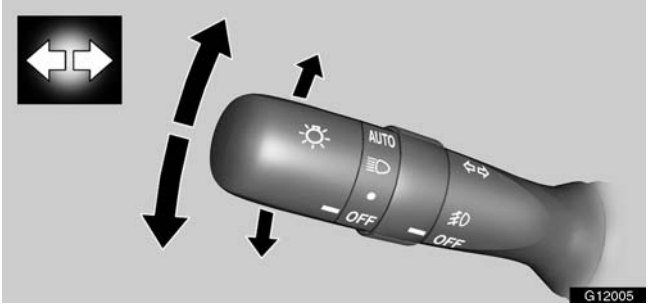
HEADLIGHT DIMMER AND TURN SIGNAL SWITCHES



For high beam, push the lever forward. Pull it back for low beam. For the headlight flasher, pull it further back.

A blue light in the instrument cluster indicates high beam or headlight flasher is on.

The headlight flasher works even when the headlight switch is off.



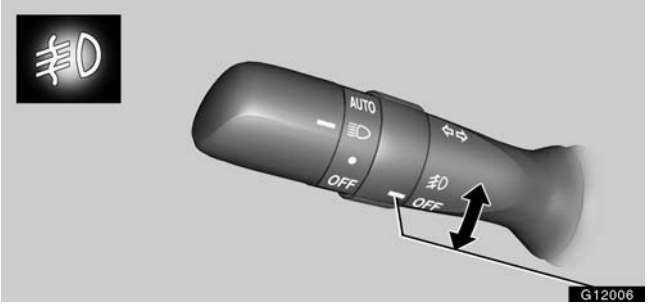
For signaling turns, move the lever up or down in the conventional manner.

The engine switch must be selected in “IG–ON” mode.

The turn signal is self–cancelling after a turn, but after a lane change, you may have to cancel it by hand. You can also signal a lane change by moving the turn signal lever partway and holding it there.

If the green light in the instrument cluster flashes faster than normal, it indicates that the front or rear turn signal bulb has burned out. If this indicator light does not come on, the fuse or the indicator light itself has probably failed.

FOG LIGHT SWITCH

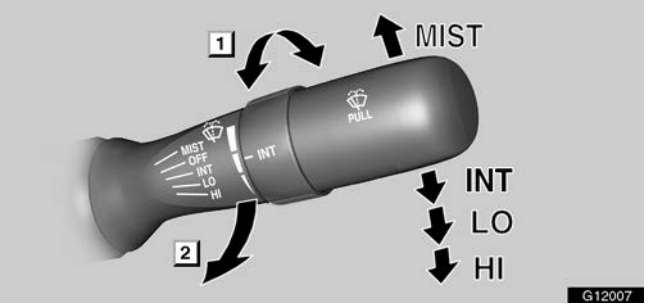


To turn on the fog lights, twist the band of the headlight lever to the fog light mark. They will come on only when the headlights are on low beam.

When the fog lights are on, the indicator lights up in the instrument cluster.

WINDSHIELD WIPER AND WASHER SWITCHES

Variable intermittent wipers



▶ 1 *Interval adjuster* 2 *Washer on*

To turn the wipers on, move the lever down until you reach the desired speed setting.

The engine switch must be selected in “IG–ON” mode.

There are 3 settings:

”INT” position: Intermittent operation

”LO” position: Low speed operation

”HI” position: High speed operation

Twist the interval adjuster upward to increase the wiping time interval between sweeps, and downward to decrease it.

The wiper lever must be in the ”INT” position.

The time interval between sweeps is shortened when the vehicle speed increases. When the vehicle speed reaches more than about 20 km/h (12 mph) with the interval adjuster twisted down to the lowest position, the time interval becomes the shortest 1.5 seconds.

If you stop the vehicle with the wiper switch in the “LO” position, the wiper speed automatically changes from low speed to intermittent operation speed.* This function does not work with the interval adjuster twisted down to the lowest position.

NOTE:
** This feature can be deactivated.*
Ask your Lexus dealer for details.

For mist wiper operations (a single wipe), pull the lever up and release it.

To make the washer squirt, push the lever toward you and release it.

If the wiper lever is in the “OFF” position, the wipers will automatically make 3 wipes and then a single wipe later to sweep the windshield completely.* The interval between the 3 wipes and the last wipe will depend on the vehicle speed. The last sweep does not happen if the vehicle speed exceeds about 170 km/h (106 mph).

NOTE:
**This function can be changed as follows:*
- *The time before the last single wipe can be set for about 3 seconds.*
- *The last single wipe can be deactivated.*

Ask your Lexus dealer for details.

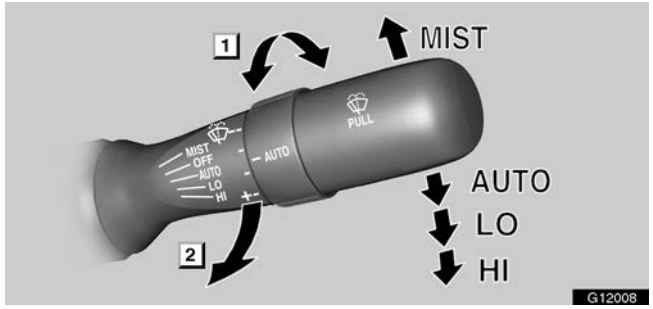
The warning message “LOW WASHER FLUID” is displayed in the multi−information display when the fluid level in the tank becomes very low. For information on adding washer fluid, see “Adding washer fluid” on page 579.

In cold weather, warm the windshield with the defroster before using the washer. This will help prevent icing, which could block your vision.

NOTICE

Do not operate the wipers if the windshield is dry. It may scratch the glass.

Rain−sensing windshield wipers



▶ 1 ***Automatic control adjuster*** 2 ***Washer on***

To turn the wipers on, move the lever down until you reach the desired speed setting.

The engine switch must be selected in “IG−ON” mode.

There are 3 settings:

“AUTO” position: Automatic operation

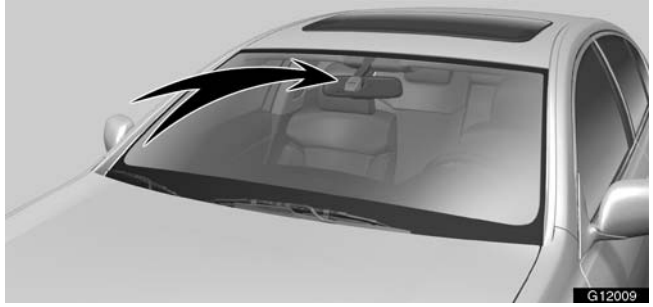
“LO” position: Low speed operation

“HI” position: High speed operation

Automatic operation*

The wiper speed is determined by the vehicle speed and the amount of raindrops and sunlight detected by the automatic wiper control sensor.

Twist the automatic control adjuster in the "–" direction to lower the sensitivity, and the "+" direction to boost the sensitivity.



The sensor is on the inside of the windshield as shown above.

NOTE:
**Automatic operation can be changed to an intermittent operation.*
Ask your Lexus dealer for details.

With the engine switch turned off, if the windshield sensor is touched by reason of cleaning the windshield or for any other reason, either of the following operations may cause automatic wiper activation.

- Turning the engine switch on with the wiper lever in the "AUTO" position.
- Turning the engine switch on and move the wiper lever down in the "AUTO" position.

Even with the wiper lever in the "AUTO" position, the system will switch to intermittent operations if the system malfunctions.

The system will turn off if the windshield gets extremely hot (at more than 80°C or 176°F) or cold (at less than –10°C or 14°F).

When the engine switch is turned off with the wiper lever in the "AUTO" position, and then the engine switch is turned on again, the automatic operation may not work even if raindrops are on the windshield.

In this case, move the lever to another position and return it to the "AUTO" position again.

CAUTION

Be careful not to get your fingers caught between the wipers and windshield.

When the wiper lever is in the "AUTO" position with the engine switch on, the wipers could operate automatically in the following cases:

- **If you touch the upper center of the windshield adjacent to the sensor.**
- **If you wipe the upper center of the windshield (adjacent to which the sensor is located) with a towel.**
- **If the windshield vibrates.**
- **If you touch the sensor.**

For mist wiper operations (a single wipe), pull the lever up and release it.

To make the washer squirt, pull the lever toward you and release it.

If the wiper lever is in the "OFF" position, the wipers will automatically make 3 wipes and then a single wipe later to sweep the windshield completely.* The interval between the 3 wipes and the last wipe will depend on the vehicle speed. The last sweep does not happen if the vehicle speed exceeds about 170 km/h (106 mph).

NOTE:
**This function can be changed as follows:*
- *The time before the last single wipe can be set for about 3 seconds.*
- *The last single wipe can be deactivated.*

Ask your Lexus dealer for details.

The warning message "LOW WASHER FLUID" is displayed in the multi–information display when the fluid level in the tank becomes very low. For information on adding washer fluid, see "Adding washer fluid" on page 579.

When the headlights are on and the washers are activated by pushing the windshield washer switch, the headlight cleaner operates once automatically.

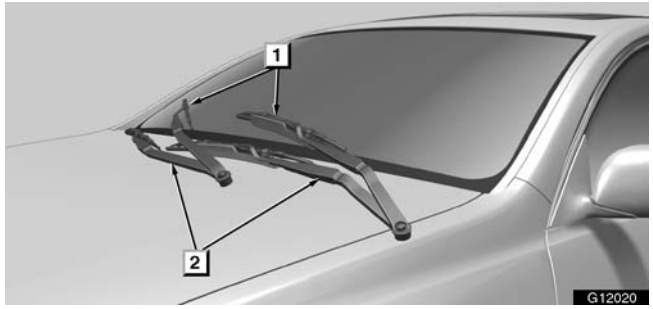
In cold weather, warm the windshield with the defroster before using the washer. This will help prevent icing, which could block your vision.

The rear window and outside rear view mirror defogger automatically turns on when you operate the wipers.

NOTICE

Do not operate the wipers if the windshield is dry. It may scratch the glass.

Shifting the windshield wiper position



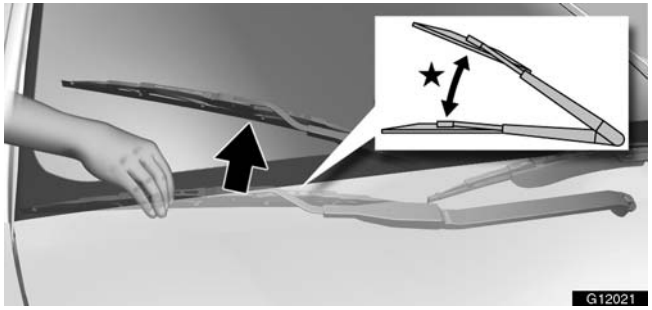
▶ 1 ***Rest position*** 2 ***Retracted position***

The wiper blades retract under the hood when the wipers are turned off.

In the following cases, the wipers should be shifted from the retracted position to the rest position above the hood level.

- When cleaning the windshield
- When inspecting or replacing the wipers
- When the retraction may be obstructed by snow, etc., at the bottom of the windshield

Other than the above cases, keep the wipers in the retracted position.

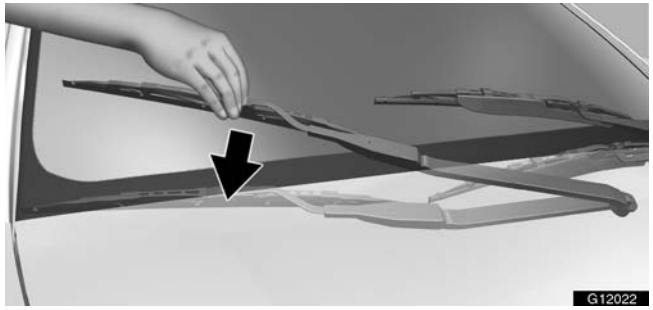


★ *More than 10 cm (3.9 in.)*

To shift the windshield wipers from retracted to rest position, hold the connection of the wiper arm and wiper blade and pull it upward along the windshield glass with the force of about 98 N (10 kgf, 22 lbf.).

NOTICE

To prevent the wiper blades from being deformed, be sure to hold the connection of the wiper arm and wiper blade securely.



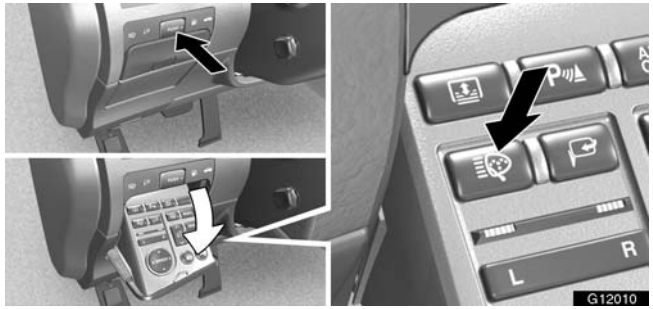
To return the windshield wipers to retracted position, push the connection of the wiper arm and wiper blade downward.

NOTICE

To prevent the wiper blades from being deformed, be sure to hold the connection of the wiper arm and wiper blade securely.

HEADLIGHT CLEANER SWITCH

The headlight cleaner switch is located in the switch box.



Push the button to use the switch box. To spray fluid on the headlights, push the switch with the headlights on.

The engine switch must be selected in “IG−ON” mode.

The warning message “LOW WASHER FLUID” is displayed in the multi−information display when the fluid level in the tank becomes very low. For information on adding washer fluid, see “Adding washer fluid” on page 579.

After operation, be sure to close the switch box to its original position.

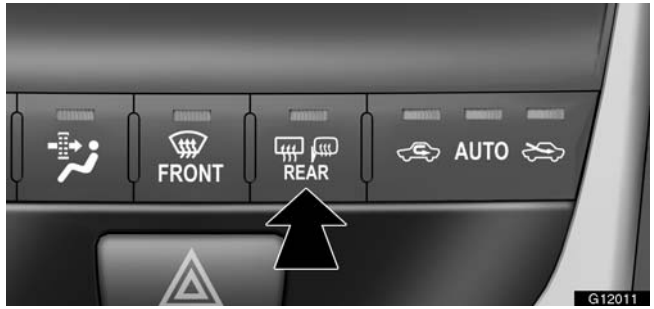
CAUTION

To reduce the chance of injury in case of an accident or a sudden stop, keep the switch box closed when not in use while driving.

NOTICE

Do not turn the headlight cleaner on with the washer fluid tank empty. It may cause the cleaner motor to overheat.

REAR WINDOW AND OUTSIDE REAR VIEW MIRROR DEFOGGER SWITCH



To turn the electric rear window and outside rear view mirror defogger on, push the switch.

The engine switch must be selected in “IG–ON” mode.

The thin heater wires on the inside of the rear window and the heater panels in the outside rear view mirrors will quickly clear the surface. Keep your hands off the mirror faces when the switch is on. An indicator light is on when the defogger is operating.

The system will automatically shut off when the defogger has operated about 15 minutes.

⚠ CAUTION

Since the mirror surfaces can get hot, do not touch them when the switch is on.

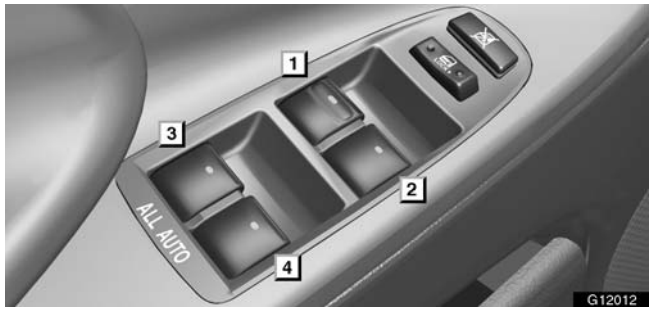
If further defrosting or defogging is desired, simply actuate the switch again. When the surface has cleared, push the switch once again to turn the defogger off. Continuous use may cause the battery to discharge, especially during stop–and–go driving. The defogger is not designed to dry rain water or to melt snow.

If the outside rear view mirrors are heavily coated with ice, use a spray de–icer before operating the switch.

NOTICE

- ***When cleaning the inside of the rear window, be careful not to scratch or damage the heater wires or connectors.***
- ***To prevent the battery from being discharged, turn the switch off when the engine is not running.***

POWER WINDOW SWITCHES



▶ 1 *For driver's window*
2 *For front passenger's window*
3 *For left rear window*
4 *For right rear window*

To raise or lower the windows, use the switch on each door. The passengers' windows can also be controlled by the switches on the driver's door.

The power windows work when the engine switch is selected in "IG–ON" mode.

Retained accessory power operation: Even if the engine switch is off with all the doors closed, the window can be operated until any of the doors is opened (or for about 45 seconds).

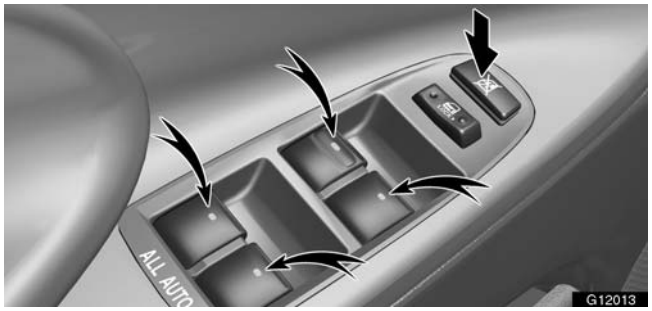
Operating the switches

To lower the window, push the switch halfway down. Pull it up to raise the window. The window glass moves as long as the switch is operated.

Automatic operation: To fully raise or lower the window automatically, pull the switch fully up or push it fully down.

To stop the window partway, lightly push or pull the switch in the opposite direction and then release it.

Operating the window lock switch



▶***Indicator light***

With the window lock switch pressed in, only the driver's window can be raised or lowered.

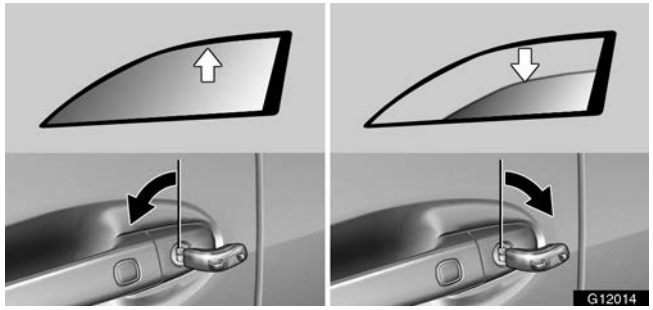
The indicator lights on the switches tell you which of the switches can be operated.

Even with the window lock switch pressed in, the windows will be opened from outside the vehicle using a mechanical key or wireless remote control.

Operating the windows from outside the vehicle

The windows can be operated using a mechanical key.*

NOTE:
**This feature can be deactivated.*
Ask your Lexus dealer for details.



Insert the mechanical key into the key hole on the driver's side.

To close the windows: Turn the key in the locking direction and hold it.

After the door is locked, the windows begin to close. To stop in the middle, return the key.

To open the windows: Turn the key in the unlocking direction and hold it.

After the door is unlocked, the windows begin to open. To stop in the middle, return the key.

This function will work even with the window lock switch pressed in.

The windows also can be opened using the wireless remote control. For details, see page 28.

Jam protection function

During automatic raising operation, retained accessory power raising operation or raising operation using the mechanical key from the outside, the window stops and is lowered if something gets caught between the window and window frame.

If the window receives a strong impact, this function may work even if nothing is caught.

If the battery is disconnected or run down

The power window may not operate automatically and the jam protection function will not function correctly after you reconnect, replace or recharge the battery. At this time, the indicator lights of the switches will flash. In any of these cases, you should normalize the power window on each door.

To normalize the power windows:

1. Push down the power window switch of each door and lower the windows halfway.

2. Pull up the switch until the windows close and hold the switch for one second.

Make sure the windows open and close automatically. If the power windows cannot be operated properly, have them checked by your Lexus dealer.

⚠ CAUTION

To avoid serious personal injury, you must do the following.

- **Before you close the power windows, always make sure there is nobody around the power windows. You must also make sure the heads, hands and other parts of the bodies of all occupants are kept completely inside the vehicle. If someone's neck, head or hands get caught in a closing window, it could result in death or serious injury. When anyone closes the power windows, make sure he or she operates the windows safely.**
- **When small children are in the vehicle, never let them use the power window switches without supervision. Use the window lock switch to prevent them from making unexpected use of the switches.**

- **Be sure to turn the engine switch to “OFF” mode when you leave your vehicle.**
- **Never leave anyone (particularly a small child) alone in your vehicle, especially when the engine switch is on. Otherwise, he/she could use the power window switches and get trapped in a window. Unattended persons (particularly a small child) can be involved in a serious accident.**
- **Never try jamming any part of your body to activate the jam protection function intentionally.**
- **The jam protection function may not work if something gets caught just before the window fully closed.**

EMERGENCY FLASHER SWITCH

To turn on the emergency flashers, push the switch. To turn them off, push the switch again.

All the turn signal lights will flash. The emergency flashers will work with the engine running or off and with or without the electronic key.

Turn on the emergency flashers to warn other drivers if you must stop your vehicle where it might be a traffic hazard.

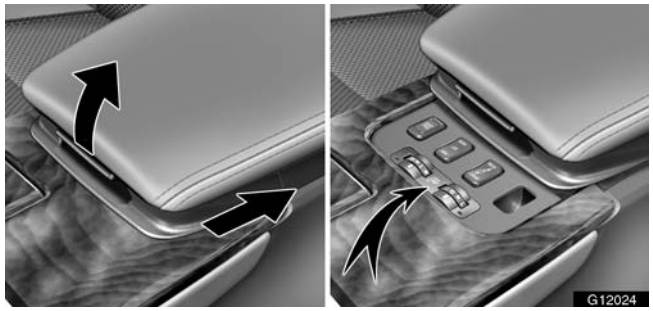
Always pull your vehicle as far off the road as possible.

The turn signal light switch will not work when the emergency flashers are in operation.

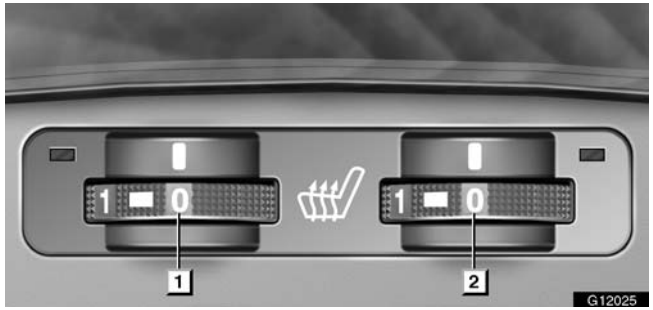
NOTICE

To prevent the battery from being discharged, do not leave the switch on longer than necessary when the engine is not running.

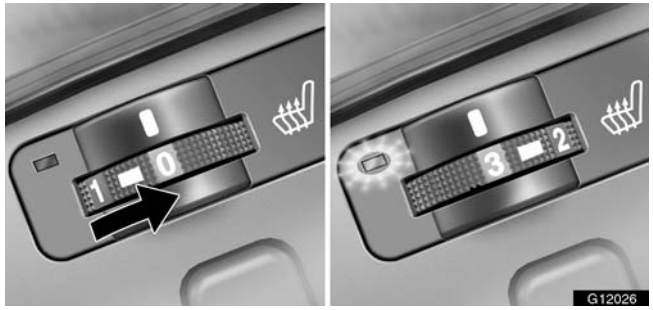
SEAT HEATER SWITCHES



To use the seat heater switches, pull the lever to slide the rear console box cover backward.



▶ 1 *For driver's seat* 2 *For front passenger's seat*



To turn on the heater, turn the dial as shown. The indicator light (yellow) comes on.

The engine switch must be selected in "IG–ON" mode.

The heating level will be increased as you turn the dial to the higher number.

To disable this function, turn the dial to the "0" position. The indicator light goes off. Keep the dial in this position when not in use.

⚠ CAUTION

Occupants must use caution when operating the seat heater because they may experience minor burns even at low temperatures. Use extra caution for;

- **Babies, small children, elderly persons, sick persons or persons with physical disabilities**
- **Persons who have sensitive skin**
- **Persons who are exhausted**
- **Persons who have taken alcohol or drugs which induce sleep (sleeping drug, cold remedy, etc.).**

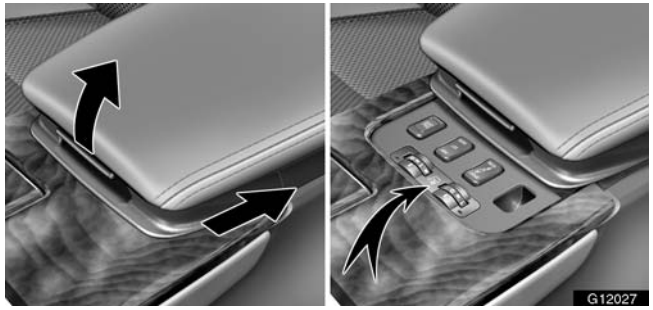
To prevent the seat from overheating, do not use the seat heater with a blanket, cushion, or other insulating objects which cover the seat.

NOTICE

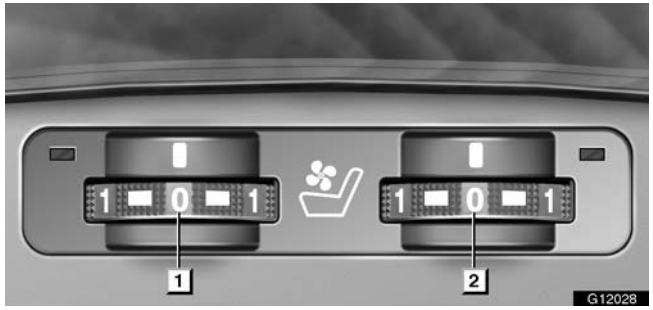
- ***Do not put unevenly weighted objects on the seat and do not stick sharp objects (needles, nails, etc.) into the seat.***
- ***When cleaning the seats, do not use organic substances (paint thinner, benzine, alcohol, gasoline, etc.). They may damage the heater and seat surface.***
- ***To prevent the battery from being discharged, turn the switches off when the engine is not running.***

SEAT VENTILATOR/HEATER SWITCHES

The seats can be warmed and deliver airflow from the seat surface using seat ventilator/heater switches.

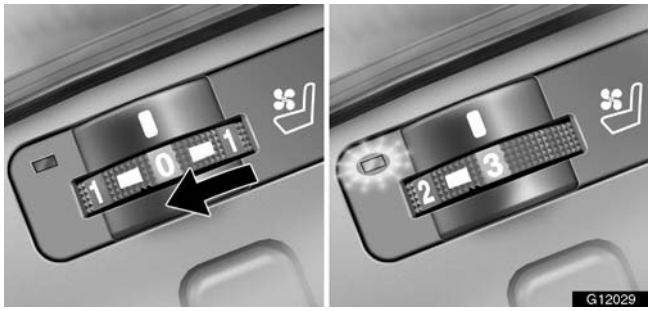


To use the seat heater/ventilator switches, pull the lever to slide the rear console box cover backward.



▶ 1 *For driver's seat* 2 *For front passenger's seat*

Seat ventilator



To turn on the seat ventilator, turn the dial as shown. The indicator light (green) comes on.

The engine switch must be selected in “IG–ON” mode.

More air will be delivered as you turn the dial to the higher number.

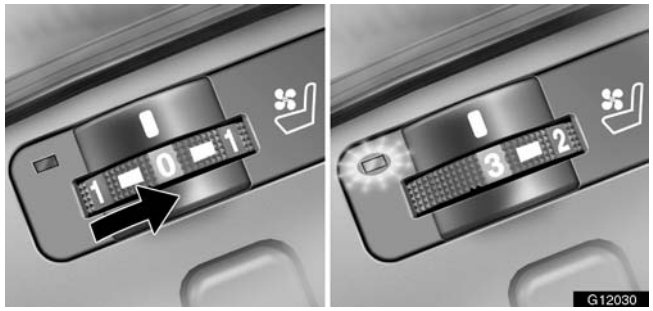
After the switch is turned on, it takes several minutes until you feel cool.

To disable this function, turn the dial to the “0” position. The indicator light goes off. To disable this function, turn the dial to the “0” position. The indicator light goes off. Keep the dial in this position when not in use.

NOTICE

- ***Do not put unevenly weighted objects on the seat and do not stick sharp objects (needles, nails, etc.) into the seat.***
- ***When cleaning the seats, do not use organic substances (paint thinner, benzine, alcohol, gasoline, etc.). They may damage the seat ventilation / heating system and seat surface.***
- ***When cleaning the seats, fully wring out a towel to be used. The wet seats may cause the seat ventilation/heating system to malfunction.***
- ***To prevent the battery from being discharged, turn the switches off when the engine is not running.***

Seat heater



To turn on the seat heater, turn the dial as shown. The indicator light (yellow) comes on.

The engine switch must be selected in “IG–ON” mode.

The heating level will be increased as you turn the dial to the higher number.

To disable this function, turn the dial to the “0” position. The indicator light goes off. Keep the dial in this position when not in use.

⚠ CAUTION

Occupants must use caution when operating the seat heater because they may experience minor burns even at low temperatures. Use extra caution for;

- **Babies, small children, elderly persons, sick persons or persons with physical disabilities**
- **Persons who have sensitive skin**
- **Persons who are exhausted**
- **Persons who have taken alcohol or drugs which induce sleep (sleeping drug, cold remedy, etc.).**

To prevent the seat from overheating, do not use the seat heater with a blanket, cushion, or other insulating objects which cover the seat.

NOTICE

- ***Do not put unevenly weighted objects on the seat and do not stick sharp objects (needles, nails, etc.) into the seat.***
- ***When cleaning the seats, do not use organic substances (paint thinner, benzine, alcohol, gasoline, etc.). They may damage the seat ventilation/heating system and seat surface.***
- ***When cleaning the seats, fully wring out a towel to be used. The wet seats may cause the seat ventilation/heating system to malfunction.***
- ***To prevent the battery from being discharged, turn the switches off when the engine is not running.***

SECTION 1 – 3

INSTRUMENTS AND CONTROLS

Gauges, meters and service reminder indicators

Fuel gauge 68
Engine coolant temperature gauge 68
Tachometer 69
Odometer and trip meter 70
Light sensitive optitron meter 71
Service reminder indicators and warning buzzers 72
Multi–information display 82
Instrument panel light control 96

FUEL GAUGE

▶*Low fuel level warning light*

The gauge indicates the approximate quantity of fuel remaining in the tank when the engine switch is selected in "IG−ON" mode.

It is a good idea to keep the tank over 1/4 full.

If the fuel level approaches "E" or the low fuel level warning light comes on, fill the fuel tank as soon as possible.

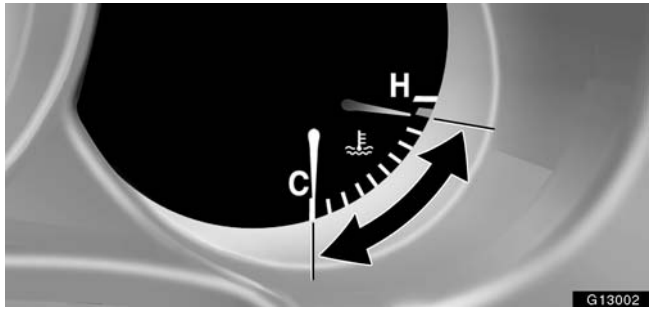
On inclines or curves, due to the movement of fuel in the tank, the fuel gauge needle may fluctuate or the low fuel level warning light may come on earlier than usual.

If the fuel tank is completely empty, the malfunction indicator lamp comes on. Fill the fuel tank immediately.

The indicator lamp goes off after driving several times. If the indicator lamp does not go off, contact your Lexus dealer as soon as possible.

See the inner back cover for fuel capacity and recommended fuel selection.

ENGINE COOLANT TEMPERATURE GAUGE



▶*Normal range*

The gauge indicates the engine coolant temperature when the engine switch is selected in "IG−ON" mode. The engine operating temperature will vary with changes in weather and engine load.

If the needle points to the red zone or higher, stop your vehicle and allow the engine to cool.

Your vehicle may overheat during severe operating conditions, such as:

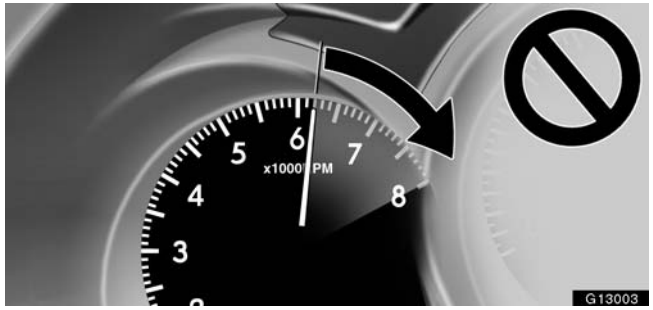
- Driving up a long hill on a hot day.
- Reducing speed or stopping after high speed driving.

- Idling for a long period with the air conditioning on in stop–and–go traffic.

NOTICE

- ***Do not remove the thermostat in the engine cooling system as this may cause the engine to overheat. The thermostat is designed to control the flow of coolant to keep the temperature of the engine within the specified operating range.***
- ***Do not continue driving with an overheated engine. See "If your vehicle overheats" on page 467.***

TACHOMETER



The tachometer indicates engine speed in thousands of rpm (revolutions per minute). Use it while driving to prevent engine over−revving.

Driving with the engine running too fast causes excessive engine wear and poor fuel economy. Remember, in most cases the slower the engine speed, the greater the fuel economy.

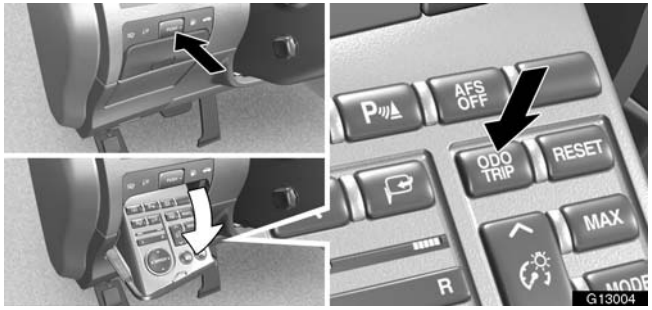
NOTICE

Do not let the indicator needle get into the red zone. This may cause severe engine damage.

ODOMETER AND TRIP METER

This meter displays the odometer and two trip meters. To change the mode indication, use the "ODO TRIP" switch.

The "ODO TRIP" switch is located in the switch box.



Push the button to use the switch box and then push the "ODO TRIP" switch.

The odometer records the total distance the vehicle has been driven. The twin trip meter records two different distances independently.

For example, you can use one meter to calculate the fuel economy and the other to measure the distance on each trip.

To change the trip meter indication from one trip to the other, push the "ODO TRIP" change switch. To set the A trip meter to zero, display the A meter reading, then push the "RESET" switch. The same applies for the B trip meter.

The data of trip meters will be cancelled if the electrical power source is disconnected.

After operation, be sure to close the switch box to its original position.

⚠ CAUTION

To reduce the chance of injury in case of an accident or a sudden stop, keep the switch box closed when not in use while driving.

LIGHT SENSITIVE OPTITRON METER

Light sensitive optitron meter reduces unwanted glare of the instrument cluster to provide a fine view for the driver. The reflection of the instrument cluster is adjusted automatically depending on the lighting condition of your surrounding.

To make an adjustment, follow the procedure below.

The reflection control switch is located in the switch box.

Push the button to use the switch box. When you push the "MODE" switch, the present setting appears on the multi−information display.

To change the setting, push the "MODE" switch once and then again within 6 seconds. Each time you push the button, the setting changes in the following order:

1. AUTO−Norm
2. AUTO−Lo
3. AUTO−Hi
4. MANUAL−1
5. MANUAL−2
6. MANUAL−3
7. MANUAL−4

The setting display goes off automatically about 6 seconds after the "MODE" switch is pushed. The mode shown last is set.

After operation, be sure to close the switch box to its original position.

⚠ CAUTION

To reduce the chance of injury in case of an accident or a sudden stop, keep the switch box closed when not in use while driving.

NOTICE

Do not place luggage (especially metallic type on the package tray, or apply window tint (especially a conductive or metallic tape) or a sticker on the rear window. Otherwise the light sensitive optitron meter may not operate properly.

SERVICE REMINDER INDICATORS AND WARNING BUZZERS

	IF THIS INDICATOR OR BUZZER COMES ON ...	DO THIS.
(a)	BRAKE or (Red indicator and buzzer)	If parking brake is off, stop immediately and contact Lexus dealer.
(b)	(Yellow indicator)	Take vehicle to Lexus dealer. If brake system warning light (red) is also on, stop immediately and contact Lexus dealer.
(c)	(Indicator and buzzer)	Fasten driver's seat belt.
(d)	PASSENGER	Fasten front passenger's seat belt.

IF THIS INDICATOR OR BUZZER COMES ON ...		DO THIS.
(e)		Take vehicle to Lexus dealer immediately.
(f)		Stop and check.
(g)	CHECK or	Take vehicle to Lexus dealer.
(h)		See multi−information display.
(i)	ABS or ABS	Take vehicle to Lexus dealer. If brake system warning light (red) is also on, stop immediately and contact Lexus dealer.

IF THIS INDICATOR OR BUZZER COMES ON ...		DO THIS.
(j)		Close all doors.
(k)	AFS OFF	If flashing, take vehicle to Lexus dealer.
(l)		Adjust tire inflation pressure. If light remains on, contact Lexus dealer.
(m)	P/S	Take vehicle to Lexus dealer.
(n)	PCS	Take vehicle to Lexus dealer.
(o)	Low fuel level warning light	Fill up tank.

IF THIS INDICATOR OR BUZZER COMES ON ...		DO THIS.
(p)	Key reminder buzzer	Turn off the engine switch.

(a) Brake System Warning Light (red) and Buzzer

This light comes on in the following cases when the engine switch is selected in “IG–ON” mode.

- **When the parking brake is applied ...**

GS430—This light comes on for a few seconds when the engine is started even after the parking brake is released.

GS300—This light comes on for a few seconds when the engine switch is selected in “IG–ON” mode even after the parking brake is released.

If you drive your vehicle without releasing the parking brake, the buzzer sounds and the message “PARK BRAKE” appears on the multi–information display.

- **When the brake fluid level is low ...**

CAUTION

It is dangerous to continue driving normally when the brake fluid level is low.

Have your vehicle checked at your Lexus dealer in the following case:

- The light does not come on even if the parking brake is applied when the engine is started.
- The light does not come on even if the engine is started with the parking brake released.

A warning light turning on briefly during operation does not indicate a problem.

⚠ CAUTION

If either of the following conditions occurs, immediately stop your vehicle at a safe place and contact your Lexus dealer.

- **The light does not turn off even after the parking brake is released while the engine is running.**

  In this case, the brakes may not work properly and your stopping distance will become longer. Depress the brake pedal firmly and bring the vehicle to an immediate stop.

- **The brake system warning light remains on together with the "ABS" warning light.**

  In this case, not only the anti−lock brake system will fail but also the vehicle will become extremely unstable during braking.

GS430 only—Any of the following conditions may occur, but do not indicate the malfunction:

- The light may stay on for about 60 seconds after the engine is started. It is normal if it turns off after a while.
- Depressing the brake pedal repeatedly may turn on the warning light and buzzer. It is normal if the light turns off and the buzzer stops sounding after a few seconds.
- You may hear a small sound in the engine compartment after the engine is started or the brake pedal is depressed repeatedly. This is a pump pulsating sound of the brake system, and it is not a malfunction.

(b) Brake System Warning Light (yellow)

The light comes on when the engine switch is selected in "IG−ON" mode.

GS430—If the engine is started, and the traction control system, vehicle stability control system and hill−start assist control system work properly, the light turns off after a few seconds. Thereafter, if any part of the system malfunctions, the light comes on again.

GS300—If the engine switch is selected in "IG−ON" mode, and the traction control system, vehicle stability control system and hill−start assist control system work properly, the light turns off after a few seconds. Thereafter, if any part of the system malfunctions, the light comes on again.

Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer as soon as possible.

(c) Driver's Seat Belt Reminder Light and Buzzer

The light and buzzer act as a reminder to have the driver buckle up the seat belt.

Once the engine switch is selected in “IG−ON” mode, the reminder light flashes and buzzer sounds if the driver’s seat belt is not fastened. Unless the driver fastens the belt, the light continues flashing and the buzzer stops after about 4 to 8 seconds.

If the vehicle speed exceeds about 15 km/h (10 mph) with the driver’s seat belt reminder light flashing, beeps sound intermittently for about 20 seconds.

(d) Front Passenger’s Seat Belt Reminder Light

The light acts as a reminder to have the front passenger buckle up the seat belt.

Once the engine switch is selected in “IG−ON” mode, the reminder light flashes if a passenger sits in the front passenger seat and does not fasten the seat belt. Unless the front passenger fastens the belt, the light continues flashing. However, if a front passenger uses an additional seat cushion, the indicator light may not flash even when the seat belt is not buckled up.

If luggage or other load is placed on the front passenger seat, depending on its weight and how it is placed on the seat, built−in sensors in the seat cushion may detect the pressure, causing the reminder light to flash.

(e) SRS Warning Light

The indicator comes on when the engine switch is selected in “IG−ON” mode. It goes off after about 6 seconds. This means the SRS airbags and seat belt pretensioners are operating properly.

This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensor assemblies, curtain shield airbag sensor assemblies, driver’s seat position sensor, driver’s seat belt buckle switch, occupant detection sensor, front passenger’s seat belt buckle switch, seat belt pretensioner assemblies, inflators, warning light, interconnecting wiring and power sources.

If either of the following conditions occurs, this indicates a malfunction somewhere in the parts monitored by the warning light system. Contact your Lexus dealer as soon as possible to service the vehicle.

- When the engine switch is selected in “IG−ON” mode, the light does not come on or remains on for more than 6 seconds.
- The light comes on while driving.

If the light stays on, it indicates that the SRS driver and front passenger airbags, SRS side and curtain shield airbags and/or seat belt pretensioners have a problem.

(f) Discharge Warning Light

This light warns that the battery is being discharged.

If it comes on while you are driving, stop the vehicle, turn off the engine, and check for the cause. Look first at the engine drive belt.

- If it is loose or broken, the generator will not charge the battery properly.
- If the belt is O.K., there is a problem somewhere in the charging system.

The engine ignition will continue to operate, however, until the battery is discharged. Turn off the air conditioning, blower, radio, etc., and drive directly to the nearest Lexus dealer or repair shop.

NOTICE

Do not continue driving if the engine drive belt is broken or loose.

(g) Malfunction Indicator Lamp

This lamp comes on when the engine switch is selected in "IG−ON" mode and goes off after the engine starts. This means that the warning light system is operating properly.

If the lamp remains on, or the lamp comes on while driving, first check the followings:

- Empty fuel tank
  If the fuel tank is empty, refuel immediately.
- Loose fuel tank cap
  If the fuel tank cap is loose, securely tighten it.

These cases are temporary malfunctions. The malfunction indicator lamp will go off after taking several driving trips.

If the lamp does not go off even after several trips, contact your Lexus dealer as soon as possible.

If the fuel tank is not empty or the fuel tank cap is not loose...

- There is a problem somewhere in the engine, emission control system, electronic throttle control system, automatic transmission electrical system or warning light system itself.

Contact your Lexus dealer as soon as possible to service the vehicle.

If this lamp comes on and engine speed does not increase when the accelerator pedal is depressed, there may be a problem somewhere in the electronic throttle control system.

At this time, vibration may occur. However, if you depress the accelerator pedal more firmly and slowly, you can drive your vehicle at low speeds. Have your vehicle checked by your Lexus dealer as soon as possible.

Even if the abnormality of the electronic throttle control system is corrected during low speed driving, the system may not be recovered until the engine is stopped and the engine switch is selected in “ACC” or “OFF” mode.

Emissions inspection and maintenance (I/M) programs

Your vehicle may not pass a state emission inspection if the malfunction indicator lamp remains on. Contact your Lexus dealer to check your vehicle’s emission control system and OBD (On–Board Diagnostics) system before taking your vehicle for the inspection.

For details, see “Emissions inspection and maintenance (I/M) programs” on page 497.

(h) Master Warning Light

If any system malfunctions, this warning light comes on or flashes together with a warning tone, and a warning message appears on the multi–information display. When the cause of the problem is eliminated, the warning tone and message on the display will turn off.

(i) ”ABS” Warning Light

The light comes on when the engine switch is selected in “IG–ON” mode.

GS430—If the anti–lock brake system and the brake assist system work properly, the light turns off in a few seconds after the engine is started. Thereafter, if either system malfunctions, the light comes on again.

GS300—If the anti–lock brake system and the brake assist system work properly, the light turns off in a few seconds after the engine switch is selected in “IG–ON” mode. Thereafter, if either system malfunctions, the light comes on again.

When the “ABS” warning light is on, the anti–lock brake system and the brake assist system do not operate, but the brake system still operates conventionally.

If either of the following conditions occur, this indicates a malfunction somewhere in the components monitored by the warning light system. Contact your Lexus dealer as soon as possible to service the vehicle.

- The light does not come on when the engine switch is selected in “IG–ON” mode.
- The light remains on after the engine is started (GS430), or remains on after the engine switch is selected in “IG–ON” mode (GS300).
- The light comes on while you are driving.

A warning light turning on briefly during operation does not indicate a problem.

CAUTION

If the “ABS” warning light remains on together with the brake system warning light (red), immediately stop your vehicle at a safe place and contact your Lexus dealer.

In this case, not only the anti−lock brake system will fail but also the vehicle will become extremely unstable during braking.

GS430 only—Either of the following conditions may occur, but does not indicate a malfunction:

- The light may stay on for about 60 seconds after the engine is started. It is normal if it turns off after a while.
- Depressing the brake pedal repeatedly may turn on the light. It is normal if it turns off after a few seconds.

(j) Open Door Warning Light

This light remains on until all the doors are completely closed.

(k) Adaptive Front Lighting System Off Indicator Light

This light comes on when you turn off the Adaptive Front Lighting System (AFS) by pushing the “AFS OFF” switch.

If there is a problem somewhere in the Adaptive Front Lighting System (AFS) or automatic headlight leveling system, the light flashes. At this time, both systems do not operate properly. Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer as soon as possible.

(l) Low tire pressure warning light

This light comes on when the engine switch is selected in “IG−ON” mode. If the tire pressure warning system works properly and tire inflation pressure is appropriate, the light goes off after a few seconds.

This light comes on or flashes in the following cases when the engine switch is selected in “IG−ON” mode.

- **When the low tire inflation pressure is detected while driving...**

  If any tire has low inflation pressure, the light comes on.

  The light goes off after the tire inflation pressure is adjusted to a specified level.

- **When initializing the system...**

  If initialization is completed, the light blinks three times.

- **When the system malfunctions...**

  If the system malfunctions, the light blinks.

Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer as soon as possible.

(m) Electric Power Steering System Warning Light

The light comes on when the engine switch is selected in “IG−ON” mode. If the electric power steering system works properly, the light turns off after a few seconds. If the system has malfunctions, the light comes on again.

If the following conditions occur, this indicates a malfunction somewhere in the components monitored by the warning light system. Contact your Lexus dealer as soon as possible to service the vehicle.

- The light does not come on when the engine switch is selected in “IG−ON” mode or remains on.
- The light stays on while you are driving.

The warning light turning on while racing the engine for a long time may not indicate malfunction. To turn off the light, restart the engine and start driving.

⚠ CAUTION

If the electric power steering system warning light comes on, take your vehicle to your Lexus dealer as soon as possible. In this case, more effort is required for the steering wheel to turn than usual. Drive your vehicle while firmly gripping the steering wheel.

(n) Pre−Collision System Warning Light

The light warns that there is a problem somewhere in the pre−collision system.

The light comes on when the engine switch is selected in “IG−ON” mode. If the system works properly, the light goes off after a few seconds.

If the light does not come on when the engine switch is selected in “IG−ON” mode, have your vehicle checked by your Lexus dealer.

(o) Low Fuel Level Warning Light

This light comes on when the fuel level in the tank becomes very low. Fill the tank as soon as possible.

On inclines or curves, due to the movement of fuel in the tank, the low fuel level warning light may come on earlier than usual.

(p) Key Reminder Buzzer

This buzzer acts as a reminder to turn off the engine when you bring out the electronic key from the vehicle with the engine switch in “IG−ON” or “ACC” mode.

How to check all the service reminder indicators

(except the low fuel level warning light):

1. Apply the parking brake.
2. Open the door.

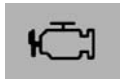
The following service reminder indicator should come on. It goes off when you close the door completely.

3. Select the engine switch in “IG–ON” mode.

The following service reminder indicators should come on.

BRAKE or (red)

ABS or

CHECK or 

(yellow)

AFS OFF

PCS P/S

The following service reminder indicators go off after a few seconds.

P/S AFS OFF

GS300 only—The above and following service reminder indicators go off after a few seconds.

ABS or

(yellow)

The following service reminder indicator goes off after about 6 seconds.

The lights other than the slip indicator light may stay on for about 60 seconds after the engine is started. It is normal if they go out after a while.

If any service reminder indicator or warning buzzer does not function as described above, have it checked by your Lexus dealer as soon as possible.

MULTI−INFORMATION DISPLAY

The multi−information display provides various information, including your vehicle's driving condition, outside temperature, and warning messages if your vehicle is in trouble.

During ordinary driving, cruise information or graphic information is displayed. However, if any problem occurs in your vehicle, the display changes to a warning message screen.

(a) Cruise information

The following information is shown with the engine switch in "IG−ON" mode. Each time you push the "DISP" switch, the displayed information is changed.

- Outside temperature
- Available driving distance
- Average fuel consumption after being refueled
- Current fuel consumption
- Blank

The displayed cruise information values indicate the general driving condition and may not always reflect precise and actual conditions.

● Outside temperature

The outside temperature is displayed. For details, see "Outside temperature display" on page 106.

- **Available driving distance**

The available driving distance is calculated and displayed depending on the amount of remaining fuel.

- **Average fuel consumption after refueling**

The average fuel consumption after refueling is calculated and displayed based on the total driving distance and the total fuel consumption after refueling.

The value is updated every 10 seconds.

When refueling, be sure to stop your vehicle and turn the engine switch off.

The average fuel consumption could not be calculated in either of the following cases:

- Refueled by opening the fuel filler door using the manual lever in the trunk
- Refueled with a small quantity of gasoline

- **Current fuel consumption**

The current fuel consumption is calculated and displayed based on the driving distance and the fuel consumption at 20 revolutions of the engine.

The value is updated every 0.5 seconds.

If you are driving at low speeds just before stopping, the accurate figure may not be shown.

(b) Graphic information

The following graphic information is shown on the display.

- Lexus park assist system display (if equipped)
- Dynamic radar cruise control display (if equipped)

See page 365 for Lexus park assist system and page 395 for dynamic radar cruise control.

If you push the Lexus park assist system switch or turn the engine switch on with the main switch of the Lexus park assist system on, the Lexus park assist system screen appears for 2 seconds and then the multi−information display returns to the previous screen.

When you push the main switch of the dynamic radar cruise control, the dynamic radar cruise control screen appears. When you push the “DISP” switch with the radar cruise control screen on the display, the screen changes to cruise information display.

(c) Warning messages

The following warning messages are shown on the multi−information display.

- **Open Door Warning**

- **Hood Open Warning**

- **Trunk Open Warning**

When any door, hood or trunk is open with the engine switch in "IG−ON" mode, a message appears to let you know which door, the hood or trunk is open. If you continue driving in this condition, the master warning light flashes and a warning tone sounds when the vehicle speed exceeds 5 km/h (3 mph).

If any of the above warning messages appears, stop your vehicle and close the door, hood or trunk securely.

- **Moon Roof Warning**

If the driver's door is opened with the engine switch turned off and the moon roof opened, the master warning light flashes, a warning tone sounds and the above message appears.

When you leave your vehicle, be sure to close the moon roof.

- **Parking Brake Release Warning**

If you start driving with the parking brake applied, the master warning light flashes, a warning tone sounds and the above message appears when the vehicle speed exceeds 5 km/h (3 mph).

If the above warning message appears, stop your vehicle and release the parking brake.

- **Headlight Leveling System Failure Warning**

If there is a problem in the automatic headlight leveling system, the master warning light comes on, a warning tone sounds and the above message appears.

If the above warning message appears, have your vehicle checked by your Lexus dealer as soon as possible.

- **Rear Lights System Failure Warning**

CHECK
REARLAMP

If there is a problem in the rear lights system (tail lights, license plate light, stop lights, rear side marker light, high mounted stoplight), the master warning light comes on, a warning tone sounds and the above message appears.

If the above warning message appears, have your vehicle checked by your Lexus dealer as soon as possible.

- **Low Washer Fluid Warning**

LOW WASHER
FLUID

When the fluid level in the tank becomes very low, the master warning light flashes, a warning tone sounds and the above message appears.

Fill the tank as soon as possible.

- **Low Engine Oil Pressure Warning**

LOW OIL
PRESSURE

When the engine oil pressure becomes too low, the master warning light flashes, a warning tone sounds and the above message appears.

If this message appears while you are driving, pull off the road to a safe place and stop the engine immediately. Call a Lexus dealer or qualified repair shop for assistance.

The message may appear when the oil level is extremely low. It is not designed to indicate low oil level, and the oil level must be checked using the oil level dipstick.

NOTICE

Do not drive the vehicle while this warning message is displayed − even for one block. It may ruin the engine.

- **Low Engine Oil Level Warning**

LOW ENGINE
OIL LEVEL

When the engine oil level is too low, the master warning light comes on, a warning tone sounds, and the above message appears.

Add oil as soon as possible. (For instructions, see “Checking the engine oil level” on page 522.)

While driving on steep inclines or rough roads which causes the vehicle to substantially sway or on curves, this message may appear due to the movement of engine oil in the engine.

In normal conditions, due to engine oil consumption, this message may appear earlier than the specified service interval of the scheduled maintenance. This is because the engine oil is consumed to the low level within the scheduled maintenance interval and does not indicate a problem. (For detailed information, see “Facts about engine oil consumption” on page 520.)

NOTICE
Continued engine operation with low engine oil will damage the engine.

- **Engine Oil Maintenance Reset Warning (U.S.A. only)**

OIL MAINT
RESET

This message indicates that the engine oil maintenance data has been reset. After replacing the engine oil, be sure to reset the maintenance data.

To reset the data, perform the following operations:

1. Push the “ODO TRIP” switch in the switch box to change the display to blank.

2. Turn the engine switch off.

3. Turn the engine switch on with the trip meter “RESET” switch held down.

4. Keep pushing the “RESET” switch for longer than 7 seconds after the engine switch is turned on.

After the above operation, the master warning light comes on, a warning tone sounds and the above message appears to inform you that the engine oil maintenance data has been reset.

- **Engine Oil Replacement Reminder (U.S.A. only)**

OIL MAINT
REQD SOON

If the driving range exceeds 4,500 miles after the engine oil maintenance data is reset, the master warning light comes on, a warning tone sounds and the above message appears for about 15 seconds when you select the engine switch in "IG−ON" mode.

This message indicates that the engine oil should be replaced soon. If the message appears, it is recommended to inspect the engine oil with the engine switch off. For details about inspection, see "Checking the engine oil level" on page 522.

If the engine oil level is low, engine oil should be replaced. Have it replaced at your Lexus dealer.

After the engine oil replacement, reset the engine oil maintenance data and make sure the "OIL MAINT RESET" appears on the display.

NOTICE

The warning message on the display is based on the driving range after the engine oil maintenance data reset. This is not based on the monitoring of dirty condition of the engine oil.

- **Engine Oil Replacement Warning (U.S.A. only)**

OIL MAINT
REQD

If the driving range exceeds 5,000 miles after the engine oil maintenance data is reset, the master warning light comes on, a warning tone sounds and the above message appears.

This message indicates that the engine oil should be replaced as soon as possible. If the message appears, it is recommended to inspect the engine oil with the ignition off. For details about inspection, see "Checking the engine oil level" on page 522.

If the engine oil level is low, engine oil should be replaced. Have it replaced at your Lexus dealer.

After the engine oil replacement, reset the engine oil maintenance data and make sure the "OIL MAINT RESET" appears on the display.

NOTICE

The warning message on the display is based on the driving range after the engine oil maintenance data reset. This is not based on the monitoring of dirty condition of the engine oil.

- **Electronic Brake System Failure Warning**

CHECK VSC
CHECK ECB

▶*GS430*

CHECK VSC

▶*GS300*

If the above message appears and the brake system warning light (yellow) comes on, the following systems do not operate. (GS430 only—In some cases, the multi−information display shows either "CHECK VSC" or "CHECK ECB" only.)

- Traction control system
- Vehicle stability control system
- Hill−start assist control system

If the above message appears and the brake system warning light (yellow) and "ABS" warning light come on, the following systems do not operate. (GS430 only—In some cases, the multi−information display shows either "CHECK VSC" or "CHECK ECB" only.)

- Anti−lock brake system
- Brake assist system

Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer as soon as possible.

- **Variable Gear Ratio Steering System Warning (GS430 only)**

CHECK VGRS

If there is a problem in the variable gear ratio steering system, the master warning light comes on and the above message appears.

If this message appears, the system does not work. Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer as soon as possible.

- **Four−Wheel Drive System Warning (Four−wheel drive models only)**

CHECK 4WD

If there is a problem in the four−wheel drive system, the master warning light comes on, a warning tone sounds and the above message appears.

If the above warning message appears, have your vehicle checked by your Lexus dealer as soon as possible.

- **Tire Pressure Warning**

LOW TIRE

When the low tire inflation pressure is detected while driving, the low tire pressure warning light and master warning light come on, and the above message appears.

If the above message appears, adjust the tire inflation pressure to the specified level as soon as possible. Push the tire pressure warning system reset switch for a few seconds and make sure the warning message goes off. If the message still remains on, have your vehicle checked by your Lexus dealer as soon as possible.

PRESSURE
INITIAL

This message indicates the tire pressure warning system is initialized. After replacing the tires or wheels, adjust all 4 tires to specified tire inflation pressure and initialize the tire pressure warning system. To initialize the system, start the engine and push the tire pressure warning system reset switch for longer than 3 seconds with the vehicle stopped. The above message appears.

CHECK
SYSTEM

If there is a problem electrically in the tire pressure warning system, the low tire pressure warning light and master warning light blink and the above message appears.

Although it is no problem to continue driving with the above message on the display, have your vehicle checked by your Lexus dealer as soon as possible.

- **Electronic Key System Warning**

KEY IS NOT
DETECTED

In the following cases, the master warning light flashes, a warning tone sounds and the above message appears.

- An electronic key is not detected in the vehicle when you push the engine switch. In this case, the above message appears for 8 seconds.
- An electronic key is not detected in the vehicle because someone has taken an electronic key outside of the vehicle without turning the engine switch off. At this time, the electronic key sounds an alarm. The above message turns off if you turn the engine switch off or the entry function detects an electronic key in the vehicle.

In addition to either of the above conditions, if you get out from the vehicle, having an electronic key when the engine switch is selected in “IG−ON” mode and the selector lever is in a position other than “P”, “SHIFT TO P RANGE” and “KEY IS NOT DETECTED” appear alternately.

SHIFT TO
P RANGE

If you get out from the vehicle, having an electronic key when the engine switch is selected in “IG−ON” mode and the selector lever is in a position other than “P”, the master warning light flashes, a beep sounds inside the vehicle and the above message appears. When you shift the selector lever to the “P” position or start driving, the beeping stops sounding, the above message turns off.

In addition to the above condition, if the entry function does not detect an electronic key in the vehicle, “SHIFT TO P RANGE” and “KEY IS NOT DETECTED” appear alternately.

LOW KEY
BATTERY

If the entry function determines that the battery voltage is low (2V to 3V) when the engine switch is turned off more than 20 minutes after turned on, the master warning light flashes, a warning tone sounds and the above message appears.

If the above message appears, the battery needs to be replaced. Although you can replace the battery referring to “Replacing the battery ” on page 33, we recommend you have it replaced by your Lexus dealer as it is easy to be scratched.

CHECK S/T
LOCK

If the steering lock is malfunctioning, the master warning light comes on, the engine switch indicator light blinks amber and the above message appears.

The engine will not start in this case. Contact your Lexus dealer as soon as possible.

S/T IS NOT
UNLOCKED

If the steering lock is not unlocked due to the load applied to the steering wheel when pushing the engine switch, the master warning light comes on, the engine switch indicator light blinks green and the above message appears.

The engine will not start in this case. To start the engine, push the engine switch again while turning the steering wheel in either direction.

- **Lexus Park Assist System Warning**

If icicles, snowflakes or mud gets on the ultrasonic sensors of the Lexus park assist system when the system is on, the above message appears and the vehicle symbol and indicator bars continue flashing until the suspected sensor is cleaned.

Remove the foreign matter or deice the sensor, the system returns to normal.

If the ultrasonic sensor of the Lexus park assist system is malfunctioning or a sensor cable is broken when the system is on, the malfunctioning sensor flashes, 2 beeps sound 5 times and the above message appears.

The flashing sensor is disabled, but other sensors work properly. Have your vehicle checked by your Lexus dealer as soon as possible.

- **Radar Cruise Control Warning**

CLEAN RADAR
SENSOR

If the system cannot easily measure the vehicle−to−vehicle distance because of a dirty millimeter wave radar sensor or grille cover while the dynamic radar cruise control is on, the master warning light comes on and the "CRUISE" indicator light flashes. At this time a warning tone sounds and the above message appears.

If this message appears, clean the sensor and grille cover with a soft cloth and try setting the preset speed again. If the dirt is removed without cleaning, the system will automatically enter the "RADAR READY" mode. If the system does not enter the "RADAR READY" mode even after cleaning or the message remains on the display, the system might be malfunctioning. Although it is no problem to continue driving, contact your Lexus dealer.

CRUISE NOT
AVAILABLE

If the system cannot easily measure the vehicle−to−vehicle distance because of the following conditions while the dynamic radar cruise control is on, the master warning light comes on, the "CRUISE" indicator light flashes. At this time a warning tone sounds and the above message appears.

- The driving pattern selector switch is set to the snow position mode.
- It is determined that it is difficult to make a measurement because of bad weather (such as extremely hot weather)
- The wipers are operated at high speed with the wiper lever in the "AUTO" position

In the following cases, the dynamic radar cruise control switches to the "RADAR READY" mode:

- The driving pattern selector switch is changed to the normal or power position.
- The wipers are stopped or are switched to low speed or intermittent operation. (Including intermittent and stopped wipers in the "AUTO" position)

In the above conditions, press the control lever upward in the "+ RES" direction and release it. The dynamic radar cruise control will be restored, however, even after the weather clears, if the setting operation cannot be performed or if the warning message still appears, the system might have malfunctioned. Although it is no problem to continue driving, contact your Lexus dealer.

CHECK CRUISE
SYSTEM

If the system malfunction is detected when dynamic radar cruise control is in the "RADAR READY" mode or operating, the master warning light comes on and the "CRUISE" indicator light flashes. At this time a warning tone sounds and the above message appears.

If this message appears, stop your vehicle in a safe place, turn the engine switch off, and then restart it to reset the system. If the setting still cannot be made or the same message appears again, the system might have malfunctioned. Although it is no problem to continue driving, contact your Lexus dealer.

NOTICE

While you are cruising with the dynamic radar cruise control on, if the master warning light comes on, the "CRUISE" indicator light flashes, "CHECK CRUISE SYSTEM" appears on the multi−information display and the warning tone sounds, turn the engine switch off and then on again. If the function is cancelled again after setting or if settings cannot be made, the dynamic radar cruise control system may be malfunctioning. Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer.

- **Pre−Collision System Warning**

CHECK PCS

If the pre−collision system is malfunctioning, the pre−collision system warning light and master warning light comes on, a warning tone sounds and the above message appears.

If the above message appears, the pre−collision system may not operate. Contact your Lexus dealer as soon as possible.

PCS
DISABLED
NOW

In the following conditions, the pre−collision system warning light blinks, the master warning light comes on, a warning tone sounds, and the above message appears.

- **The millimeter wave radar sensor or the grille cover is dirty.**

  Clean the grille or sensor with a soft cloth to remove the dirt.

- **The pre−collision seat belts are activated repeatedly for a short time.**

  The system turns off temporarily for overheating protection.

The above conditions do not indicate a malfunction. If the problem is removed, the warning lights and message go out and the system returns to normal.

INSTRUMENT PANEL LIGHT CONTROL

The brightness of the instrument panel lights is automatically adjusted at the maximum when the engine switch is turned on.

Using the light control switch, you can also adjust the brightness as you like. Perform the following operation.

Instrument panel control switches are located in the switch box.

▶*Light control switch*

Push the button to use the switch box. And push the light control switch upward to increase brightness and downward to decrease it.

However, if the brightness is automatically adjusted at the maximum, pushing the switch cannot change the brightness. And this switch cannot adjust the brightness of the outside temperature display and clock on the instrument panel as well as the touch screen.

Pushing the “MAX” switch will turn the brightness of all indicators on the instrument panel at the maximum. The intensity of the instrument panel lights will not be reduced when the headlight switch is on with the brightness adjusted at the maximum using the “MAX” switch.

When the light control switch is turned to minimum, the foot lights and inside door handle lights will turn off.

After operation, be sure to close the switch box to its original position.

⚠ CAUTION

To reduce the chance of injury in case of an accident or a sudden stop, keep the switch box closed when not in use while driving.

SECTION 1 – 4

INSTRUMENTS AND CONTROLS

Interior equipment

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Overhead console box 117
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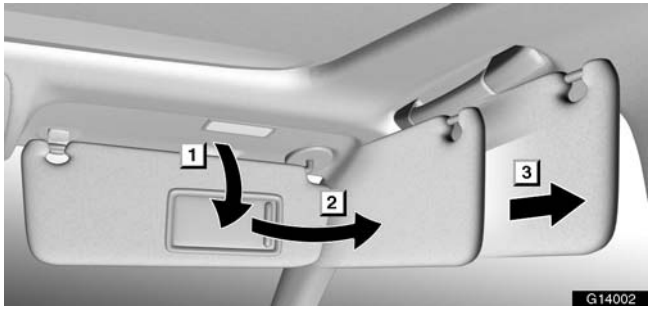
SUN VISORS



To block out glare, move the sun visor as shown.

1 **To block out glare from the front , swing the sun visor down.**

2 **To block out glare from the side, remove the sun visor from the hook and swing it to the side.**

At this position, the vanity light may not come on.

3 **To block out glare coming obliquely from behind you, slide the visor backwards.**

At this position, the vanity light does not come on.

INTERIOR LIGHTS

Front

Rear

To turn on or off the front and rear lights, push the interior light switches.

“ON” switch—Keeps the lights on all the time.

“OFF” switch—Turns the lights off.

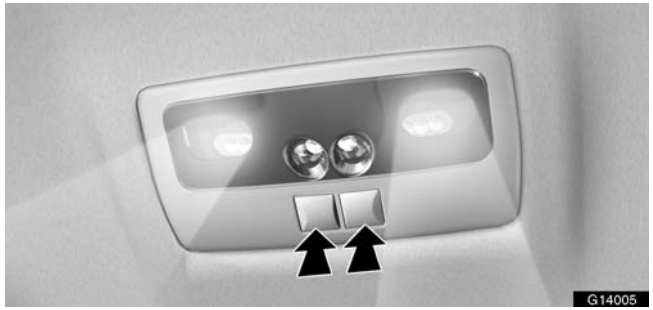
“DOOR” switch—If you get close to the vehicle (about 1 m (3 ft.) from each outside door handle, carrying an electronic key or open a door, all the interior lights come on when the engine switch is off. However, if the engine switch is already on, only the interior light near the door you opened comes on.

The light(s) will go off when all the doors are closed. For details, see “Illuminated entry system” on page 100.

PERSONAL LIGHTS

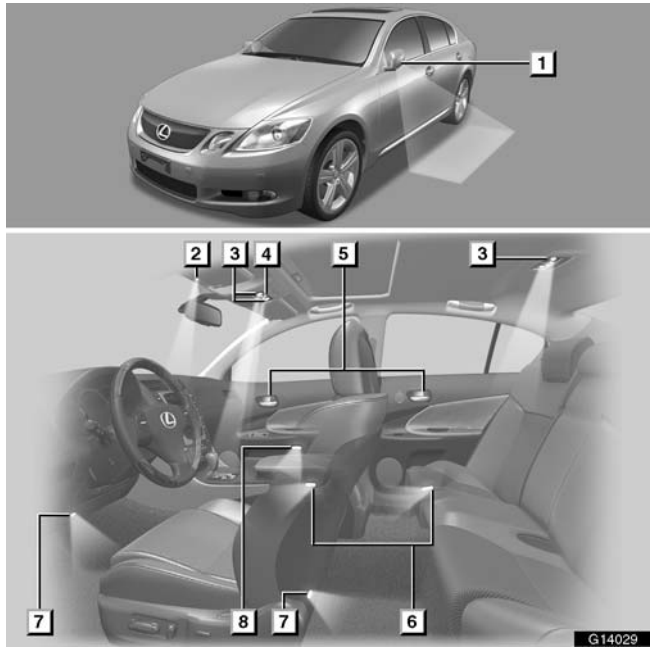
Front

Rear



To turn on the personal light, push the switch. To turn it off, push the switch again.

ILLUMINATED ENTRY SYSTEM



▶ 1 ***Outer foot lights***
2 ***Steering spot light***
3 ***Seat spot lights***
(with the interior light in “DOOR” position)
4 ***Selector lever spot light***
5 ***Inside door handle lights***
6 ***Door courtesy lights***
7 ***Foot lights***
8 ***Outer scuff lights***

The outer foot lights, steering spot light and seat spot lights will come on when you get close to the vehicle (about 1 m (3 ft.) from the outside door handle), carrying an electronic key, or open the door.* After all the doors are closed, the lights remain on for about 15 seconds and then fade out. (For details, see “Outer foot lights” on page 208.)**

NOTE:
**When you open a door other than the driver’s door, the seat spot light near the door you opened comes on.*
***The duration of lighting can be changed.*
Ask your Lexus dealer for details.

However, in the following cases, the lights go out immediately:

- All the doors are closed and the engine switch is selected in “ACC” or “IG–ON” mode.
- All the doors are locked.

The foot lights and inside door handle lights will comes on when any of the doors is/are opened or the engine switch is in "IG−ON" mode. After all the doors are closed and the engine switch is turned off, the lights remain on for about 15 seconds and then fade out.*

NOTE:
**The duration of lighting can be changed.*
Ask your Lexus dealer for details.

However, the lights go out immediately when all the doors are locked and the engine switch is turned off.

The intensity of the foot lights and inside door handle lights can be changed with the instrument panel light control switch. The lights will be turned off when the light control switch is turned to minimum. (For details, see "Instrument panel light control" on page 96.)

Outer scuff lights and courtesy lights

Outer scuff lights and courtesy lights will come on when any of the doors is/are opened. After all the doors are closed, the lights will turn off.

Selector lever spot light

The selector lever spot light will come on when the engine switch is selected in "ACC" or "IG−ON" mode. When the selector lever is moved out of "P" position, the intensity of the light will be reduced.

The intensity of the selector lever spot light can be changed with the instrument panel light control switch. This light will be turned off when the light control switch is turned to minimum.

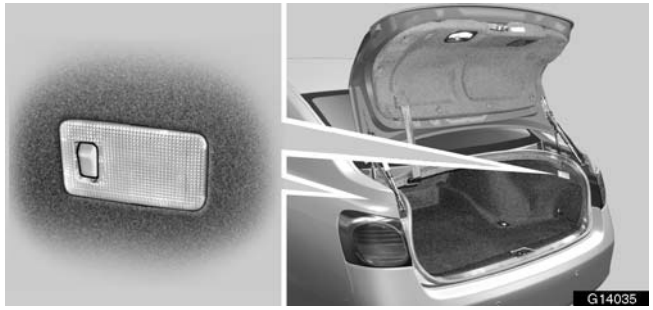
Lighting table

The lighting conditions are as follows: If several conditions concur, the lights may not operate as shown.

Lighting condition	Steering spot light & seat spot light	Inside door handle lights & foot lights*	Outer scuff lights & door courtesy lights	Selector lever spot light*
Getting close to the vehicle with the electronic key in possession or unlocking any doors	ON** →Fade out about 15 seconds later	—	—	—
Locking all the doors	OFF	OFF	—	—
Opening the door(s)	ON	ON	ON*	—
Closing all the doors	OFF (ON for about 15 seconds before turned off)	OFF (ON for about 15 seconds before turned off)	OFF	—
Turning the engine switch from “OFF” to “ACC” or “IG–ON”	OFF	ON (IG–ON only)	—	ON
Turning off the engine switch	ON** →Fade out about 15 seconds later	OFF (ON for about 15 seconds before turned off)	—	OFF

NOTE:
**The lights can be set to dim when the selector lever is moved out of “P”.*
***The seat spot light can be set not to be turned on.*
Ask your Lexus dealer for details.

LUGGAGE COMPARTMENT LIGHT



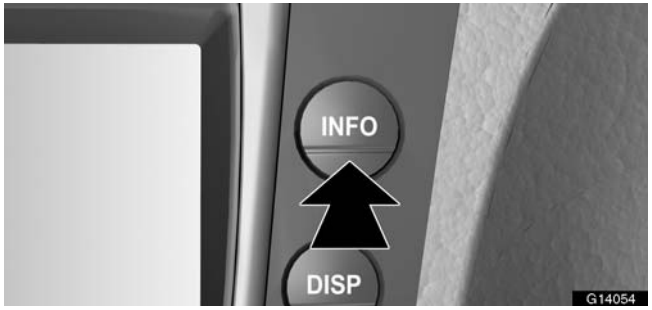
To turn on the luggage compartment light, open the trunk lid or push the switch. Closing the trunk lid will turn the light off.

CLOCK

The digital clock indicates the time with the engine switch in "ACC" or "IG−ON" mode.

Vehicles with navigation system: The clock can be corrected manually or automatically using signals from the GPS. For details, see the separate "Navigation System Owner's Manual".

Vehicles without navigation system: To adjust the clock or set the daylight saving time, follow the procedures below.



1. Push the “INFO” button to display the setting screen.

2. Touch the “Adjust Clock” switch to display the adjust clock screen.

When the headlight switch is turned to the first or second click stop, the brightness of the display will be reduced.

You can brighten the display. To adjust the brightness, see “Instrument panel light control” on page 96.

(a) To adjust a clock

You can adjust the clock manually with "H", "M" and ":00" switches.

"H": To set the hour

"M": To set the minute.

":00": To adjust the time to the nearest hour.

For example, if the ":00" switch is pressed when the time is between 9:30 – 9:59 or between 10:01 – 10:29, the time will change to 10:00.

If the electrical power source has been disconnected from the clock, the time display will automatically be set to 1:00.

After adjustment, touch "OK".

(b) To set the daylight saving time

You can set or cancel the daylight saving time.

"ON": To set the daylight saving time.

"OFF": To cancel the daylight saving time.

After setting, touch "OK".

OUTSIDE TEMPERATURE DISPLAY

▶***On the instrument panel***

This display shows the outside temperature when the engine switch is on.

The displayed temperature ranges from – 40°C (– 40°F) up to 50°C (122°F). If the temperature does not appear on the display or it shows "– – –", take your vehicle to your Lexus dealer.

When the headlight switch is turned to the first or second click stop, the brightness of the display will be reduced.

You can brighten the display. To adjust the brightness, see "Instrument panel light control" on page 96.

▶***Multi–information display***

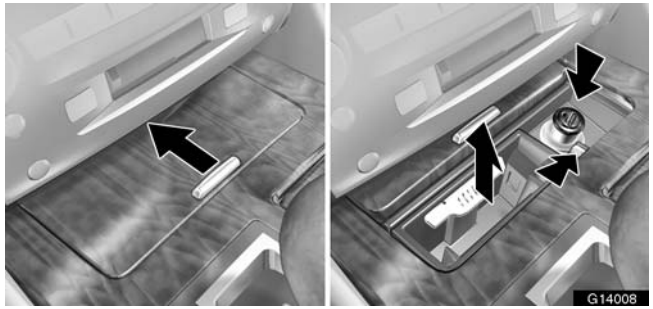
When you push the "DISP" switch with the engine switch on, another outside temperature display appears on the multi–information display.

The displayed temperature ranges from – 40°C (– 40°F) up to 50°C (122°F). If the temperature does not appear on the display or it shows "E" or "– –", take your vehicle to your Lexus dealer.

When the headlight switch is turned to the first or second click stop, the brightness of the display will be reduced.

You can adjust the brightness of the display. To adjust the brightness, see "Instrument panel light control" on page 96.

CIGARETTE LIGHTER AND ASHTRAY



▶*Front cigarette lighter and ashtray*

To use the cigarette lighter and ashtray, slide the ashtray cover forward. Then when the ashtray opens out, press in the cigarette lighter. After it finishes heating up, it automatically pops out ready for use.

Do not hold the cigarette lighter pressed in.

If the engine is not running, “ACC” mode must be selected.

When finished with your cigarette, thoroughly extinguish it in the ashtray to prevent other cigarette butts from catching fire. After using the ashtray, close it by pushing the lid forward.

To remove the ashtray, slide the lever attached beside the ashtray, to the right, and the ashtray will be lifted.

Use a Lexus genuine cigarette lighter or equivalent for replacement.

NOTICE

If you spill a drink in the ashtray, take it out and wipe off the spilt drink thoroughly, or the ashtray may not activate properly.

▶*Rear ashtray*

To use the ashtray, open the cover.

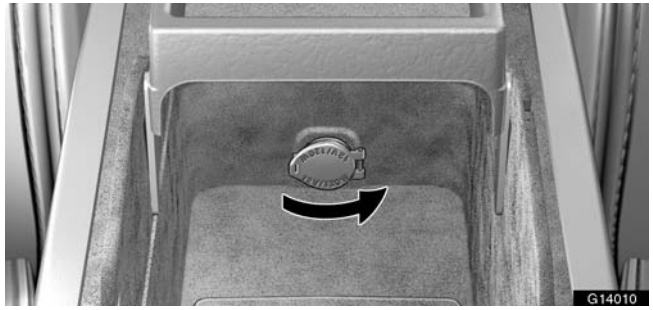
When finished with your cigarette, thoroughly extinguish it in the ashtray to prevent other cigarette butts from catching fire. After using the ashtray, close the lid completely.

To remove the ashtray, press down on the lock spring plate and pull it out.

⚠ CAUTION

To reduce the chance of injury in case of an accident or sudden stop while driving, always close the ashtray cover completely after use.

POWER OUTLET



The power outlet is designed for power supply for car accessories.

The power outlet is located in the rear console box.

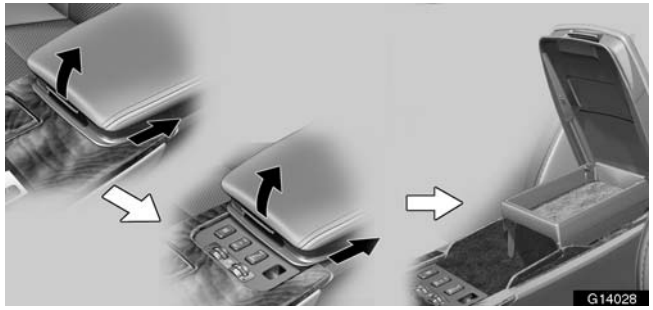
The power outlet works when “ACC” or “IG–ON” mode is selected.

NOTICE

- ***To prevent the fuse from being blown, do not use the electricity over the total vehicle capacity of 12V/120W.***
- ***To prevent the battery from being discharged, do not use the power outlet longer than necessary when the engine is not running.***

- ***Close the power outlet lid when the power outlet is not in use. Inserting anything other than an appropriate plug that fits the outlet, or allowing any liquid to get into the outlet may cause electrical failure or short circuits.***

REAR CONSOLE BOX



To open the rear console box, pull the lever upward and slide the console box lid rearward as shown in the illustration.

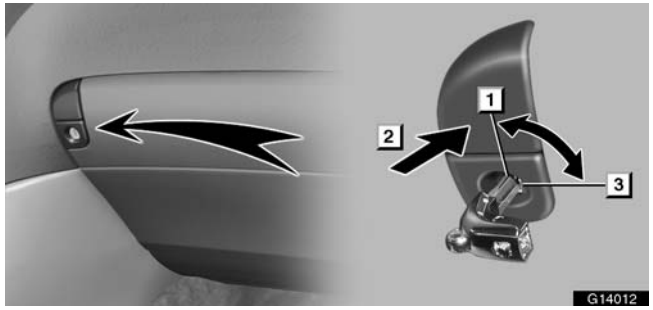
The sliding lid comes once to a stop when the switches appear. To open the box fully, pull the lever and slide the box lid again from this position.

The rear console box light comes on when the tail lights are turned on.

CAUTION

- **To reduce the chance of injury in case of an accident or a sudden stop, always keep the rear console box closed while driving.**
- **Do not apply excessive load over the tray with your hand, or closing the console box lid may injure your fingers.**
- **Do not open the rear console box while operating the rear vents, or closing the console box lid may injure your fingers.**

GLOVE BOX



▶ 1 *Unlock* 2 *Open* 3 *Lock*

To open the glove box door, push the button. To lock the glove box door, insert the mechanical key and turn it clockwise.

With the tail lights on, the glove box light will come on.

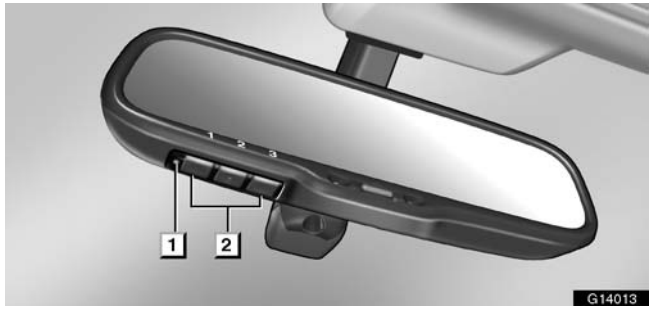
CAUTION

To reduce the chance of injury in case of an accident or a sudden stop, always keep the glove box door closed while driving.

GARAGE DOOR OPENER

The garage door opener (HomeLink® Universal Transceiver) is manufactured under license from HomeLink® and can be programmed to operate garage doors, gates, entry doors, door locks, home lighting systems, and security systems, etc.

(a) Programming the HomeLink®



▶ 1 *Indicator light* 2 *Buttons*

The HomeLink® in your vehicle has 3 buttons and you can store one program for each button.

To ensure correct programming into the HomeLink®, install a new battery in the hand–held transmitter prior to programming.

The battery side of the hand–held transmitter must be pointed away from the HomeLink® during the programming process.

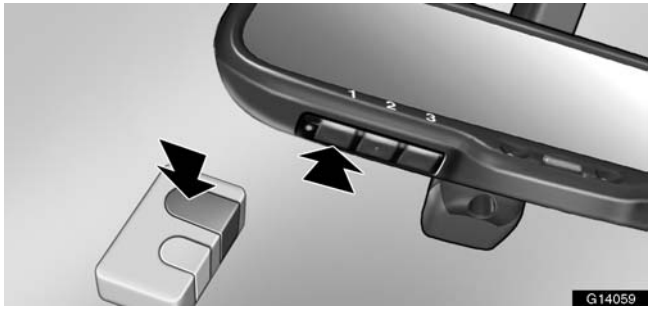
For Canadian users, follow the procedure in “Programming an entrance gate/Programming all devices in the Canadian market”.

1. Decide which of 3 HomeLink® buttons you want to program.

2. Place your hand–held garage transmitter 25 to 75 mm (1 to 3 in.) away from the surface of the HomeLink®.

Keep the indicator light on the HomeLink® in view while programming.

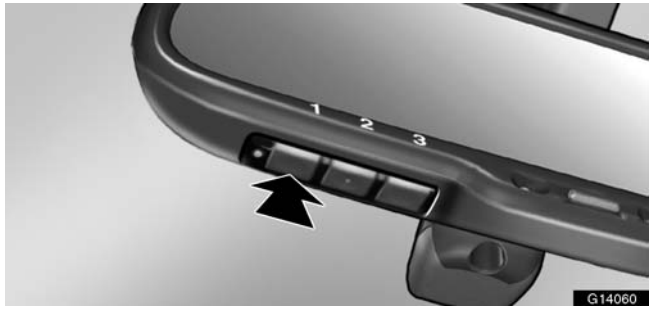
3. Simultaneously press and hold the hand–held garage transmitter button along with the selected HomeLink® button.



Do not release the buttons until step 4 has been completed.

4. When the indicator light on the HomeLink® changes from a slow to a rapid flash after 20 seconds, you can release both buttons.

5. Test the operation of the HomeLink® by pressing the newly programmed button. If programming a garage door opener, check to see if the garage door opens and closes.



If the garage door does not operate, identify if your garage transmitter is of the “Rolling Code” type. Press and hold the programmed HomeLink® button. The garage door has the rolling code feature if the indicator light (on the HomeLink®) flashes rapidly and then remains lit after 2 seconds. If your garage transmitter is the “Rolling Code” type, proceed to the heading “Programming a rolling code system”.

6. Repeat steps 2 through 5 for each remaining HomeLink® button to program another device.

Programming a rolling code system

If your device is “Rolling Code” equipped, it is necessary to follow steps 1 through 4 under the heading “Programming the HomeLink®” before proceeding with the steps listed below.

1. Locate the “training” button on the ceiling mounted garage door opener motor. The exact location and color of the button may vary by brand of garage door opener. Refer to the owner’s guide supplied by the garage door opener manufacturer for the location of this “training” button.

2. Press the “training” button on the ceiling mounted garage door opener motor.

Following this step, you have 30 seconds in which to initiate step 3 below.

3. Press and release the vehicle’s programmed HomeLink® button twice. The garage door may open. If the door does open, the programming process is complete. If the door does not open, press and release the button a third time. This third press and release will complete the programming process by opening the garage door.

The ceiling mounted garage door opener motor should now recognize the HomeLink® unit and be able to activate the garage door up/down.

4. Repeat steps 1 through 3 for each remaining HomeLink® button to program another rolling code system.

Programming an entrance gate / Programming all devices in the Canadian market

1. Decide which of the 3 HomeLink® buttons you want to program.

2. Place your hand–held gate/device transmitter 25 to 75 mm (1 to 3 in.) away from the surface of the HomeLink®.

Keep the indicator light on the HomeLink® in view while programming.

3. Press and hold the selected HomeLink® button.

4. Continuously press and release (cycle) the hand–held gate/device transmitter button every two seconds until step 5 is complete.

5. When the indicator light on the HomeLink® changes from a slow to a rapid flash after 20 seconds, you can release both buttons.

6. Test the operation of the HomeLink® by pressing the newly programmed button. Check to see if the gate/device operates correctly.

7. Repeat steps 1 through 6 for each remaining HomeLink® button to program another device.

Programming other devices

To program other devices such as home security systems, home door locks or lighting, contact your authorized Lexus dealer for assistance.

Reprogramming a button

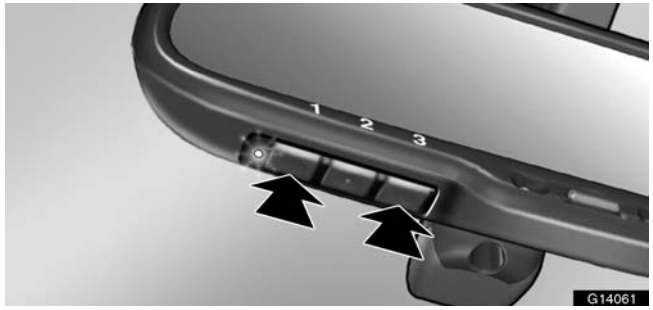
Individual HomeLink® buttons cannot be erased, however, to reprogram a single button, follow the procedure “Programming the HomeLink®”.

(b) Operating the HomeLink®

To operate the HomeLink®, press the appropriate HomeLink® button to activate the programmed device. The HomeLink® indicator light should come on. The HomeLink® continues to send the signal for up to 20 seconds as long as the button is pressed.

(c) Erasing the entire HomeLink® memory (all three programs)

To erase all previously programmed codes at one time, press and hold down the 2 outside buttons for 20 seconds until the indicator light flashes.



If you sell your vehicle, be sure to erase the programs stored in the HomeLink® memory.

⚠ CAUTION

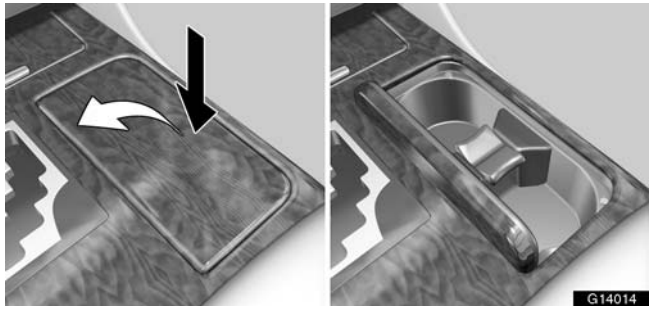
- **When programming the HomeLink® Universal Transceiver, you may be operating a garage door or other device. Make sure people and objects are out of the way of the garage door or other device to prevent potential harm or damage.**

- **Do not use this HomeLink® Universal Transceiver with any garage door opener that lacks the safety stop and reverse feature as required by federal safety standards. (This includes any garage door opener model manufactured before April 1, 1982.) A garage door opener which cannot detect an object (signaling the door to stop and reverse), does not meet current federal safety standards. Using a garage door opener without these features increases risk of serious injury or death.**

This device complies with Part 15 of the FCC Rules and with RSS–210 of the IC Rules.
Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: This transmitter has been tested and complies with FCC and IC rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

CUPHOLDERS

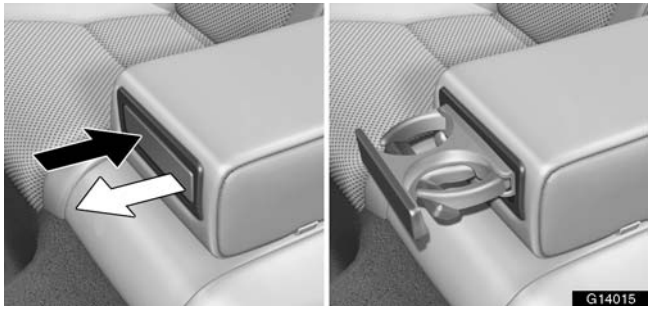


▶*Front*

To use the cupholder, push the cupholder lid.

⚠ CAUTION

- **Do not place anything else other than cups or drink–cans in the cupholder, as such items may be thrown about in the compartment and possibly injure people in the vehicle during sudden braking or in an accident.**
- **To reduce the chance of injury in case of an accident or sudden stop while driving, keep the cupholder closed when not in use.**



▶*Rear*

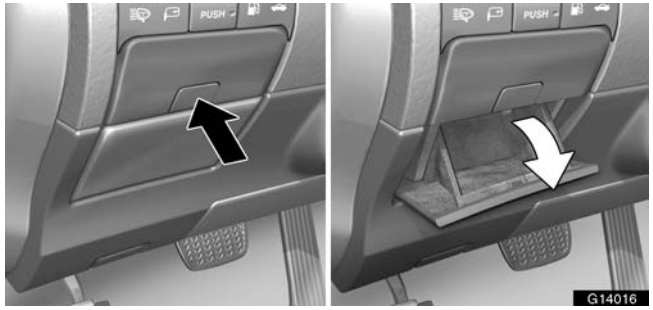
To use the cupholder, push the cup holder portion of the center armrest in the rear seat.

The cup holder is designed for holding cups or drink−cans securely.

⚠ CAUTION

- **Do not place anything else other than cups or drink−cans in the cupholder, as such items may be thrown about in the compartment and possibly injure people in the vehicle during sudden braking or in an accident.**
- **To reduce the chance of injury in case of an accident or sudden stop while driving, keep the cupholder closed when not in use.**

COIN BOXES

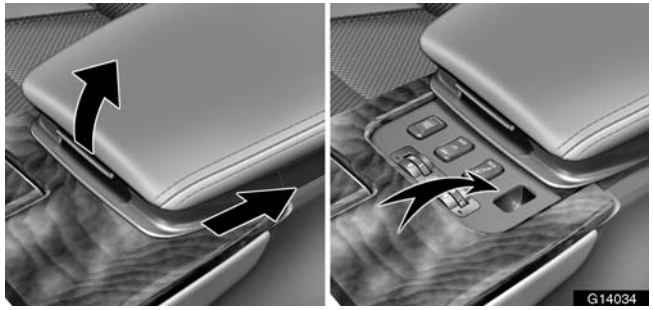


▶*On the instrument panel*

To use the coin box, push the button.

⚠ CAUTION

Keep the coin box closed when not in use.



▶*Under the lid of the rear console box*

To use the coin box, slide the rear console box as shown.

OVERHEAD CONSOLE BOX

To use the overhead console box, push the lid as shown.

⚠ CAUTION

- **To reduce the chance of injury in case of an accident or a sudden stop, always keep the overhead console box closed while driving.**
- **Do not place any object heavier than 100 g (0.22 lb.) in it. Heavier objects may cause the box to open and the contents to fly out resulting in injuries.**

NOTICE

During hot weather, the interior of the vehicle becomes very hot. Do not leave anything flammable or deformable such as a lighter, glasses, etc. inside.

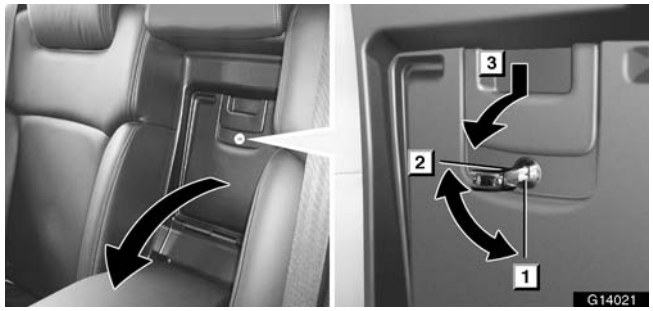
DOOR POCKETS

To use the door pocket, open it as shown.

CAUTION

To reduce the chance of injury in case of an accident or a sudden stop, always keep the door pockets closed while driving.

TRUNK STORAGE EXTENSION



▶ 1 *Lock* 2 *Unlock* 3 *Open*

Pull down the center armrest in the rear seat. Push down the handle and open the armrest door.

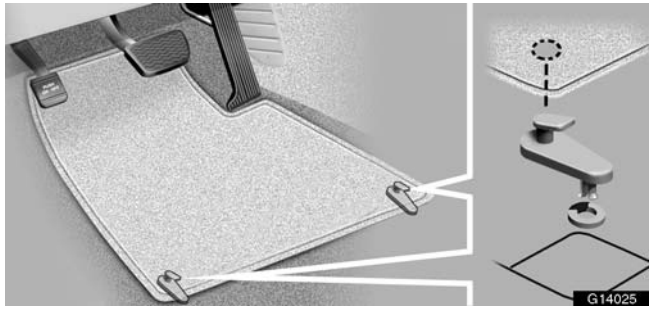
Access to the trunk can be prevented by locking the armrest door with the mechanical key.

See “Stowage precautions” on page 457 for precautions when loading luggage.

⚠ CAUTION

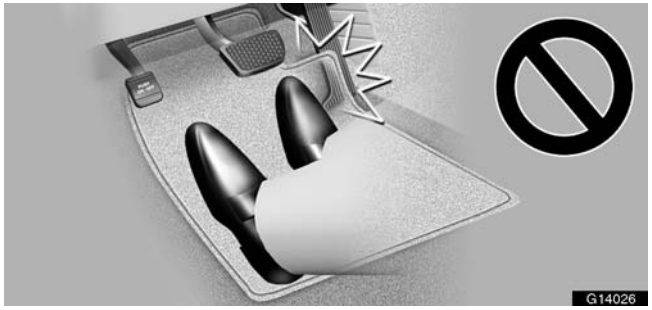
Be sure to close the door when the trunk storage extension is not in use. Luggage or cargo in the trunk may be thrown into the passenger compartment in a sudden stop or crash resulting in injury.

FLOOR MAT



Use a floor mat of the correct size.

If the floor carpet and floor mat have 2 holes, then they are designed for use with locking clips. Fix the floor mat with locking clips into the holes in the floor carpet.

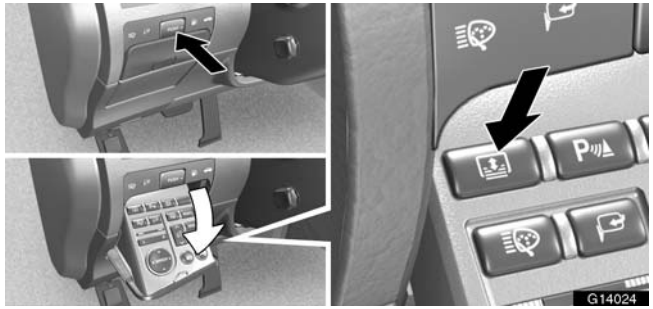


⚠ CAUTION

Make sure the floor mat is properly placed on the floor carpet. If the floor mat slips and interferes with the movement of the pedals during driving, it may cause an accident.

REAR ELECTRIC SUNSHADE

The rear electric sunshade switch is located in the switch box.



Push the button to use the switch box and then push the rear electric sunshade switch.

The rear electric sunshade will be raised. To lower the shade, push the switch again.

The sunshade works when the engine switch is selected in “IG–ON” mode.

After operation, be sure to close the switch box to its original position.

When the selector lever is shifted into the “R” position while the sunshade is raised, the sunshade will be automatically lowered.

To raise the sunshade again, perform any of the following operations:

- Shift the selector lever into the “P” position.
- Push the switch again.
- Move the selector lever out of “R” position and drive your vehicle over 15 km/h (9 mph).

Retained accessory power: Even after the engine switch is turned off, the sunshade can be operated for about 60 seconds.

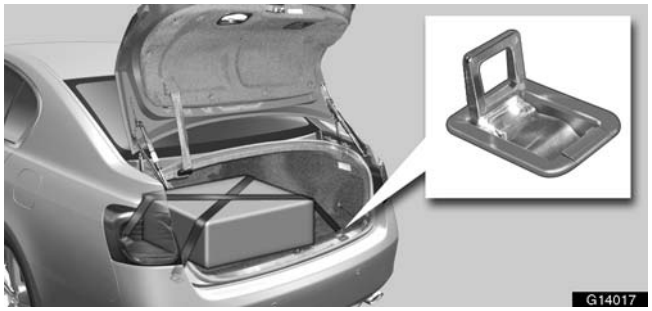
CAUTION

- **Do not touch the brackets fastening the shade to avoid injuring your fingers or hands.**
- **Do not put your fingers in the shade groove while the shade is operating to avoid getting them caught or injured by the runner.**
- **To reduce the chance of injury in case of an accident or a sudden stop, keep the switch box closed when not in use while driving.**

NOTICE

- ***To prevent the vehicle battery from being discharged, always operate the shade while the engine is running.***
- ***Observe the following to avoid damage and/or malfunction:***
  - ***Do not overload the shade motor and other parts (for instance by pushing down on the sunshade bracket while it is opening).***
  - ***Do not place anything where it may hinder the opening/closing of the shade.***
  - ***Do not affix anything to the shade.***
  - ***Clean the shade groove if there is any foreign matter or dust on it.***
  - ***Do not operate the rear electric sunshade repeatedly for a long time as its motor may overheat.***

TIE−DOWN HOOKS



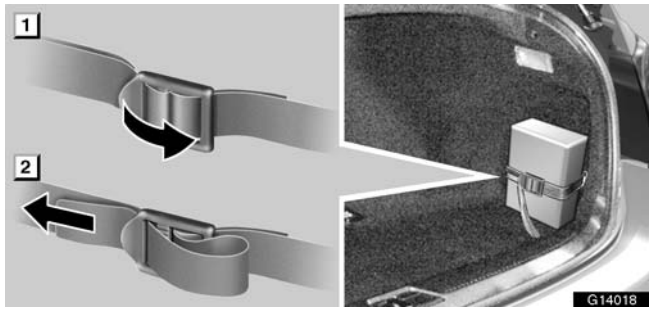
To secure your luggage, use the tie−down hooks as shown above.

See “Cargo and luggage” on page 457 for precautions when loading luggage.

⚠ CAUTION

To avoid personal injury, keep the tie−down hooks stored under the carpet when not in use.

FIRST−AID KIT HOLDER



▶ 1 ***To loosen*** 2 ***To tighten***

This belt is designed to hold the first−aid kit.

To loosen: Pull the buckle forward.

To tighten: Pull on the belt.

Make sure the first−aid kit is securely held.

SECTION 1 – 5

INSTRUMENTS AND CONTROLS

Exterior equipment

Hood 124
Trunk lid 125
Fuel tank cap 128
Moon roof 132

HOOD

1. To open the hood, pull the hood lock release lever under the instrument panel. The hood will spring up slightly.

2. Insert your fingers under the hood, push up the auxiliary catch lever and lift the hood.

Before closing the hood, check to see that you have not forgotten any tools, rags, etc. Then lower the hood and make sure it locks.

⚠ CAUTION

Before driving, be sure that the hood is closed and securely locked. Otherwise, the hood may open unexpectedly while driving and an accident may occur.

TRUNK LID

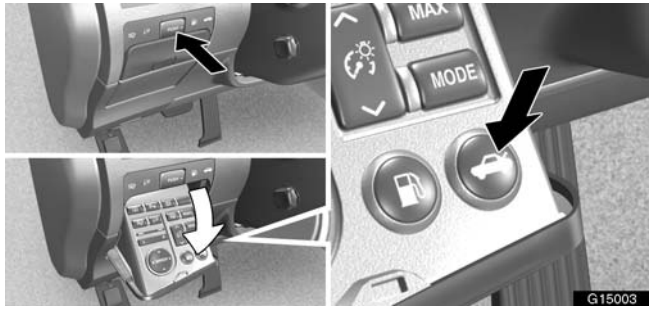
The trunk lid can be unlocked by any of the following ways:

- **Using a trunk lid opener**
- **Using a mechanical key**
- **Using a trunk button (with the entry function)**
- **Wireless remote control**

The explanation about how to unlock the trunk lid using a mechanical key and trunk lid opener is made here. For the use of trunk button and wireless remote control, see “Smart access system with push–button start” on page 10 and “Wireless remote control” on page 31.

Using a trunk lid opener

The trunk lid opener switch is located in the switch box.



Push the button to use the switch box and then push the trunk lid opener switch for about 1 second.

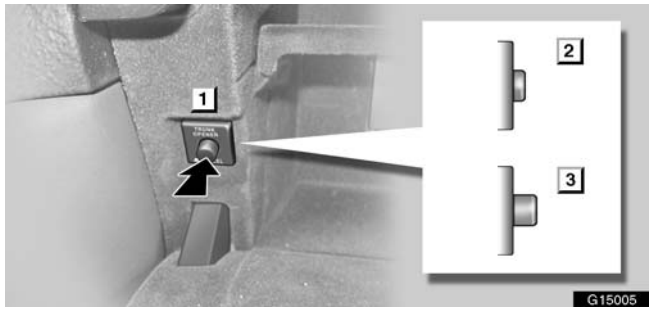
Open the trunk lid. After operation, be sure to close the switch box to its original position.

To close the trunk lid, lower it and press down on it. After closing the trunk lid, try pulling it up to make sure it is securely closed.

⚠ CAUTION

- **Keep the trunk lid closed while driving. This not only keeps the luggage from being thrown out, but also prevents exhaust gases from entering the vehicle.**
- **Always lock the trunk lid and all doors, and keep away the vehicle keys out of children's reach.**
- **Never leave children unattended in the vehicle. Un supervised children may lock themselves in the vehicles or trunk and suffer serious injuries or death.**
- **To reduce the chance of injury in case of an accident or a sudden stop, keep the switch box closed when not in use while driving.**

Trunk lid opener main switch



▶ 1 *Main switch* 2 *Operative* 3 *Inoperative*

If you do not want to activate the trunk lid opener system, turn off the main switch in the glove box. To turn it on, push in the main switch.

Using a mechanical key

To unlock the trunk lid, insert the mechanical key and turn it clockwise.

To close the trunk lid, lower it and press down on it. After closing the trunk lid, try pulling it up to make sure it is securely closed.

CAUTION

- **Keep the trunk lid closed while driving. This not only keeps the luggage from being thrown out, but also prevents exhaust gases from entering the vehicle.**
- **Always lock the trunk lid and all doors, and keep away the vehicle keys out of children's reach.**
- **Never leave children unattended in the vehicle. Un supervised children may lock themselves in the vehicles or trunk and suffer serious injuries or death.**

Trunk lid closer

If the trunk lid is closed but does not latch shut, it automatically closes completely.

CAUTION

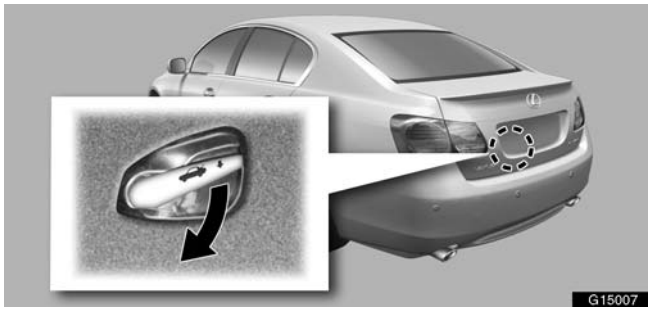
- **Pay careful attention not to get your fingers trapped as the trunk lid automatically closes when the trunk has not been fully closed.**
- **Never allow a child to operate the trunk lid.**

NOTICE

Do not apply excessive force when the trunk lid closer is operating. Doing so may damage the trunk lid closer.

Also, be careful not to leave the key inside the trunk.

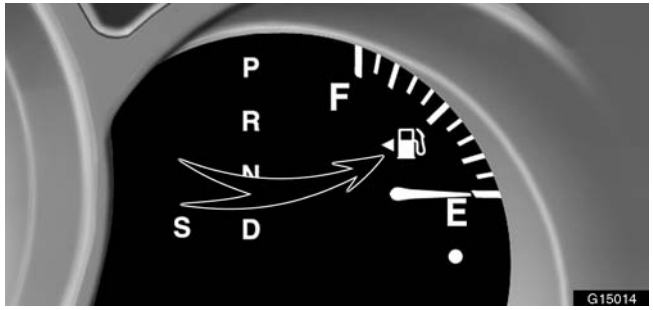
Internal trunk release handle



If a person is locked in the trunk, he/she can pull down the phosphorescent handle on the inside of trunk lid to open the trunk lid.

The phosphorescent (glow–in–the–dark) handle will continue to glow for a time after the trunk lid is closed. Exposing the handle to stronger light will cause it to glow longer.

FUEL TANK CAP



This indicates that the fuel filler door is on the left side of your vehicle.

The fuel filler door opener switch is located in the switch box.

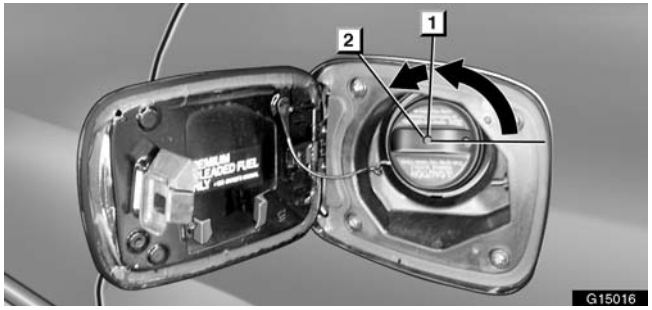
1. Push the button to use the switch box and then push the fuel filler door opener switch.

After operation, be sure to close the switch box to its original position.

When refueling, turn off the engine.

⚠ CAUTION

- **Do not smoke, cause sparks or allow open flames when refuelling. The fumes are flammable.**
- **When opening the cap, do not remove the cap quickly. In hot weather, fuel under pressure could cause injury by spraying out of the filler neck if the cap is suddenly removed.**
- **To reduce the chance of injury in case of an accident or a sudden stop, keep the switch box closed when not in use while driving.**



2. To remove the fuel tank cap, turn the cap slowly counterclockwise by 90 degrees (to the pressure point 1, then turn it additional 30 degrees (to point 2). Pause slightly before removing it.

It is not unusual to hear a slight swoosh when the cap is opened.

3. The removed cap can be stored on the back side of the fuel filler door.

Position the cap so that the hooks point to the left and right, and set it in the receptacle on the back side of the door.

When installing the cap, turn the cap clockwise until you hear a click. When you hear the click, the cap is fully closed.

If the cap is not installed securely, the malfunction indicator lamp comes on. Make sure the cap is tightened securely.

The indicator lamp goes off after driving several times. If the indicator lamp does not go off, contact your Lexus dealer as soon as possible.

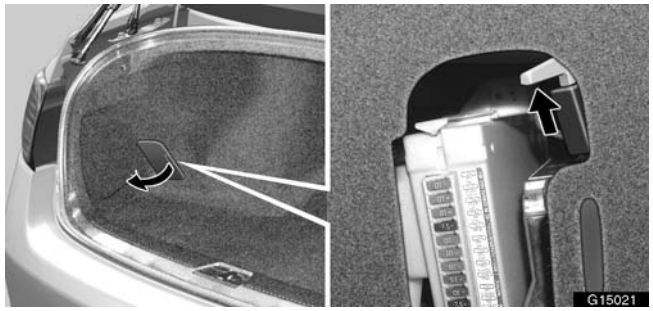
CAUTION

- **Make sure the cap is installed securely to prevent fuel spillage in the event of an accident.**
- **Use only a genuine Lexus fuel tank cap for replacement. It is designed to regulate fuel tank pressure.**

NOTICE

To prevent damage to the cap, apply force only in the turning direction to the cap. Do not pull or pry it.

In case the opener is not actuated



Remove the cover and pull up the manual lever in the trunk.

This is used in case the fuel filler door cannot be opened due to a discharged battery or other trouble.

MOON ROOF

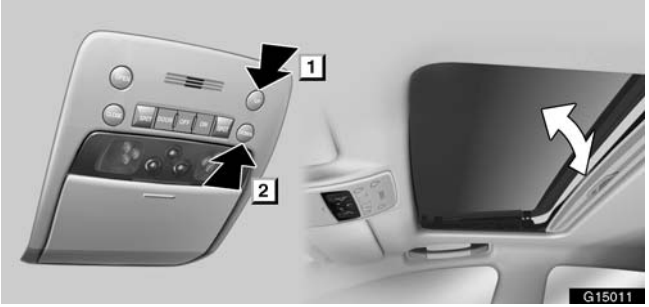
▶ 1 *Open* 2 *Close*

To slide open the moon roof, push the "OPEN" button for about 1 second. The moon roof will open and stop partway 40 mm (1.6 in.) from the fully opened position. When you push the switch once again, the moon roof will fully open. To stop partway, push the "OPEN", "CLOSE", "UP" or "DOWN" button briefly.

As driving with the moon roof opened fully will cause wind throbs, we recommend you to drive with the moon roof partway 40 mm (1.6 in.) from the fully opened position.

The sun shade can be opened or closed manually. However, if you open the moon roof, the sun shade will be opened with the moon roof.

To close the moon roof, push the "CLOSE" button for about 1 second. The moon roof will fully close. To stop partway, push the "OPEN", "CLOSE", "UP" or "DOWN" button briefly.



▶ 1 *Tilt up* 2 *Lower*

To tilt up the moon roof, push the "UP" button for about 1 second. The moon roof will fully tilt up. To stop partway, push the "UP", "DOWN", "OPEN" or "CLOSE" button briefly.

To lower the moon roof, push the "DOWN" button for about 1 second. The moon roof will be fully lowered. To stop partway, push the "UP", "DOWN", "OPEN" or "CLOSE" button briefly.

To operate the moon roof, the engine switch must be selected in "IG–ON" mode.

If the moon roof is left open when you turn the engine switch to “OFF” mode and open the driver’s door, a buzzer will remind you to close the moon roof.

Retained accessory power operation: Even if the engine switch is off, the moon roof can be operated until any of the doors is opened (or for about 45 seconds).

Operating the moon roof from outside the vehicle

The moon roof can be closed or opened using a mechanical key.*

NOTE:
**This feature can be deactivated, or sliding open or tilting up can be selected.*
Ask your Lexus dealer for details.

Insert the mechanical key into the key hole on the driver’s door.

To close the moon roof: Turn the key in the locking direction and hold it.

After the door is locked, the moon roof begins to close. To stop in the middle, return the key.

To open the moon roof: Turn the key in the unlocking direction and hold it.

After the door is unlocked, the moon roof begins to open. To stop in the middle, return the key.

Jam protection function

If something gets caught into the roof opening during closing operation, the moon roof stops and is open.

If the moon roof receives a strong impact, this function may work even if nothing is caught.

If the battery is disconnected or run down

The moon roof may not operate automatically and the jam protection function will not function correctly after you reconnect, replace or recharge the battery. In any of these cases, you should normalize the moon roof.

To normalize the moon roof, push and hold the “UP” button until the moon roof tilts all the way up and then down a little automatically.

Make sure the moon roof opens and closes automatically. If the moon roof cannot be operated properly, have it checked by your Lexus dealer.

⚠ CAUTION

To avoid serious personal injury, you must do the following.

- **While the vehicle is moving, always keep the heads, hands and other parts of the bodies of all occupants away from the roof opening. Otherwise, they could be seriously injured if the vehicle stops suddenly or if the vehicle is involved in an accident.**
- **Before you close the moon roof, always make sure there is nobody around the moon roof. You must also make sure nobody places his or her head, hands and other parts of the body in the roof opening. If someone’s neck, head or hands get caught in the closing roof, it could result in death or serious injury. When anyone closes the moon roof, first make sure it is safe to do so.**
- **Be sure to turn the engine switch to “OFF” mode when you leave your vehicle.**
- **Never leave anyone (particularly a small child) alone in your vehicle, especially when the engine switch is on. Otherwise, he/she could use the moon roof switches and get trapped in the roof opening. Unattended persons (particularly a small child) can be involved in a serious accident.**
- **Never sit on top of the vehicle around the roof opening.**

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

SECTION 1 – 6

INSTRUMENTS AND CONTROLS

Occupant restraint systems

Seats 138
Front seats 138
Rear seats 143
Armrest 144
Head restraints 144
Seat belts 147
SRS driver airbag and front passenger airbag 158
SRS side airbags and curtain shield airbags 168
Child restraint 178
Driving position memory system 198
Front passenger seat position memory system 200

SEATS

While the vehicle is being driven, all vehicle occupants should have the seatback upright, sit well back in the seat and properly wear the seat belts provided.

CAUTION

- **Do not drive the vehicle unless the occupants are properly seated. Do not allow any passengers to sit in the luggage compartment or cargo area. Persons not properly seated and/or not properly restrained by seat belts can be severely injured in the event of emergency braking or a collision.**
- **During driving, do not allow any passengers to stand up or move around between seats. Otherwise, severe injuries can occur in the event of emergency braking or a collision.**

FRONT SEATS

Front seat precautions

Driver seat

CAUTION

The SRS driver airbag deploys with considerable force, and can cause death or serious injury especially if the driver is very close to the airbag. The National Highway Traffic Safety Administration (”NHTSA”) advises:

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

- **Move your seat to the rear as far as you can while still reaching the pedals comfortably.**
- **Slightly recline the back of the seat. Although vehicle designs vary, many drivers can achieve the 250 mm (10 in.) distance, even with the driver seat all the way forward, simply by reclining the back of the seat somewhat. If reclining the back of your seat makes it hard to see the road, raise yourself by using a firm, non−slippery cushion, or raise the seat if your vehicle has that feature.**

- **If your steering wheel is adjustable, tilt it downward. This points the airbag toward your chest instead of your head and neck.**

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

Front passenger seat

CAUTION

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

Front seats

CAUTION

The SRS front side airbags are installed in the driver and front passenger seats. Observe the following precautions.

- **Do not lean against the front door when the vehicle is in use, since the front side airbag inflates with considerable speed and force. Otherwise, you may be killed or severely injured.**
- **Do not use seat accessories which cover the parts where the front side airbags inflate. Such accessories may prevent the front side airbags from activating correctly, causing death or serious injury.**
- **Do not modify or replace the front seats or upholstery of the seats equipped with front side airbags. Such change may prevent the side airbag system from activating correctly, disable the system or cause the front side airbags to inflate accidentally, resulting in death or serious injury.**

Seat adjustment precautions

CAUTION

- **Do not adjust the seat while the vehicle is moving as the seat may unexpectedly move and cause the driver to lose control of the vehicle.**
- **Be careful that the seat does not hit a passenger, luggage or the rear seat.**

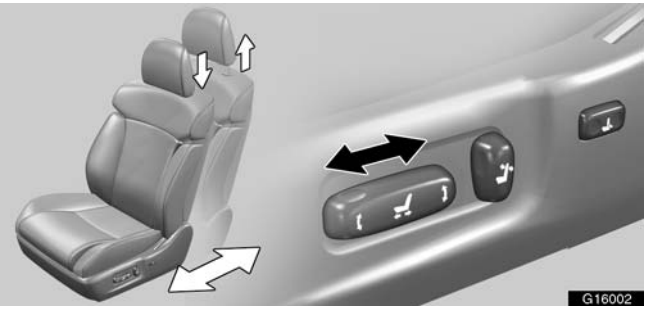
NOTICE

Do not operate the control switch in more than one dimension at a time. It may cause electrical overload.

Adjusting front seats

▶ 1 ***Seat position, seat cushion angle and height control switch***
2 ***Seatback angle control switch***
3 ***Lumbar support control switch***

Adjusting seat position

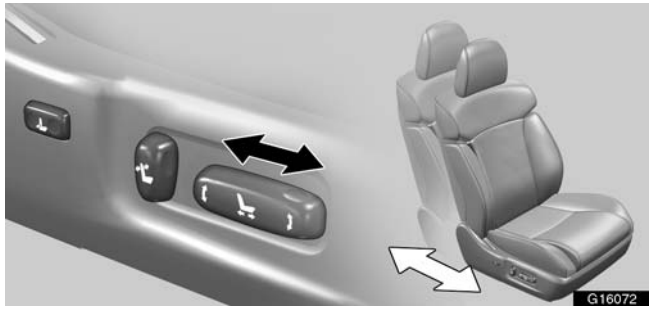


▶***For driver's seat***

Move the control switch in the desired direction.

Releasing the switch will stop the seat and head restraint in that position. Do not place anything under the seat, as this might interfere with the seat movement.

You can adjust the head restraint in the desired position. To adjust the head restraint, see "Head restraints" on page 144.

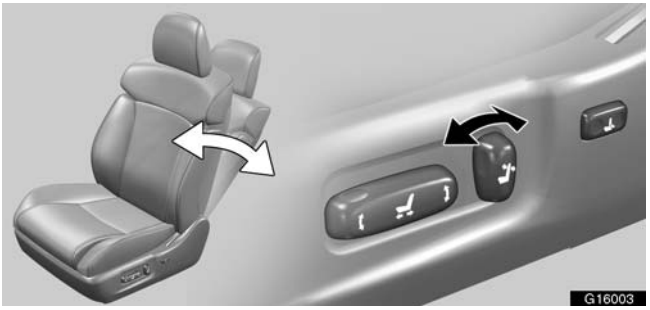


▶***For passenger's seat***

Move the control switch in the desired direction.

Releasing the switch will stop the seat in that position. Do not place anything under the seat as this might interfere with the seat movement.

Adjusting seatback angle



Move the control switch in the desired direction.

Releasing the switch will stop the seatback in that position.

⚠ CAUTION

Avoid reclining the seatback any more than needed. The seat belts provide maximum protection in a frontal or rear collision when the driver and the front passenger are sitting up straight and well back in the seats. If you are reclined, the lap belt may slide past your hips and apply restraint forces directly to the abdomen or your neck may contact the shoulder belt. In the event of a frontal collision, the more the seat is reclined, the greater the risk of death or personal injury .

Adjusting seat cushion angle and height

Move the control switch in the desired direction.

Releasing the switch will stop the seat cushion in that position.

Adjusting lumbar support

Push the control switch on either side.

The amount of lumbar support will change while the switch is pushed.

REAR SEATS

Rear seat precautions

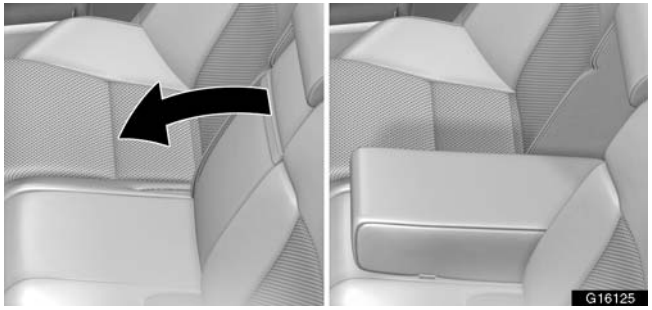
Rear seats (with SRS rear side airbags)

⚠ CAUTION

The SRS rear side airbags are installed in the outboard rear seats. Observe the following precautions.

- **Do not lean against the rear door when the vehicle is in use, since the rear side airbag inflates with considerable speed and force. Otherwise, you may be killed or severely injured.**
- **Do not use seat accessories which cover the area where the rear side airbags inflate. Such accessories may prevent the rear side airbags from activating correctly, causing death or serious injury.**
- **Do not modify or replace the outboard rear seats or the upholstery of the seats equipped with rear side airbags. Such change may prevent the side airbag system from activating correctly, disable the system, or cause the rear side airbags to inflate accidentally, resulting in death or serious injury.**

ARMREST



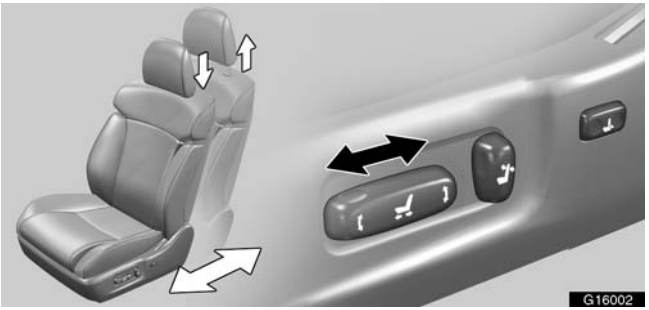
To use the armrest, pull it down as shown above.

NOTICE
To prevent damage to the armrest, avoid putting heavy loads on it.

HEAD RESTRAINTS

For your safety and comfort, adjust the head restraint before driving.

Front seats

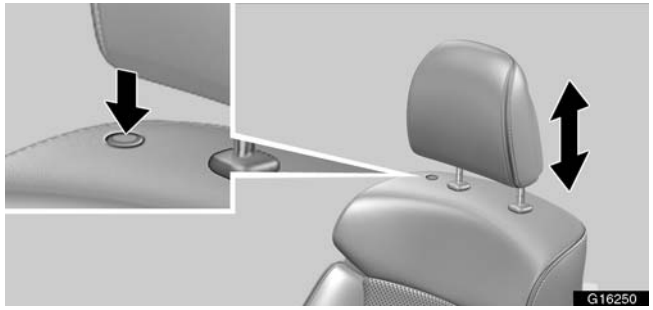


▶***Driver's seat***

The height of the driver's head restraint is automatically adjusted along with the seat position movement when the seat position control switch is used.

When the seat is adjusted to the foremost (or rearmost) position, the head restraint is adjusted to the lowest (or highest) position.

The height of the head restraint can be adjusted manually.



To adjust the height of the head restraint manually, adjust it while pushing the button located on the shoulder.

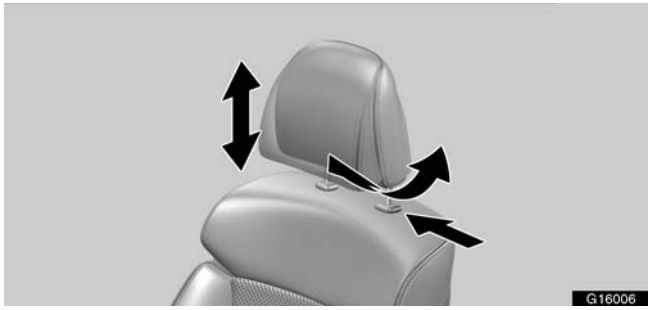
After adjusting the head restraint manually, even if you adjust the seat to the foremost (or rearmost) position using seat position control, the head restraint may not be adjusted to the lowest (or highest) position. And if the head restraint reaches the highest (or lowest) position while the seat is being adjusted backward (or forward), the head restraint will be fixed in that position.

To move the head restraint forward or rearward, move the head restraint as shown.

The head restraint is most effective when it is close to your head. Therefore, using a cushion on the seatback is not recommended.

⚠ CAUTION

Adjust the center of the head restraint so that it is closest to the top of your ears.



▶*Front passenger seat*

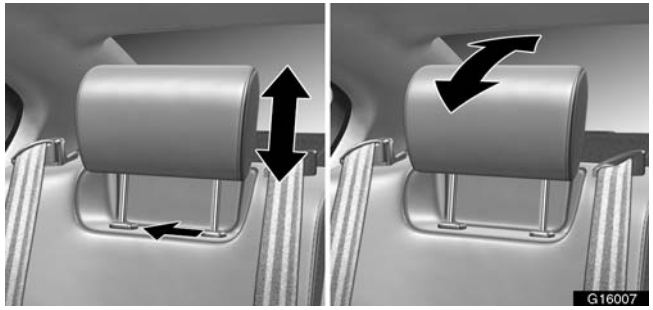
To raise the head restraint, pull it up. To lower it, press the lock release button and push the head restraint down. To move the head restraint forward or rearward, move the head restraint as shown.

The head restraint is most effective when it is close to your head. Therefore, using a cushion on the seatback is not recommended.

⚠ CAUTION

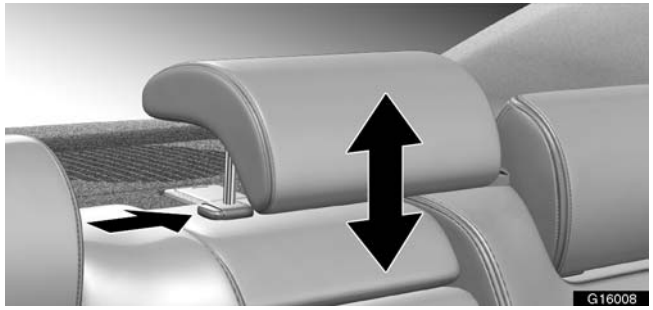
- **Adjust the center of the head restraint so that it is closest to the top of your ears.**
- **After adjusting the head restraint, make sure it is locked in position.**
- **Do not drive with the head restraints removed.**

Rear seats



▶*Outboard rear seats*

To raise the head restraint, pull it up. To lower it, press the lock release button and push the head restraint down. To move the head restraint forward or rearward, pull or push on the top.



▶*Center rear seat*

To raise the head restraint, pull it up. To lower it, press the lock release button and push the head restraint down.

Center rear head restraint: When an occupant sits on the center rear seat, always pull up the head restraint to the lock position.

The head restraint is most effective when it is close to your head. Therefore, using a cushion on the seatback is not recommended.

⚠ CAUTION

- **Adjust the center of the head restraint so that it is closest to the top of your ears.**
- **After adjusting the head restraint, make sure it is locked in position.**
- **Do not drive with the head restraints removed.**

SEAT BELTS

Seat belt precautions

Lexus strongly urges that the driver and passengers in the vehicle be properly restrained at all times with the seat belts provided. Failure to do so could increase the chance of injury and/or the severity of injury in accidents.

The seat belts provided for your vehicle are designed for people of adult size, large enough to properly wear them.

Child. Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belts. See "Child restraint" on page 178 for details.

If a child is too large for a child restraint system, the child should sit in the rear seat and must be restrained using the vehicle's seat belt. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.

If a child must sit in the front seat, the seat belts should be worn properly. If an accident occurs and the seat belts are not worn properly, the force of the rapid inflation of the airbag may cause death or serious injury to the child.

Do not allow any children to stand up or kneel on either rear or front seats. An unrestrained child could suffer serious injury or death during emergency braking or a collision. Also, do not let the child sit on your lap. Holding a child in your arms does not provide sufficient restraint.

Pregnant woman. Lexus recommends the use of a seat belt. Ask your doctor for specific recommendations. The lap belt should be worn securely and as low as possible over the hips and not on the waist.

Injured person. Lexus recommends the use of a seat belt. Depending on the injury, first check with your doctor for specific recommendations.

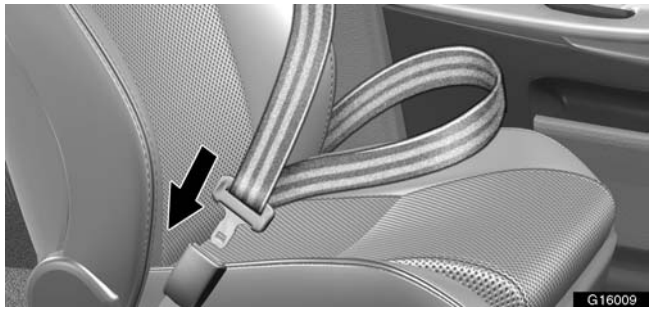
CAUTION

Persons should ride in their seats properly wearing their seat belts whenever the vehicle is moving. Otherwise, they are much more likely to suffer serious bodily injury or death in the event of sudden braking or a collision.

When using the seat belts, observe the following:

- **Use the belt for only one person at a time. Do not use a single belt for two or more people − even children.**
- **Avoid reclining the seatback any more than needed. The seat belts provide maximum protection in a frontal or rear collision when the driver and the front passenger are sitting up straight and well back in the seats. If you are reclined, the lap belt may slide past your hips and apply restraint forces directly to the abdomen or your neck may contact the shoulder belt. In the event of a frontal collision, the more the seat is reclined, the greater the risk of death or personal injury.**
- **Be careful not to damage the belt webbing or hardware. Take care that they do not get caught or pinched in the seat or doors.**
- **Inspect the belt system periodically. Check for cuts, fraying, and loose parts. Damaged parts should be replaced. Do not disassemble or modify the system.**
- **Keep the belts clean and dry. If they need cleaning, use a mild soap solution or lukewarm water. Never use bleach, dye, or abrasive cleaners, or allow them to come into contact with the belt − they may severely weaken the belts. (See “Cleaning the interior” on page 594 for instructions.)**
- **Replace the belt assembly (including bolts) if it has been used in a severe impact. The entire assembly should be replaced even if damage is not obvious.**

Fastening front and rear seat belts



Adjust the seat as needed and sit up straight and well back in the seat. To fasten your belt, pull it out of the retractor and insert the tab into the buckle.

You will hear a click when the tab locks into the buckle.

The seat belt length automatically adjusts to your size and the seat position.

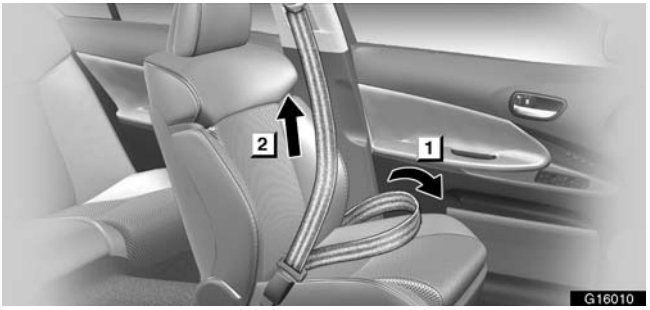
The retractor will lock the belt during a sudden stop or on impact. It also may lock if you lean forward too quickly. A slow, easy motion will allow the belt to extend, and you can move around freely.

When a rear seat belt is completely extended and is then retracted even slightly, the belt is locked in that position and cannot be extended. This feature is used to hold the child restraint system securely. (For details, see ”Child restraint” on page 178.) To free the belt again, fully retract the belt and then pull the belt out once more.

If the seat belt cannot be pulled out of the retractor, firmly pull the belt and release it. You will then be able to smoothly pull the belt out of the retractor.

⚠ CAUTION

- **After inserting the tab, make sure the tab and buckle are locked and that the belt is not twisted.**
- **Do not insert coins, clips, etc. in the buckle as this may prevent you from properly latching the tab and buckle.**
- **If the seat belt does not function normally, immediately contact your Lexus dealer. Do not use the seat until the seat belt is fixed, because it cannot protect an adult occupant or your child from injury.**



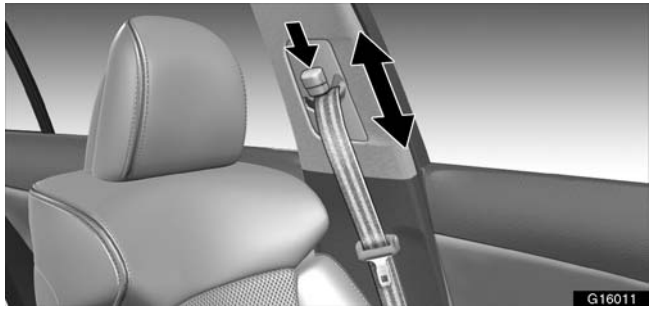
Adjust the position of the lap and shoulder belts.

1 Position the lap belt as low as possible on your hips – not on your waist.

2 Adjust it to a snug fit by pulling the shoulder portion upward through the latch plate.

⚠ CAUTION

- **Both high−positioned lap belts and loose−fitting belts could cause serious injuries due to sliding under the lap belt during a collision or other unintended event. Keep the lap belt positioned as low on hips as possible.**
- **Do not place the shoulder belt under your arm.**



▶***Front seat belts only***

Adjust the shoulder anchor position to your size.

To raise the anchor position, push the anchor up. To lower the anchor position, support the anchor while you push the lock release button then slide the anchor down. After adjustment, make sure the anchor is locked in position.

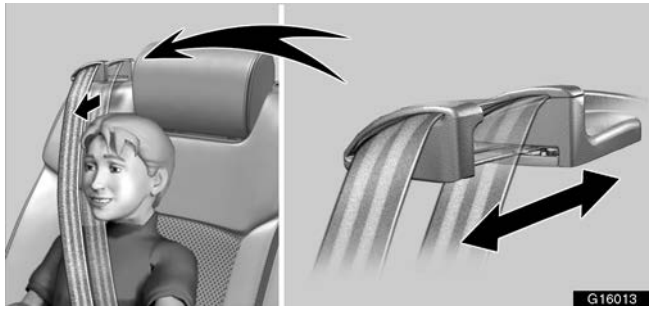
⚠ CAUTION

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 serious injuries in a collision.

To release the belt, press the buckle release button and allow the belt to retract.

If the belt does not retract smoothly, pull it out and check for kinks or twists. Then make sure it remains untwisted as it retracts.

Seat belt comfort guides



The seat belt comfort guides are installed on the outboard rear seats to relieve uncomfortableness from the shoulder belt when it is applied closer to a child's neck (at the age of 10 or so), by pulling the shoulder belt a little forward.

Slide the seat belt comfort guide forward to adjust the shoulder belt.

The seat belt comfort guide should not be in the forward position for other purposes.

CAUTION

Always make sure the shoulder belt is positioned across the center of the shoulder. The belt should be kept away from the neck, and should not fall off the shoulder. Failure to observe these precautions could reduce the effectiveness of the seat belt in an accident, causing death or serious injury.

Seat belt extender

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

Please contact your local Lexus dealer so that the dealer can order the proper required length for the extender. Bring the heaviest coat you expect to wear for proper measurement and selection of length. Additional ordering information is available at your Lexus dealer.

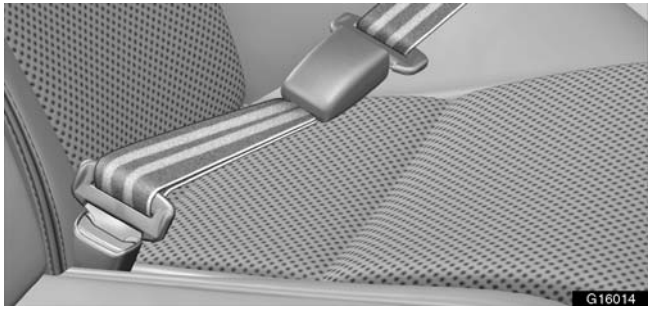
CAUTION

When using the seat belt extender, observe the following precautions. Failure to follow these instructions could reduce the effectiveness of the seat belt restraint system in case of an accident, increasing the chance of personal injury.

- **Remember that the extender provided for you may not be safe when used on a different vehicle, for another person, or at a different seating position than the one originally intended.**

- **If the seat belt extender has been connected to the driver's seat belt buckle but the seat belt extender has not also been fastened to the latch plate of the driver's seat belt, the SRS driver's airbag system will judge that the driver is wearing the seat belt even though the seat belt has not been connected. In this case, the driver's airbag may not activate correctly, causing death or serious injury in the event of a collision. Be sure to wear the seat belt with the seat belt extender. Otherwise, there will also not be any effective protection in a sudden stop or a collision provided by the seat belt.**

- **Be sure to wear the seat belt without the seat belt extender if you can fasten the seat belt without the extender.**
- **Do not use the seat belt extender when installing a child restraint system on the front or rear passenger seat. If installing a child restraint system with the seat belt extender connected to the seat belt, the seat belt will not securely hold the child restraint system, which could cause death or serious injury to the child or other passengers in the event of collision.**



To connect the extender to the seat belt, insert the tab into the seat belt buckle so that the ”PRESS” signs on the buckle release buttons of the extender and the seat belt are both facing outward as shown.

You will hear a click when the tab locks into the buckle.

When releasing the seat belt, press on the buckle release button on the extender, not on the seat belt. This helps prevent damage to the vehicle interior and extender itself.

When not in use, remove the extender and store in the vehicle for future use.

CAUTION

- **After inserting the tab, make sure the tab and buckle are locked and that the lap and shoulder portions of the belt and the seat belt extender are not twisted.**
- **Do not insert coins, clips, etc. in the buckle as this may prevent you from properly latching the tab and buckle.**
- **If the seat belt does not function normally, immediately contact your Lexus dealer. Do not use the seat until the seat belt is fixed, because it cannot protect an adult occupant or your child from injury.**

Seat belt pretensioners

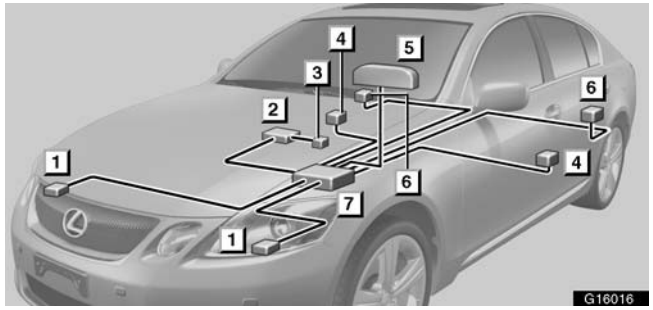
Both front seats and the two outboard rear seats are equipped with seat belt pretensioners and are designed to be activated in response to a severe frontal impact.

When the sensor detects a severe frontal impact, the seat belts are quickly drawn back by the retractor so that the belts snugly restrain the seat occupants.

The front passenger seat belt pretensioner will not activate if there is no passenger sitting in the front passenger seat. However, the front passenger seat belt pretensioner may activate if luggage is put in the seat, or the seat belt is buckled up regardless of the presence of the occupant in the seat.

The outboard rear seat belt pretensioners are activated even with no passengers in the outboard rear seats.

The seat belt pretensioners and SRS airbags may not operate together in all collisions.



▶ 1 ***Front airbag sensors***
2 ***Occupant detection sensor***
3 ***Front passenger's seat belt buckle switch***
4 ***Front seat belt pretensioner assembly***
5 ***SRS warning light***
6 ***Rear seat belt pretensioner assembly***
7 ***Airbag sensor assembly***

The seat belt pretensioner system consists mainly of the above components, and their locations are shown in the illustration.

The seat belt pretensioners are controlled by the airbag sensor assembly. The airbag sensor assembly consists of a safing sensor and airbag sensor.

When the seat belt pretensioners are activated, an operating noise may be heard and a small amount of non−toxic gas may be released. This does not indicate that a fire is occurring. This gas is normally harmless.

Once the seat belt pretensioners have been activated, the seat belt retractors remain locked.

CAUTION

Do not modify, remove, strike or open the seat belt pretensioner assemblies, airbag sensor or surrounding area or wiring. Failure to follow these instructions may prevent the seat belt pretensioners from activating correctly, cause sudden operation of the system or disable the system, which could result in death or serious injury. Consult your Lexus dealer about any repair and modification.

NOTICE

Do not perform any of the following changes without consulting your Lexus dealer. Such changes can interfere with proper operation of the seat belt pretensioners in some cases.

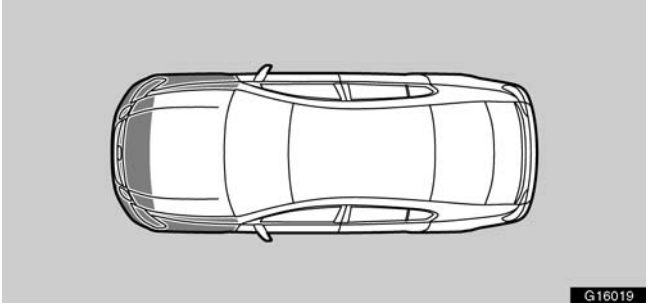
- ***Installation of electronic devices such as a mobile two−way radio, cassette tape player or CD player.***
- ***Repairs on or near the seat belt retractor assemblies.***
- ***Modification of the suspension system.***
- ***Modification of the front end structure.***
- ***Attachment of a grille guard (bull bar, kangaroo bar, etc.), snowplow, winches or any other equipment to the front end.***
- ***Repairs made on or near the front fenders, front end structure or console.***

This indicator comes on when the engine switch is selected in “IG−ON” mode. It goes off after about 6 seconds. This means the seat belt pretensioners are operating properly.

This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensor assemblies, curtain shield airbag sensor assemblies, driver’s seat position sensor, driver’s seat belt buckle switch, occupant detection sensor, front passenger’s seat belt buckle switch, seat belt pretensioner assemblies, inflators, warning light, interconnecting wiring and power sources. (For details, see “Service reminder indicators and warning buzzers” on page 72.)

If any of the following conditions occurs, this indicates a malfunction of the airbags or seat belt pretensioners. Contact your Lexus dealer as soon as possible.

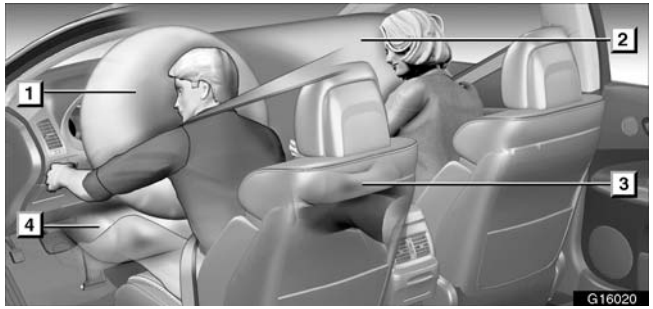
- When the engine switch is selected in “IG−ON” mode, the light does not come on or remains on for more than 6 seconds.
- The light comes on while driving.
- If any seat belt does not retract or cannot be pulled out due to a malfunction or activation of the relevant seat belt pretensioner.
- The seat belt pretensioner assembly or surrounding area has been damaged.



In the following cases, contact your Lexus dealer as soon as possible.

- The front of the vehicle (shaded in the illustration) was involved in an accident that was not severe enough to cause the seat belt pretensioners to operate.
- The seat belt pretensioner assembly or surrounding area is scratched, cracked, or otherwise damaged.

SRS DRIVER AIRBAG AND FRONT PASSENGER AIRBAG



▶ 1 *Driver airbag* 2 *Front passenger airbag*
3 *Front passenger knee airbag* 4 *Driver knee airbag*

The SRS (Supplemental Restraint System) front airbags are designed to provide further protection for the driver and front passenger in addition to the primary safety protection provided by the seat belts.

In response to a severe frontal impact, the SRS front airbags work together with the seat belts to help reduce injury by inflating. The SRS front airbags help reduce injuries mainly to the driver's or front passenger's head or chest or knees caused by hitting the vehicle interior.

The SRS front passenger airbag will not activate if there is no passenger sitting in the front passenger seat. However, the front passenger airbag may deploy if luggage is put in the seat, or the seat belt is buckled up, regardless of the presence of an occupant in the seat.

Always wear your seat belt properly.

CAUTION

- **The SRS front airbag system is designed only as a supplement to the primary protection of the driver and front passenger seat belt systems. The driver and front passenger can be killed or seriously injured by the inflating airbags if they do not wear the available seat belts properly. During sudden braking just before a collision, an unrestrained driver or front passenger can move forward into direct contact with or close proximity to the airbag which may then deploy during the collision. To ensure maximum protection in an accident, the driver and all passengers in the vehicle must wear their seat belts properly. Wearing a seat belt properly during an accident reduces the chances of death or serious injury or being thrown out of the vehicle. For instructions and precautions concerning the seat belt system, see ”Seat belts” on page 147.**

- **Improperly seated and/or restrained infants and children can be killed or seriously injured by the deploying airbags. 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 seat of the vehicle and properly restrained. The rear seat is the safest for infants and children. For instructions concerning the installation of a child restraint system, see ”Child restraint” on page 178 .**

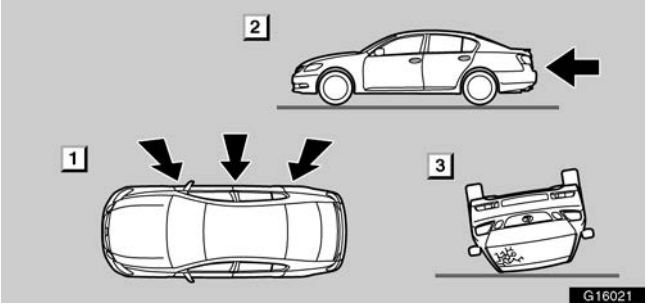
The SRS front airbags are designed to deploy in severe (usually frontal) collisions where the magnitude and duration of the forward deceleration of the vehicle exceeds the designed threshold level.

The SRS front airbags will deploy if the severity of the impact is above the designed threshold level, comparable to an approximate 25 km/h (15 mph) collision in the U.S.A. and 30 km (18 mph) collision in Canada when the vehicle has the impact straight into a fixed barrier that does not move or deform.

However, this threshold velocity will be considerably higher if the vehicle strikes an object, such as a parked vehicle or sign pole, which can move or deform on impact, or if the vehicle is involved in an underride collision (e.g. a collision in which the front of the vehicle ”underrides”, or goes under, the bed of a truck, etc.).

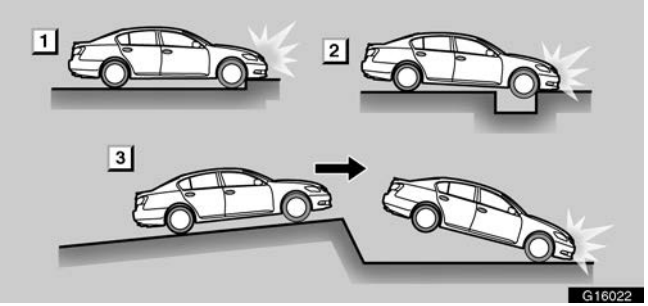
It is possible that in some collisions where the forward deceleration of the vehicle is very close to the designed threshold level, the SRS front airbags and the seat belt pretensioners may not activate together.

Always wear your seat belts properly.



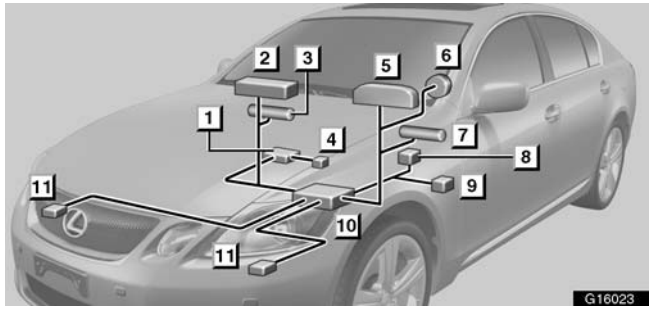
▶ 1 *Collision from the side* 2 *Collision from the rear* 3 *Vehicle rollover*

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



▶ 1 ***Hitting a curb, edge of pavement or hard surface.***
2 ***Falling into or jumping over a deep hole***
3 ***Landing hard or vehicle falling***

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



▶ 1 ***Occupant detection sensor***
2 ***Airbag module for front passenger (airbag and inflator)***
3 ***Knee airbag module for front passenger (airbag and inflator)***
4 ***Front passenger's seat belt buckle switch***
5 ***SRS warning light***
6 ***Airbag module for driver (airbag and inflator)***
7 ***Knee airbag module for driver (airbag and inflator)***
8 ***Driver's seat belt buckle switch***
9 ***Driver's seat position sensor***
10 ***Airbag sensor assembly***
11 ***Front airbag sensors***

The SRS front airbag system consists mainly of the above components, and their locations are shown in the illustration.

The airbag sensor assembly consists of a safing sensor and airbag sensors.

The front airbag sensors constantly monitor the forward deceleration of the vehicle. If an impact results in a forward deceleration beyond the designed threshold level, the system triggers the airbag inflators. At this time a chemical reaction in the inflators very quickly fills the airbags with non–toxic gas to help restrain the forward motion of the occupants. The front airbags then quickly deflate, so that there is no obstruction of the driver's vision should it be necessary to continue driving.

When the airbags inflate, they produce a loud noise and release some smoke and residue along with non–toxic gas. This does not indicate a fire. This smoke may remain inside the vehicle for some time, and may cause some minor irritation to the eyes, skin or breathing. Be sure to wash off any residue as soon as possible to prevent any potential skin irritation with soap and water. If you can safely exit from the vehicle, you should do so immediately.

Deployment of the airbags happens in a fraction of a second, so the airbags must inflate with considerable force. While the system is designed to reduce serious injuries, primarily to the head and chest, it may also cause other, less severe injuries to the face, chest, arms and hands. These are usually in the nature of minor burns or abrasions and swelling, but the force of a deploying airbag can cause more serious injuries, especially if an occupant's hands, arms, chest or head is in close proximity to the airbag module at the time of deployment. This is why it is important for the occupant to; avoid placing any object or part of the body between the occupant and the airbag module; sit straight and well back into the seat; wear the available seat belt properly; and sit as far as possible from the airbag module, while still maintaining control of the vehicle.

Parts of the airbag module (steering wheel hub, lower portion of instrument panel, dashboard and inflator) may be hot for several minutes after deployment, so do not touch! The airbags inflate only once. The windshield may be damaged by absorbing some of the force of the inflating airbag.

CAUTION

The driver or front passenger who is too close to the steering wheel, lower portion of instrument panel or dashboard during airbag deployment can be killed or seriously injured. Lexus strongly recommends that:

- **The driver sit as far back as possible from the steering wheel while still maintaining control of the vehicle.**
- **The front passenger sit as far back as possible from the dashboard.**
- **All vehicle occupants be properly restrained using the available seat belts.**
- **If the seat belt extender has been connected to the driver's seat belt buckle but the seat belt extender has not also been fastened to the latch plate of the driver's seat belt, the SRS driver's airbag system will judge that the driver is wearing the seat belt even though the seat belt has not been connected. In this case, the driver's airbag may not activate correctly, causing death or serious injury in the event of a collision. Be sure to wear the seat belt with the seat belt extender. Otherwise, there will also not be any effective protection in a sudden stop or a collision provided by the seat belt.**

For instructions and precautions concerning the seating position, see "Front seat precautions" on page 138.

- **Do not sit on the edge of the seat or lean against the dashboard when the vehicle is in use, since the front passenger airbag could inflate with considerable speed and force. Anyone who is up against, or very close to, an airbag when it inflates, can be killed or seriously injured. Sit up straight and well back in the seat, and always use your seat belt properly.**

- **Lexus strongly recommends that all infants and children be placed in the rear seat of the vehicle and be properly restrained.**
- **Do not allow a child to stand up or kneel on the front passenger seat, since the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.**
- **Do not hold a child on your lap or in your arms. Use a child restraint system in the rear seat. For instructions concerning the installation of a child restraint system, see ”Child restraint” on page 178.**

- **Do not put anything or any part of your body on or in front of the dashboard, lower portion of instrument panel, steering wheel pad that houses the front airbag system or in the areas where the SRS knee airbags will inflate. They might restrict inflation or cause death or serious injury as they are projected rearward by the force of the deploying airbags. Likewise, the driver and front passenger should not hold objects in their arms or on their knees.**
- **If a vinyl cover is put on the area where the SRS knee airbag will deploy, be sure to remove it.**

- **Do not attach any objects except Lexus genuine parts in the area where the SRS knee airbag for the front passenger will inflate. When using an ashtray or auxiliary box on the front passenger's console box, be sure to keep it closed. The attached object, or opened ashtray or auxiliary box might restrict inflation of the airbag or be thrown away by the force of the deploying airbag, causing a danger.**
- **Do not modify or remove any wiring. Do not modify, remove, strike or open any components, such as the steering wheel pad, steering wheel, column cover, dashboard near the front passenger airbag, front passenger airbag cover, knee airbags or airbag sensor assembly. Doing so may prevent the front airbag system from activating correctly, cause sudden activation of the system or disable the system, which could result in death or serious injury.**

Failure to follow these instructions can result in death or serious injury. Consult your Lexus dealer about any repair and modification.

NOTICE

Do not perform any of the following changes without consulting your Lexus dealer. Such changes can interfere with proper operation of the SRS front airbag system in some cases.

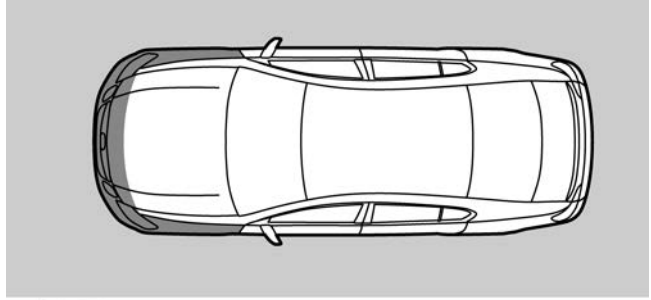
- ***Installation of electronic devices such as a mobile two−way radio, cassette tape player or CD player.***
- ***Modification of the suspension system.***
- ***Modification of the front end structure.***
- ***Attachment of a grille guard (bull bar, kangaroo bar, etc.), snowplow, winches or any other equipment to the front end.***
- ***Repairs made on or near the front fenders, front end structure, console, steering column, steering wheel, lower portion of instrument panel or dashboard near the front passenger airbag.***

This indicator comes on when the engine switch is selected in “IG−ON” mode. It goes off after about 6 seconds. This means the SRS front airbags are operating properly.

This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensor assemblies, curtain shield airbag sensor assemblies, driver’s seat position sensor, driver’s seat belt buckle switch, occupant detection sensor, front passenger’s seat belt buckle switch, seat belt pretensioner assemblies, inflators, warning light, interconnecting wiring and power sources. (For details, see “Service reminder indicators and warning buzzers” on page 72.)

If any of the following conditions occurs, this indicates a malfunction of the airbags or seat belt pretensioners. Contact your Lexus dealer as soon as possible.

- When the engine switch is selected in “IG−ON” mode, the light does not come on or remains on for more than 6 seconds.
- The light comes on while driving.



In the following cases, contact your Lexus dealer as soon as possible:

- The SRS front airbags have been inflated.
- The front of the vehicle (shaded in the illustration) was involved in an accident that was not severe enough to cause the SRS front airbags to inflate.
- The pad section of the steering wheel, dashboard or lower portion of instrument panel (shaded in the illustration) is scratched, cracked, or otherwise damaged.

NOTICE

Do not disconnect the battery cables before contacting your Lexus dealer.

SRS SIDE AIRBAGS AND CURTAIN SHIELD AIRBAGS

▶ 1 ***Curtain shield airbag***
2 ***Front side airbag***
3 ***Rear side airbag (for some models)***

The SRS (Supplemental Restraint System) side airbags and curtain shield airbags are designed to provide further protection for the driver, front passenger and rear outboard passengers in addition to the primary safety protection provided by the seat belts.

In response to a severe side impact, the SRS side airbags and curtain shield airbags work with the seat belts to help reduce injury by inflating. The SRS front side airbags help reduce injuries mainly to the driver's or front passenger's chest. The SRS curtain shield airbags help reduce injuries mainly to the driver's, front passenger's or rear outboard passenger's head.

The SRS front side airbag on the passenger seat will not activate if there is no passenger sitting in the front passenger seat. However, the front side airbag on the passenger seat may deploy if luggage is put in the seat, or the seat belt is buckled up, regardless of the presence of an occupant in the seat.

The SRS curtain shield airbags may activate even when the side airbags are not activated.

Always wear your seat belt properly.

Vehicles equipped with SRS rear side airbags—

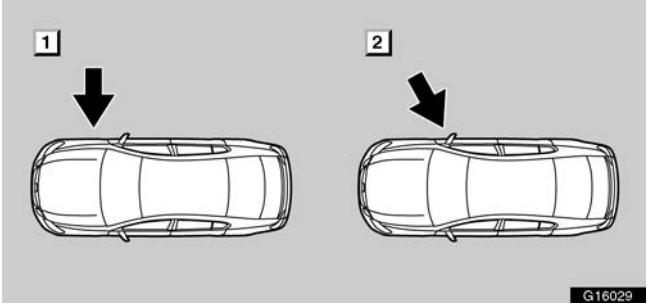
The SRS rear side airbags help reduce injuries mainly to the rear outboard passenger's chest.

The SRS rear side airbags will activate regardless of the presence of the occupant.

CAUTION

- **The SRS side airbag and curtain shield airbag system is designed only as a supplement to the primary protection of the driver, front passenger and rear outboard passenger seat belt systems. To ensure maximum protection in an accident, the driver and all passengers in the vehicle must wear their seat belts properly. Wearing a seat belt properly during an accident reduces the chances of death or serious injury or being thrown out of the vehicle. For instructions and precautions concerning the seat belt system, see “Seat belts” on page 147.**

- **Do not allow anyone to lean his/her head or any part of his/her body against the door or the area of the seat, front pillar, rear pillar or roof side rail from which the SRS side airbag and curtain shield airbag deploy even if he/she is a child seated in the child restraint system. It is dangerous if the SRS side airbag and curtain shield airbag inflate, and the impact of the deploying airbags could cause death or serious injury to the occupant.**
- **Improperly seated and/or restrained infants and children can be killed or seriously injured by the deploying airbags. An infant or child who is too small to use a seat belt should be properly secured using a child restraint system. Lexus strongly recommends that all infants and children be placed in the rear seats of the vehicle and properly restrained. The rear seats are the safest for infants and children. For instructions concerning the installation of a child restraint system, see “Child restraint” on page 178 .**

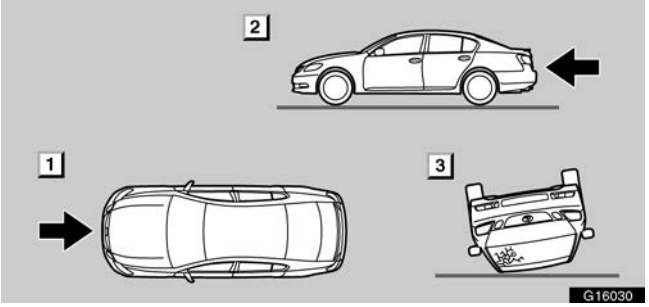


▶ 1 *Collision from the side to the vehicle body other than the passenger compartment*
2 *Collision from the side at an angle*

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

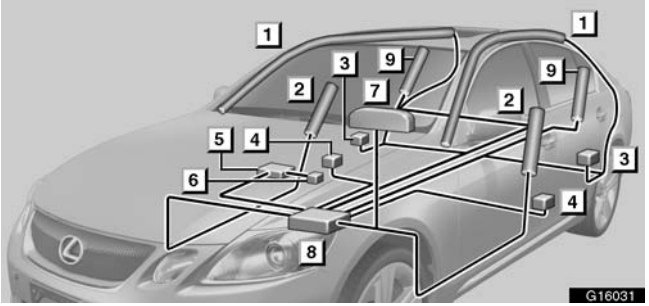
The SRS side airbags and curtain shield airbags are designed to inflate when the passenger compartment area suffers a severe impact from the side.

Always wear your seat belts properly.



▶ 1 *Collision from the front*
2 *Collision from the rear*
3 *Vehicle rollover*

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



▶ 1 ***Curtain shield airbag modules (airbag and inflator)***
2 ***Front side airbag modules (airbag and inflator)***
3 ***Curtain shield airbag sensor assemblies***
4 ***Side and curtain shield airbag sensor assemblies***
5 ***Occupant detection sensor***
6 ***Front passenger's seat belt buckle switch***
7 ***SRS warning light***
8 ***Airbag sensor assembly***
9 ***Vehicles with rear side airbag only:***
Rear side airbag modules (airbag and inflator)

The SRS side airbag and curtain shield airbag system consists mainly of the above components, and their locations are shown in the illustration.

The SRS side airbag and curtain shield airbag system is controlled by the airbag sensor assembly. The airbag sensor assembly consists of a safing sensor and airbag sensor.

In a severe side impact, the side and curtain shield airbag sensor and/or the curtain shield airbag sensor trigger(s) the side airbag inflators and/or the curtain shield airbag inflators. At this time a chemical reaction in the inflators quickly fills the airbags with non–toxic gas to help restrain the lateral motion of the occupants.

When the airbags inflate, they produce a fairly loud noise and release some smoke and residue along with non–toxic gas. This does not indicate a fire. This smoke may remain inside the vehicle for some time, and may cause some minor irritation to the eyes, skin or breathing. Be sure to wash off any residue as soon as possible to prevent any potential skin irritation with soap and water. If you can safely exit from the vehicle, you should do so immediately.

Deployment of the airbags happens in a fraction of a second, so the airbags must inflate with considerable force. While the system is designed to reduce serious injuries, it may also cause minor burns or abrasions and swelling.

Front (and outboard rear) seats as well as the parts of the front and rear pillars, and roof side rail may be hot for several minutes, but the airbags themselves will be hot. The airbags are designed to inflate only once.

CAUTION

SRS side airbags and curtain shield airbags inflate with considerable force. To reduce the possibility of death or serious injury when they inflate, the driver, front passenger and rear outboard passengers must:

- **Wear their seat belts properly.**
- **Remain properly seated with their backs upright and against the seats at all times.**

- **Do not allow anyone to lean against the door when the vehicle is in use, since the side airbag and curtain shield airbag could inflate with considerable speed and force. Otherwise, he/she may be killed or seriously injured. Special care should be taken especially when you have a small child in the vehicle.**
- **Sit up straight and well back in the seat, distributing your weight evenly in the seat. Do not apply excessive weight to the outer side of the seats with a side airbag, and to the front pillar, rear pillar and roof side rail with a curtain shield airbag.**

- **Do not allow anyone to get his/her head close to the area where the side airbag and curtain shield airbag inflate, since these airbags could inflate with considerable speed and force. Otherwise, he/she may be killed or seriously injured. Special care should be taken especially when you have a small child in the vehicle.**
- **Do not allow anyone to kneel on the front passenger (and outboard rear)seat, facing the front passenger's side (and rear outboard passenger's side) door, since the side airbag and curtain shield airbag could inflate with considerable speed and force. Otherwise, he/she may be killed or seriously injured. Special care should be taken especially when you have a small child in the vehicle.**

- **Do not allow anyone to get his/her head or hands out of windows since the curtain shield airbags could inflate with considerable speed and force. Otherwise, he/she may be killed or seriously injured. Special care should be taken especially when you have a small child in the vehicle.**

- **Do not attach a cupholder or any other device or object on or around the doors. When the side airbag inflate, the cupholder or any other device or object will be thrown with great force, or the side airbag may not activate correctly, resulting in death or serious injury. Likewise, the driver and front passenger should not hold objects in their arms or on their knees.**

- **Do not attach a microphone or any other device or object around the area where the curtain shield airbag activates such as on the windshield glass, side door glass, front and rear pillars, roof side rail and assist grips. When the curtain shield airbag inflates, the microphone or other device or object will be thrown away with great force or the curtain shield airbag may not activate correctly, resulting in death or serious injury.**
- **Do not hook a hanger, heavy or sharp pointed objects on the coat hook. If the curtain shield airbag inflates, those items will be thrown away with great force or the curtain shield airbag may not activate correctly, resulting in death or serious injury. When you hang clothes, hang them on the coat hook directly.**

- **Do not use seat accessories which cover the parts where the side airbags inflate. Such accessories may prevent the side airbags from activating correctly, causing death or serious injury.**
- **Do not modify or replace the front (and outboard rear) seats or upholstery of the seats with front (and rear) side airbags. Such changes may prevent the side airbag system from activating correctly, disable the system or cause the side airbags to inflate accidentally, resulting in death or serious injury.**
- **Do not disassemble or repair the front and rear pillars and roof side rails containing the curtain shield airbags. Such changes may disable the system or cause the curtain shield airbags to inflate accidentally, resulting in death or serious injury.**

Failure to follow these instructions can result in death or serious injury. Consult your Lexus dealer about any repair and modification.

NOTICE

Do not perform any of the following changes without consulting your Lexus dealer. Such changes can interfere with proper operation of the SRS side airbag and curtain shield airbag system in some cases.

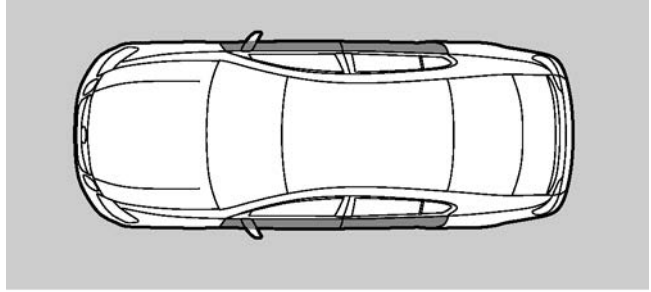
- ***Installation of electronic devices such as a mobile two−way radio, cassette tape player or CD player.***
- ***Modification of the suspension system.***
- ***Modification of the structure of the passenger compartment.***
- ***Repairs made on or near the console, front (or outboard rear) seats.***

The indicator comes on when the engine switch is selected in “IG−ON” mode. It goes off after about 6 seconds. This means the SRS side airbags and curtain shield airbags are operating properly.

This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensor assemblies, curtain shield airbag sensor assemblies, driver’s seat position sensor, driver’s seat belt buckle switch, occupant detection sensor, front passenger’s seat belt buckle switch, seat belt pretensioner assemblies, inflators, warning light, interconnecting wiring and power sources. (For details, see “Service reminder indicators and warning buzzers” on page 72.)

If any of the following conditions occurs, this indicates a malfunction of the airbags or seat belt pretensioners. Contact your Lexus dealer as soon as possible.

- When the engine switch is selected in “IG−ON” mode, the light does not come on or remains on for more than 6 seconds.
- The light comes on while driving.



In the following cases, contact your Lexus dealer as soon as possible:

- Any of the SRS front (and rear) side airbags and curtain shield airbags have been inflated.
- The portion of the doors (shaded in the illustration) was involved in an accident that was not severe enough to cause the SRS side airbags and curtain shield airbags to inflate.
- The surface of the seats with the side airbag (shaded in the illustration) is scratched, cracked, or otherwise damaged.
- The portion of the front pillars, rear pillars or roof side rail garnishes (padding) containing the curtain shield airbags inside (shaded in the illustration) is scratched, cracked, or otherwise damaged.

NOTICE

Do not disconnect the battery cables before contacting your Lexus dealer.

CHILD RESTRAINT

Child restraint precautions

Lexus strongly urges the use of appropriate child restraint systems for children.

The laws of all 50 states in the U.S.A. and Canada now require the use of a child restraint system.

Your vehicle conforms to SAE J1819.

If a child is too large for a child restraint system, the child should sit in the rear seat and must be restrained using the vehicle's seat belt. See "Seat belts" on page 147 for details.

CAUTION

- **For effective protection in automobile accidents and sudden stops, a child must be properly restrained, using a seat belt or child restraint system depending on age and size of the child. Holding a child in your arms is not a substitute for a child restraint system. In an accident, the child can be crushed against the windshield, or between you and the vehicle's interior.**
- **Lexus strongly urges use of a proper child restraint system which conforms to the size of the child, installed on the rear seat. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.**
- **Never install a rear−facing child restraint system on the front passenger seat. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear−facing child restraint system is installed on the front passenger seat.**
- **A forward−facing child restraint system should be allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.**
- **Do not use the seat belt extender when installing a child restraint system on the front or rear passenger seat. If installing a child restraint system with the seat belt extender connected to the seat belt, the seat belt will not securely hold the child restraint system, which could cause death or serious injury to the child or other passengers in the event of collision.**
- **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 pillar or roof side rail from which the side airbags or curtain shield airbags deploy even if the child is seated in a child restraint system. It is dangerous if the side airbag and curtain shield airbag inflate, and the impact could cause death or serious injury to the child.**

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

Child restraint system

A child restraint system for a small child or baby must itself be properly restrained on the seat with the lap portion of the lap/shoulder belt. You must carefully consult the manufacturer's instructions which accompany the child restraint system.

To provide proper restraint, use a child restraint system following the manufacturer's instructions about the appropriate age and size of the child for the child restraint system.

Install the child restraint system correctly following the instructions provided by its manufacturer. General directions are also provided under the following illustrations.

The child restraint system should be 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.

When not using the child restraint system, keep it secured with the seat belt or place it in the trunk or somewhere other than the passenger compartment. This will prevent it from injuring passengers in the event of a sudden stop or accident.

Types of child restraint system

Child restraint systems are classified into the following 3 types depending on the child's age and size.

(A) Infant seat
(B) Convertible seat
(C) Booster seat

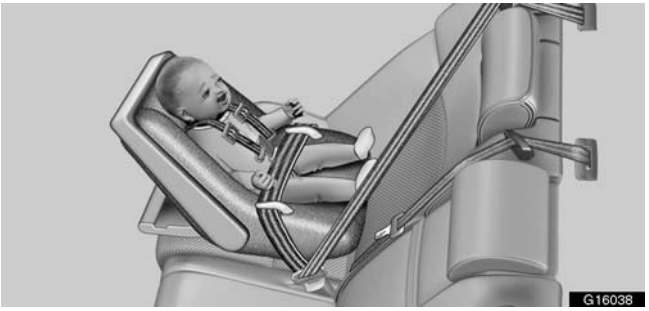
Install the child restraint system following the instructions provided by its manufacturer.

Your vehicle has anchor brackets for securing the top strap of a child restraint system.

For instructions about how to use the anchor bracket, see "Using a top strap" on page 193.

Child restraint lower anchorages approved for your vehicle may also be used. See "Installation with child restraint lower anchorages" on page 195.

(A) Infant seat

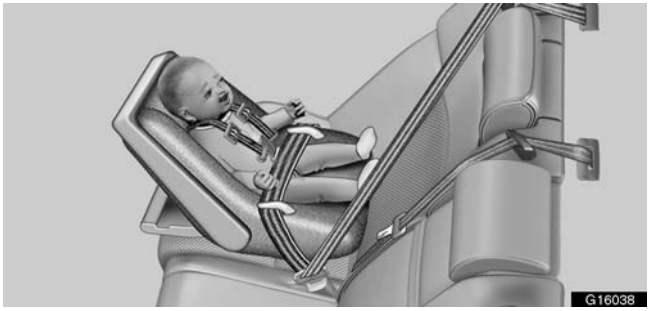


(B) Convertible seat

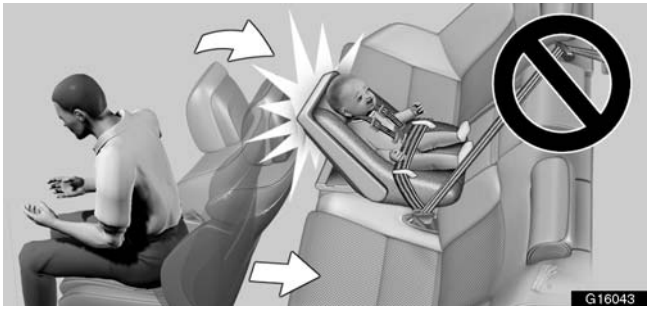
(C) Booster seat

INSTALLATION WITH 3−POINT TYPE SEAT BELT

(A) Infant seat installation



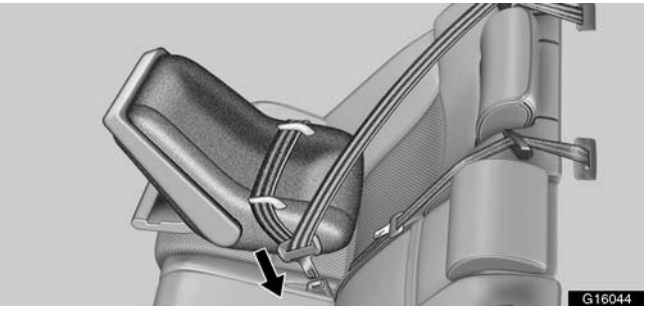
An infant seat must be used in rear−facing position only.



⚠ CAUTION

- **Never install a rear−facing child restraint system on the front passenger seat. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear−facing child restraint system is installed on the front passenger seat.**

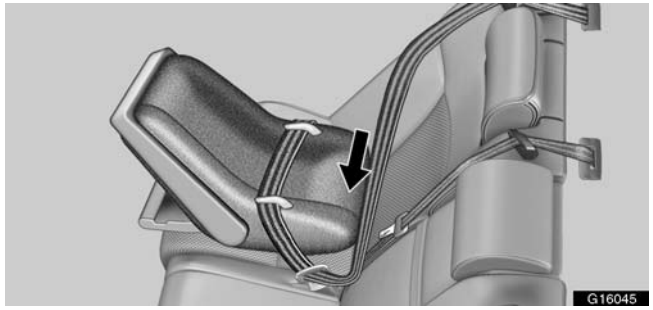
- **If the driver's seat position does not allow sufficient space for safe installation, install the child restraint system on the rear right seat.**



1. Run the lap and shoulder belt through or around the infant seat following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt. Keep the lap portion of the belt tight.

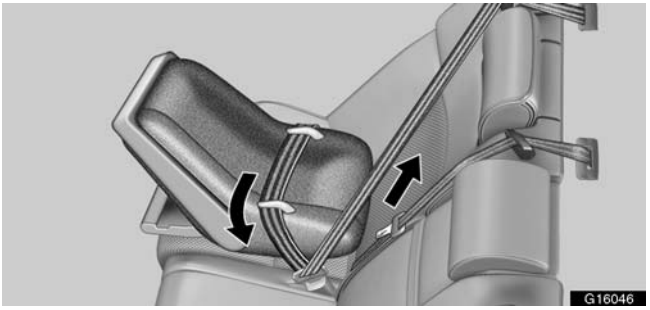
CAUTION

- **After inserting the tab, make sure the tab and buckle are locked and that the lap and shoulder portions of the belt are not twisted.**
- **Do not insert coins, clips, etc. in the buckle as this may prevent your child from properly latching the tab and buckle.**
- **If the seat belt does not function normally, it cannot protect your child from death or serious injury. Contact your Lexus dealer immediately. Do not install the child restraint system on the seat until the seat belt is fixed.**

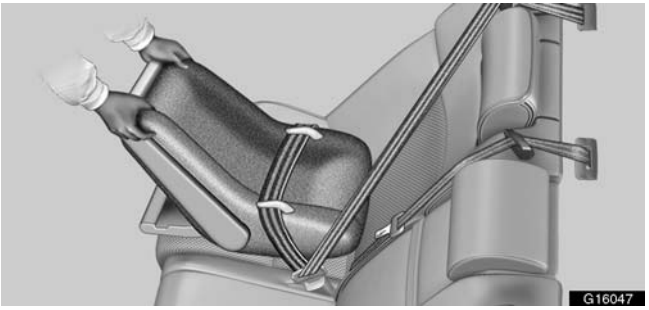


2. Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted even slightly, it cannot be extended.

To hold the infant seat securely, make sure the belt is in the lock mode before letting the belt retract.

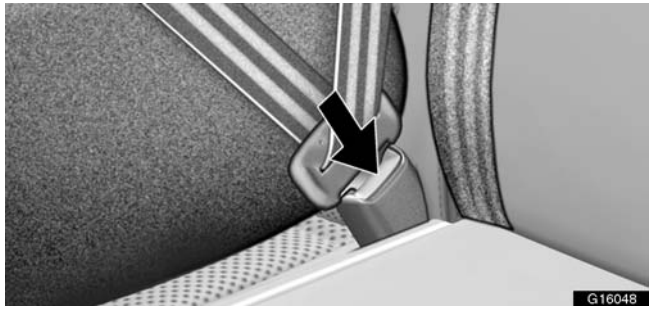


3. While pressing the infant seat firmly against the seat cushion and seatback, let the shoulder belt retract as far as it will go to hold the infant seat securely.



⚠ CAUTION

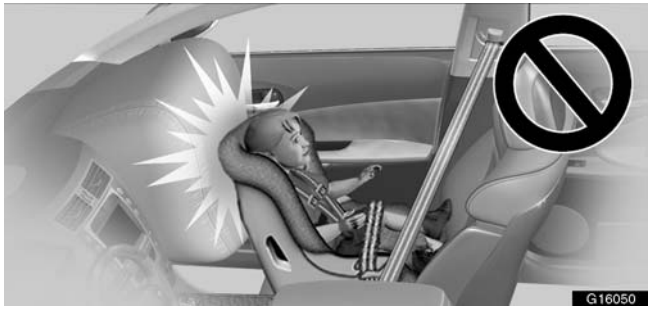
Push and pull the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer.



4. To remove the infant seat, press the buckle release button and allow the belt to retract completely. The belt will move freely again and be ready to work for an adult or older child passenger.

(B) Convertible seat installation

A convertible seat must be used in forward−facing or rear−facing position depending on the age and size of the child. When installing, follow the manufacturer's instructions about the appropriate age and size of the child as well as directions for installing the child restraint system.

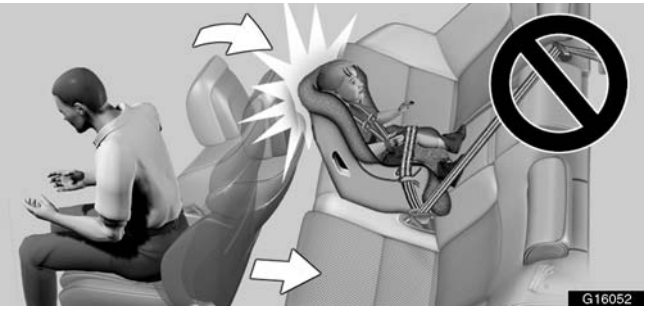


⚠ CAUTION

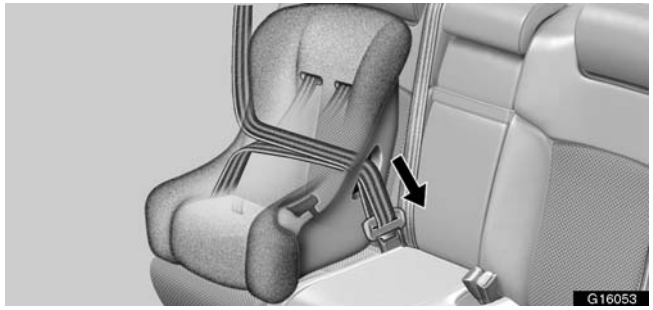
- **Never install a rear−facing child restraint system on the front passenger seat. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear−facing child restraint system is installed on the front passenger seat.**

▶***Move seat fully back***

- **A forward−facing child restraint system should be allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.**
- **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 pillar or roof side rail from which the front (or rear) side airbags or curtain shield airbags deploy even if the child is seated in a child restraint system. It is dangerous if the front (and rear) side airbags and curtain shield airbags inflate, and the impact could cause death or serious injury to the child.**



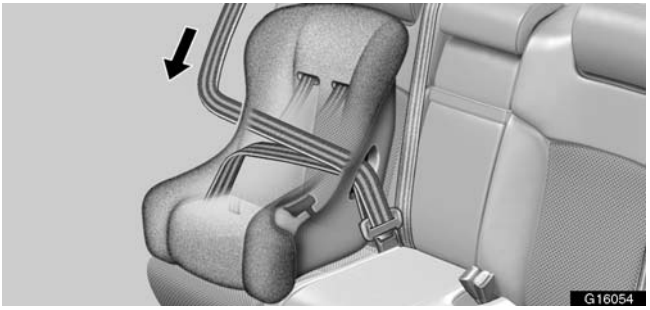
- **If the driver's seat position does not allow sufficient space for safe installation, install the child restraint system on the rear right seat.**



1. Run the lap and shoulder belt through or around the convertible seat following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt. Keep the lap portion of the belt tight.

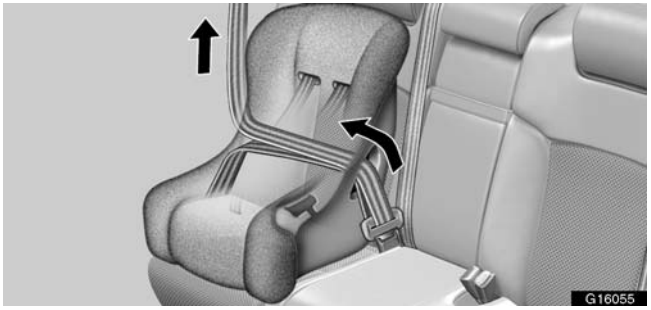
CAUTION

- **After inserting the tab, make sure the tab and buckle are locked and that the lap and shoulder portions of the belt are not twisted.**
- **Do not insert coins, clips, etc. in the buckle as this may prevent your child from properly latching the tab and buckle.**
- **If the seat belt does not function normally, it cannot protect your child from death or serious injury. Contact your Lexus dealer immediately. Do not install the child restraint system on the seat until the seat belt is fixed.**

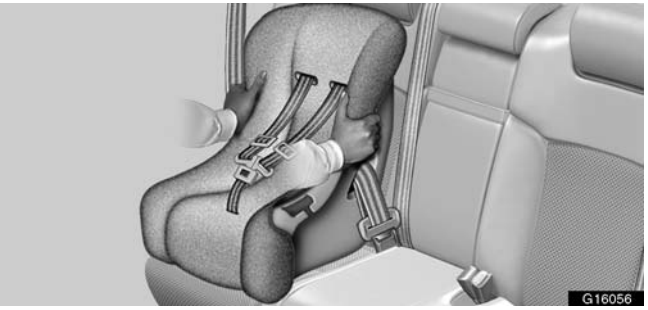


2. Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted even slightly, it cannot be extended.

To hold the convertible seat securely, make sure the belt is in the lock mode before letting the belt retract.

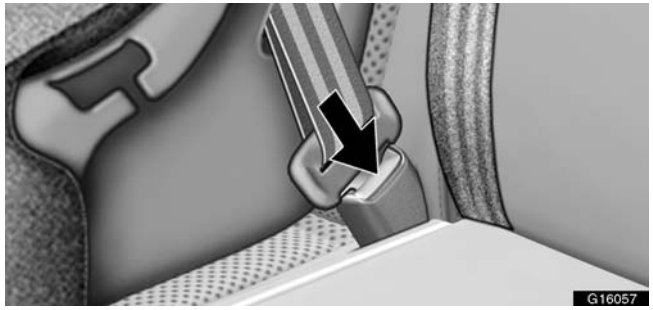


3. While pressing the convertible seat firmly against the seat cushion and seatback, let the shoulder belt retract as far as it will go to hold the convertible seat securely.



⚠ CAUTION

Push and pull the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer.



4. To remove the convertible seat, press the buckle release button and allow the belt to retract completely. The belt will move freely again and be ready to work for an adult or older child passenger.

(C) Booster seat installation

A booster seat must be used in forward−facing position only.

▶***Move seat fully back***

⚠ CAUTION

- **A forward−facing child restraint system should be allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.**

- **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 pillar or roof side rail from which the front (or rear) side airbags or curtain shield airbags deploy even if the child is seated in a child restraint system. It is dangerous if the front (and rear) side airbags and curtain shield airbags inflate, and the impact could cause death or serious injury to the child.**

1. Sit the child on a booster seat. Run the lap and shoulder belt through or around the booster seat and across the child following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt.

Make sure the shoulder belt is correctly across the child's shoulder and that the lap belt is positioned as low as possible on the child's hips. See "Seat belts" on page 147 for details.

CAUTION

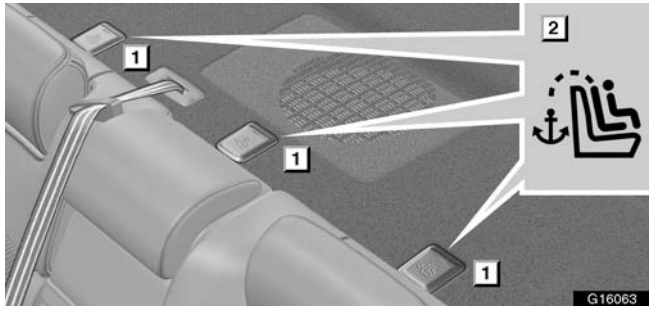
- **Always make sure the shoulder belt is positioned across the center of child's shoulder. The belt should be kept away from child's neck, but not falling off child's shoulder. Otherwise, the child may be killed or seriously injured in case of sudden braking or a collision.**

- **Both high−positioned lap belts and loose−fitting belts could cause death or serious injuries due to sliding under the lap belt during a collision or other unintended event. Keep the lap belt positioned as low on a child's hips as possible.**
- **For child's safety, do not place the shoulder belt under child's arm.**
- **After inserting the tab, make sure the tab and buckle are locked and that the lap and shoulder portions of the belt are not twisted.**
- **Do not insert coins, clips, etc. in the buckle as this may prevent your child from properly latching the tab and buckle.**
- **If the seat belt does not function normally, it cannot protect your child from death or serious injury. Contact your Lexus dealer immediately. Do not install the child restraint system on the seat until the seat belt is fixed.**

2. To remove the booster seat, press the buckle release button and allow the belt to retract.

Using a top strap

Follow the procedure below for a child restraint system that requires the use of a top strap.

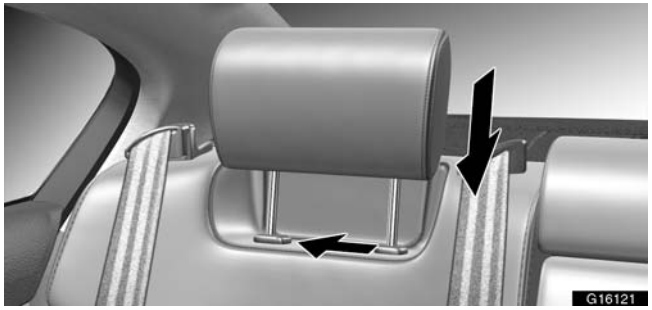


▶ 1 ***Anchor bracket*** 2 ***Symbol***

Use the anchor bracket on the package tray behind the rear seat to attach the top strap.

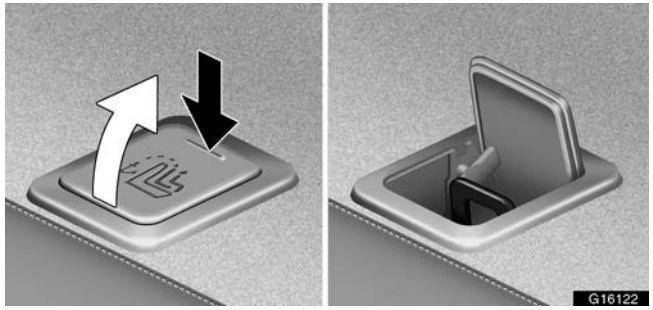
Anchor brackets are installed for each rear seating position.

This symbol indicates the locations of the anchor bracket.

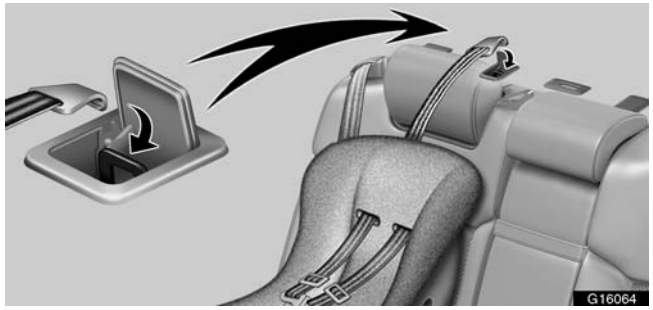


TO USE THE ANCHOR BRACKET

1. Lower the head restraint to the lowest position.



2. Push the lid of the anchor bracket to open it.



3. Fix the child restraint system with the seat belt.

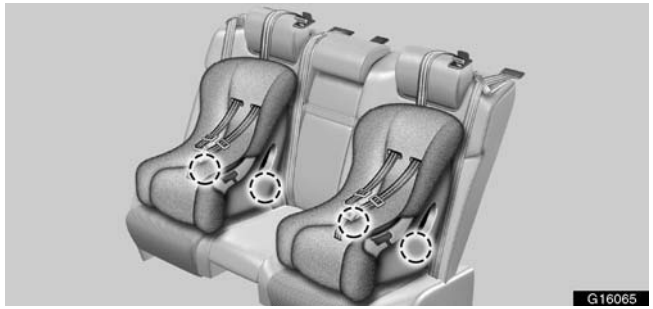
4. Latch the hook onto the anchor bracket and tighten the top strap.

For instructions to install the child restraint system, see “Types of child restraint system” on page 180.

⚠ CAUTION

Make sure the top strap is securely latched, and check that the child restraint system is secure by pushing and pulling it in different directions. Follow all the installation instructions provided by its manufacturer.

Installation with child restraint lower anchorages

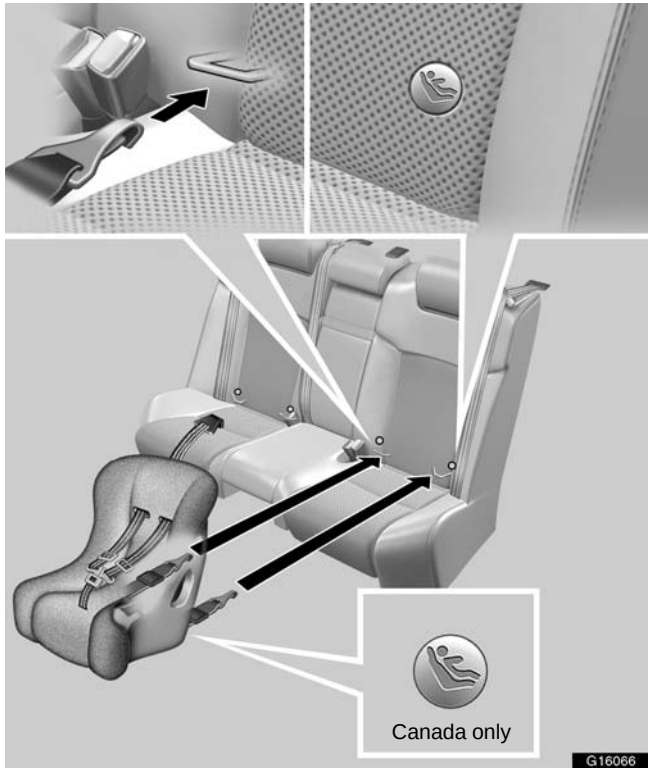


Lower anchorages for the child restraint systems complying with the FMVSS225 or CMVSS210.2 specifications are installed in the rear seat.

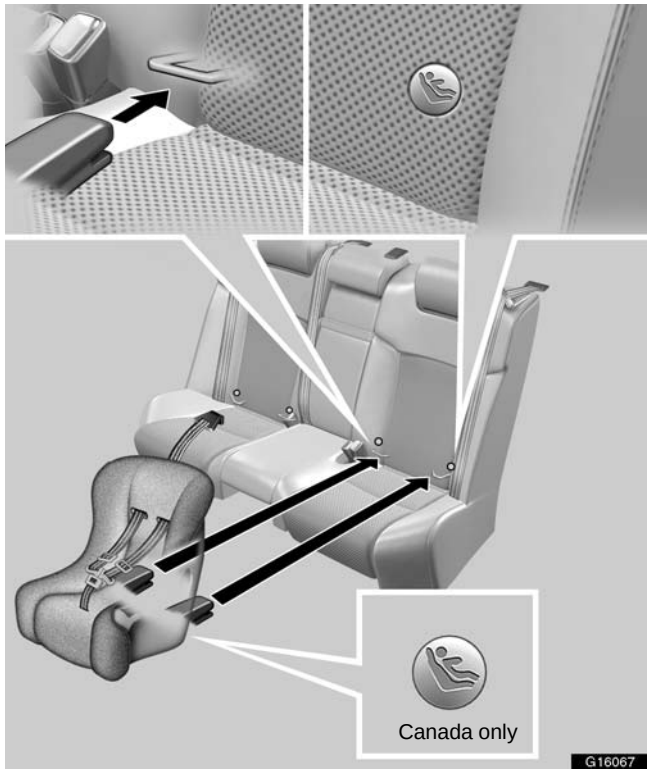
The anchorages are installed in the gap between the seat cushion and seatback of both outboard rear seats.

Child restraint system complying with the FMVSS213 or CMVSS213 specification can be fixed to these anchorages. In this case, it is not necessary to fix the child restraint system with a seat belt on the vehicle.

CHILD RESTRAINT SYSTEM INSTALLATION



▶*Type A*



▶*Type B*

1. Widen the gap between the seat cushion and seatback slightly and confirm the position of the lower anchorages near the button on the seatback.

Type A—

2. Latch the hooks of lower straps onto the anchorages and tighten the lower straps.

Type B—

2. Latch the buckles onto the anchorages

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

If your child restraint system has a top strap, it should be anchored. (For the installation of the top strap, see “Using a top strap” on page 193.)

For installation details, refer to the instruction manual equipped with each product.

CAUTION

- **When using the lower anchorages for the child restraint system, be sure that there are no irregular objects around the anchorages or that the seat belt is not caught.**
- **Push and pull the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer.**

DRIVING POSITION MEMORY SYSTEM

A microcomputer will memorize the position of the driver's seat, and the positions of the tilt and telescopic steering, and outside rear view mirrors. Three different driving position profiles can be entered into the computer's memory.

Recording a driving position in the computer's memory can only be done when the engine switch is selected in "IG–ON" mode and the selector lever is in the "P" position.

Setting the driving position

1. Adjust the driver's seat, tilt and telescopic steering and outside rear view mirrors to the desired position.

2. While pushing the "SET" button, push button "1","2" or "3" until the signal beeps.

The beep sound means that the positions are recorded in the computer's memory.

By repeating these two steps and pressing the remaining button, the driving position for another driver can be recorded.

To set a new memorized position, select the desired position and perform step 2. The previous memory will be erased and the new position will be set.

To make only slight changes to an already memorized position, the easiest way is to first activate the memorized position, then make the desired changes and perform step 2 above.

Recalling the memorized position

When you push button "1", "2" or "3", the driving position will be automatically adjusted to the position recorded for that button.

Conditions for memorized position activation

- Engine switch in “IG−ON” mode and selector lever in ”P” position, with the vehicle stopped.
- Engine switch in “OFF” mode and within 30 seconds of opening driver’s door.
  The memorized position can be activated, except for the tilt and telescopic steering.

If any driving position memory switch is pushed while one of the memorized driving position profiles is being activated, the operation will stop.

To activate the system, push the desired button (“1”, “2” or “3”) again.

The driving position memory control system cannot be operated while the vehicle is moving.

If the vehicle’s battery is disconnected, the computer’s memory will be erased and the memorized positions will have to be set again.

⚠ CAUTION

- **Do not start the vehicle while the adjustments are being made.**
- **Take care not to select the wrong button, or the seat could strike the rear passenger or hit your body against the steering wheel. If this happens, you can stop the movement by pressing another driving position memory switch.**

MEMORY RECALL FUNCTION

You can recall the memorized position using the entry function or wireless remote control.

If you unlock the door using the entry function or wireless remote control, the memorized seat position is recalled when the driver’s door is opened. The memorized steering wheel position will be recalled when you push the engine switch.

This function can be used after setting by the following procedure.

Setting the driving position onto the electronic key

The driver’s door must be closed with the engine switch turned off.

1. Push and hold the previously memorized driving position button “1”, “2” or “3”.

2. While depressing the button above, push and hold the “LOCK” or “UNLOCK” button on the electronic key until a beep sounds.

If you wish to set other driving position, repeat the above procedure. The previous setting will be erased and the new position will be set.

Resetting the driving position on the electronic key

The driver’s door must be closed with the engine switch turned off.

1. Push and hold the “SET” button.

2. Push and hold the “LOCK” or “UNLOCK” button on the electronic key until two beeps sound.

FRONT PASSENGER SEAT POSITION MEMORY SYSTEM

A microcomputer can memorize the position of the front passenger seat. Three different seat position profiles can be entered into the computer's memory.

Recording a seat position in the computer's memory can only be done when the engine switch is selected in "IG−ON" mode and the selector lever is in the "P" position.

Setting the front passenger seat position

1. Adjust the front passenger seat to the desired position.

2. While pushing the "SET" button, push button "1","2" or "3" until the signal beeps.

The beep sound means that the positions are recorded in the computer's memory.

By repeating these two steps and pressing the remaining button, the seat position for another passenger can be recorded.

To set a new memorized position, select the desired position and perform step 2. The previous memory will be erased and the new position will be set.

To make only slight changes to an already memorized position, the easiest way is to first activate the memorized position, then make the desired changes and perform step 2 above.

Recalling the memorized position

When you push button "1", "2" or "3", the seat position will be automatically adjusted to the position recorded for that button.

Conditions for memorized position activation

- Engine switch in “IG−ON” mode and selector lever in ”P” position, with the vehicle stopped.
- Engine switch in “OFF” mode and within 30 seconds of opening front passenger’s door.

If any seat position memory switch is pushed while one of the memorized seat position profiles is being activated, the operation will stop.

To activate the system, push the desired button (“1”, “2” or “3”) again.

The seat position memory control system cannot be operated while the vehicle is moving.

If the vehicle’s battery is disconnected, the computer’s memory will be erased and the memorized positions will have to be set again.

⚠ CAUTION

- **Do not start the vehicle while the adjustments are being made.**
- **Take care not to select the wrong button, or the seat could strike the rear passenger . If this happens, you can stop the movement by pressing another driving position memory switch.**

SECTION 1 – 7

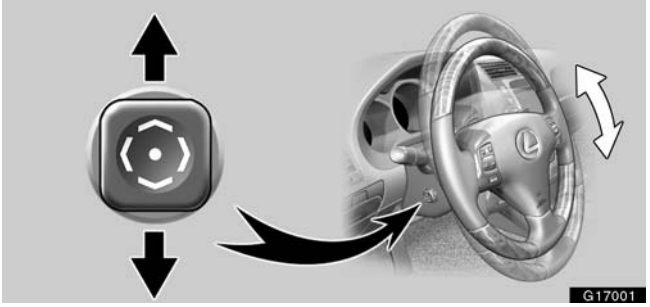
INSTRUMENTS AND CONTROLS

Steering wheel and mirrors

Tilt and telescopic steering column 204
Outside rear view mirrors 205
Inside rear view mirror 209
Vanity mirrors 214

TILT AND TELESCOPIC STEERING COLUMN

Adjustment of steering column tilt

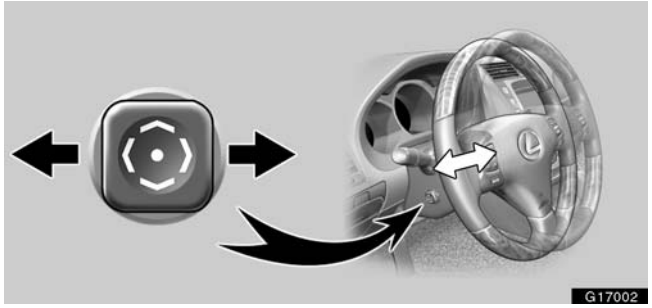


To adjust the tilt of the steering column, push the control switch upward or downward to set it to the desired position.

⚠ CAUTION

Do not adjust the steering column while the vehicle is moving. Doing so may cause the driver to mishandle the vehicle and an accident may occur resulting in death or serious injuries.

Adjustment of telescopic steering column

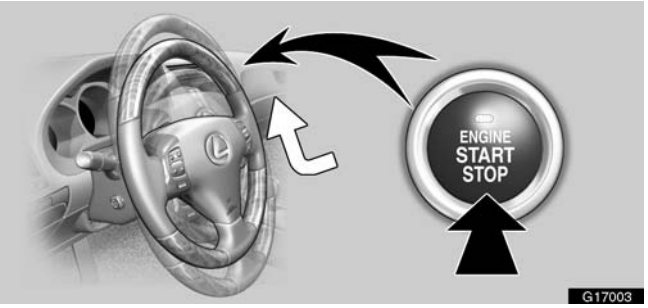


To adjust the steering column length, push the control switch forward or backward to set the steering wheel to the desired position.

⚠ CAUTION

Do not adjust the steering column while the vehicle is moving. Doing so may cause the driver to mishandle the vehicle and an accident may occur resulting in death or serious injuries.

Automatic tilt away*



When the engine switch is off, the steering column moves forward away from the driver and also tilts up for easy exit and entry.

When you turn on the engine switch, the steering column returns to the previously set position.

NOTE:
**This feature can be deactivated.*
Ask your Lexus dealer for details.

OUTSIDE REAR VIEW MIRRORS

Adjust the mirror so that you can just see the side of your vehicle in the mirror.

Be careful when judging the size or distance of any object seen in the outside rear view mirror on the passenger's side because it is a convex mirror. Any object seen in a convex mirror will look smaller and farther away than if seen in a normal flat mirror.

When the inside rear view mirror darkens in "AUTO" mode, the outside rear view mirrors also darken to reduce the reflection of the headlights of the following vehicle. For details, see "Inside rear view mirror" on page 209.

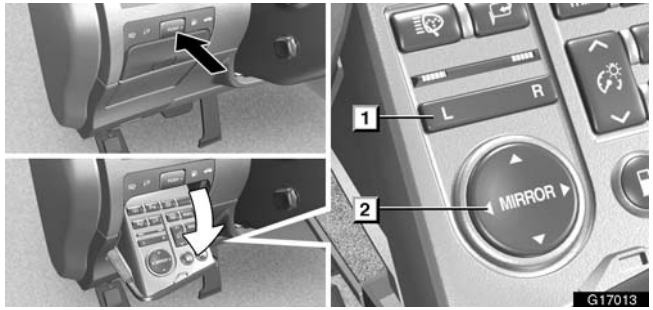
When you push the rear window and outside rear view mirror defogger switch, the heater panels in the outside rear view mirrors will quickly clear the mirror surface. (See "Rear window and outside rear view mirror defogger switch" on page 56.)

CAUTION

- **Do not adjust the mirror while the vehicle is moving. Doing so may cause the driver to mishandle the vehicle and an accident may occur resulting in death or serious injuries.**
- **Since the mirror surfaces can get hot, do not touch them when the rear window and outside rear view mirror defogger switch is on.**

Power rear view mirror control

The power rear view mirror control switch is located in the switch box.



▶ 1 *Master switch* 2 *Control switch*

Push the button to use the switch box. Push "L" (left mirror) or "R" (right mirror) on the master switch and then push the control switch on the desired side.

The indicator light of the switch you selected comes on when you push "L" or "R".

When you move the selector lever to "R" position with "L" or "R" switch on, the rear view mirrors will be automatically adjusted down to help backing up.

While the indicator light is on, the mirror can be adjusted. When you push the same side again, the light goes out and the mirror cannot be adjusted. After adjustment, be sure to close the switch box to its original position.

The power rear view mirrors can be adjusted when the engine

switch is in “ACC” or “IG−ON” mode.

⚠ CAUTION

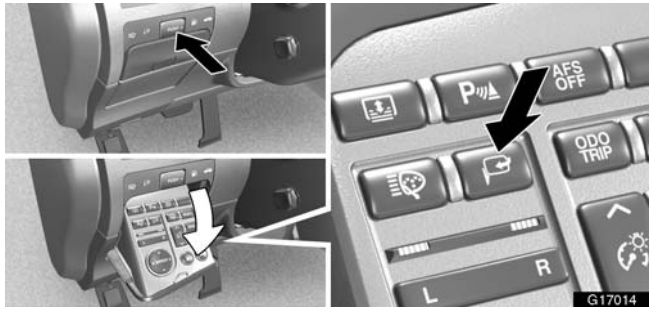
To reduce the chance of injury in case of an accident or a sudden stop, keep the switch box closed when not in use while driving.

NOTICE

If ice should jam the mirror, do not operate the control or scrape the mirror face. Use a spray de−icer to free the mirror.

Folding rear view mirrors

The power rear view mirror folding switch is located in the switch box.



Push the button to use the switch box and then push the folding switch.

The rear view mirrors are folded backward. When you push the switch again, the mirrors will be extended to their original position. After adjustment, be sure to close the switch box to its original position.

The engine switch must be selected in “ACC” or “IG−ON” mode.

The rear view mirrors can be folded backward for parking in compact areas.

CAUTION

- **To avoid personal injury and any mirror malfunction, do not touch the mirror while it is moving.**
- **Do not drive with the mirrors folded backward. Both the driver and passenger side rear view mirrors must be extended and properly adjusted before driving.**
- **To reduce the chance of injury in case of an accident or a sudden stop, keep the switch box closed when not in use while driving.**

Outer foot lights

The outer foot lights illuminate the ground near the doors for about 15 seconds to ensure safe footing for the driver and passengers who are about to get in the vehicle.*

The outer foot lights come on in the following conditions:

- You are getting closer to the vehicle carrying an electronic key and you enter the effective range of the entry function (about 1 m (3 ft) from each outside door handle).
- The doors are unlocked with the wireless remote control.
- The doors are unlocked with the power door lock switch on the driver's side.

The outer foot lights go off 15 seconds after the lights come on or when:

- Pushing the lock switch on the outside door handle with an electronic key in possession,
- the doors are locked with the wireless remote control function,
- the doors are locked by inserting a mechanical key into the door keyhole,
- the doors are locked with the power door lock switch on the driver's side, or
- the selector lever is moved out of "P" position when the engine switch is on.

NOTE:
** The outer foot lights illuminating time can be changed. Ask your Lexus dealer for details.*

INSIDE REAR VIEW MIRROR

Adjust the mirror so that you can just see the rear of your vehicle in the mirror.

Pushing the "AUTO" button changes the mode between "AUTO" and "DAY".

The indicator comes on when the "AUTO" mode is selected.

"DAY" mode: The mirror surface is normal.

"AUTO" mode: If the mirror detects light from the headlights of the vehicle behind you, the mirror surface darkens slightly to reduce the reflected light.

When the inside rear view mirror surface changes, the outside rear view mirror surfaces will also become darker.

When the engine switch is selected in "IG–ON" mode, the inside rear view mirror always turns on in the "AUTO" mode.

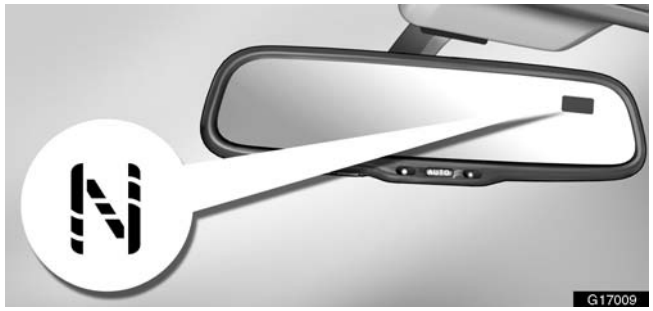
When the outside air temperature is low, it may take a little longer for the mirror to darken in response to the detection of headlights.

⚠ CAUTION

Do not adjust the mirror while the vehicle is moving. Doing so may cause the driver to mishandle the vehicle and an accident may occur resulting in death or serious injuries.

To ensure correct functioning of anti−glare mirror sensors located on both sides of the mirror, do not touch or cover the sensors with your finger or a piece of cloth, etc.

Compass



The compass indicates the direction in which the vehicle is heading. The illustration shown above indicates the vehicle is heading north.

Displays	Directions
N	North
NE	Northeast
E	East
SE	Southeast
S	South
SW	Southwest
W	West
NW	Northwest

Pushing the "AUTO" button for longer than 3 seconds turns on or off the compass display.

The compass may not show the correct direction in the following conditions:

- The vehicle is stopped immediately after turning.

  The compass does not adjust while the vehicle is stopped.
- The engine switch is turned off immediately after turning.
- The vehicle is on an inclined surface.
- The vehicle is in a place where the earth's magnetic field is subject to interference by artificial magnetic fields (underground parking, under a steel tower, between buildings, roof parking, near a crossing, near a large vehicle, etc.).
- The vehicle is magnetized. (There is a magnet or a metal object near the inside rear view mirror.)
- The battery has been disconnected.
- Any door is open.

If the deviation is small, the compass works to calibrate the direction automatically while the vehicle is in motion.

For obtaining additional precision or for complete calibrating, see "CALIBRATING THE COMPASS" below.

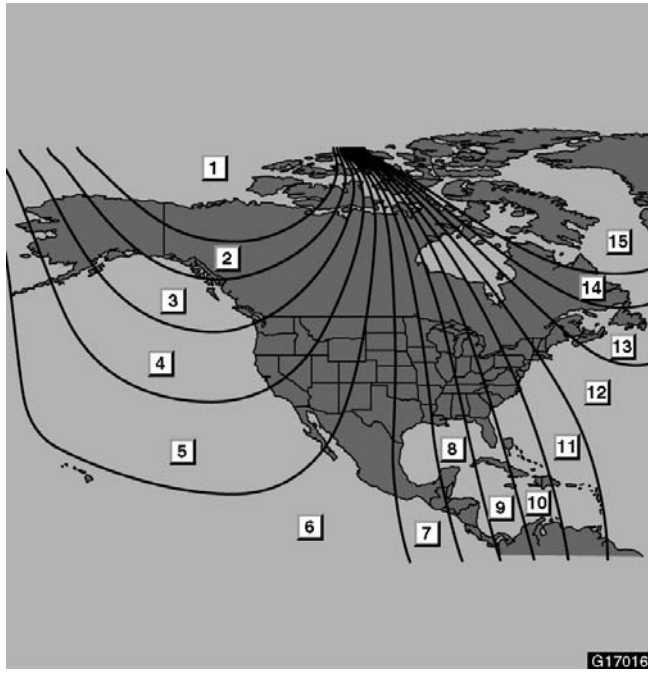
NOTICE

Do not put magnets or a metal object near the inside rear view mirror. Doing this may cause malfunction of the compass sensor.

CALIBRATING THE COMPASS (deviation calibration)

The direction display on the compass deviates from the true direction determined by the earth's magnetic field. The amount of deviation varies according to the geographic position of the vehicle.

To adjust for this deviation, stop the vehicle and push the "AUTO" button for longer than about 6 seconds until the zone number (1–15) appears on the display. Then push the button again, referring to the following map to select the number of the zone where the vehicle is.



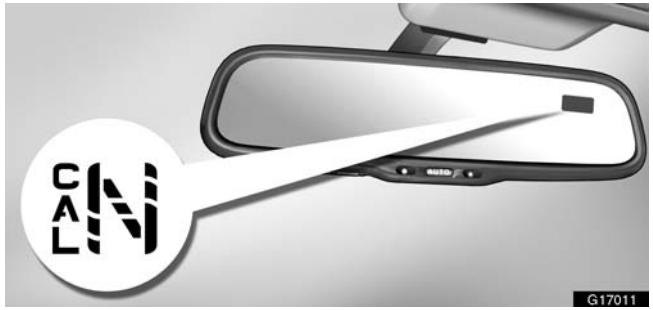
▶*Zone number*

If the direction is displayed several seconds after adjustment, the calibration is finished.

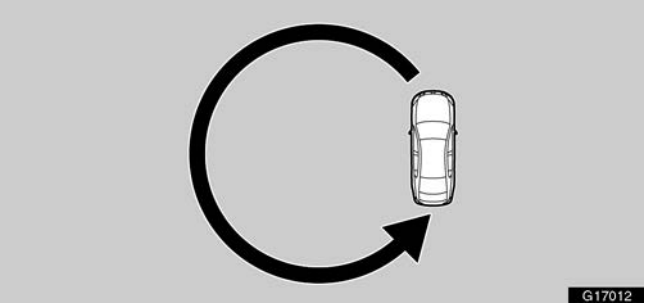
⚠ CAUTION

Do not adjust the display while the vehicle is moving. Be sure to adjust the display only when the vehicle is stopped.

CALIBRATING THE COMPASS (circling calibration)



"CAL" appears on the display in case the circling calibration is required due to a drastic change in the magnetic field. To rectify this, follow the calibration procedure below.



Drive the vehicle slowly (at 8 km/h (5 mph) or lower) in a circle until the direction is displayed. If there is not enough space to drive in a circle, drive around the block until the direction is displayed.

After driving in 1 to 3 circles in the above method, calibration is complete with the “CAL” off the display and the direction shown on the display.

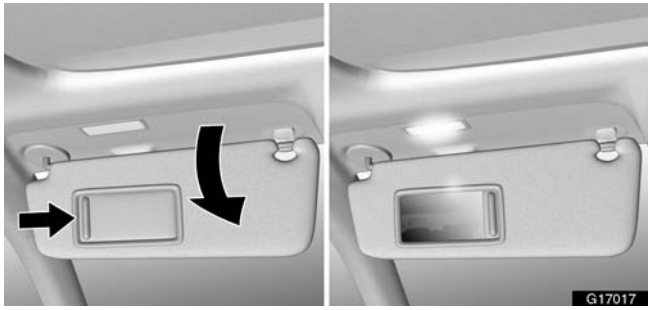
If calibration cannot be performed because of the vehicle is magnetized, take your vehicle to a Lexus dealer.

- Do not perform circling calibration of the compass in a place where the earth’s magnetic field is subject to interference by artificial magnetic fields (underground parking, under a steel tower, between buildings, roof parking, near a crossing, near a large vehicle, etc.).
- During calibration, do not operate electric systems (moon roof, power windows, etc.) as they may interfere with the calibration.

CAUTION

- **When doing the circling calibration, be sure to secure a wide space, and watch out for people and vehicles in the neighborhood. Do not violate any local traffic rules while performing circling calibration.**
- **Do not adjust the display while the vehicle is moving. Be sure to adjust the display only when the vehicle is stopped.**

VANITY MIRRORS



To use the vanity mirror, swing the sun visor down and slide the cover.

The vanity light comes on when you slide the cover. However if the sun visor is not hooked securely, the light may not come on.

NOTICE
To prevent the battery from being discharged, do not leave the cover open for a long time while the engine is stopped.

SECTION 1 – 8

INSTRUMENTS AND CONTROLS

Touch screen

Overview 216
Information menu 218

OVERVIEW

▶*Vehicles with Navigation system*

▶*Vehicles without Navigation system*

1 ***Touch screen***

2 ***"CLIMATE" button***
The air conditioning operation screen is shown.
(See page 254 for details.)

3 ***"AUDIO" button***
The audio operation screen is shown.
(See page 274 for details.)

4 ***"INFO"button***
The information menu screen is shown.
(See page 218 for details.)

5 ***"DISP" button***
The display adjustment screen is shown.
(See page 251 for details.)

Initial screen

When you select the engine switch in “ACC” or “IG–ON” mode, the initial screen appears and the system begins operating.

After a few seconds, the initial screen disappears.

CAUTION

When the vehicle is stopped with the engine running, always apply the parking brake for safety.

Touch switch operation

This system is operated mainly by the switches on the screen. To prevent damage to the screen, lightly touch switches on the screen with your finger. When you touch a switch on the screen, a beep sounds.

Do not use objects other than your finger to touch the screen.

INFORMATION

- ***If the system does not respond to a touch of a switch, move your finger away from the screen and then touch it again.***
- ***You cannot operate dimmed switches.***
- ***Wipe off fingerprints on the surface of the display using a glass cleaning cloth.***
- ***The displayed image may become darker and moving images may be slightly distorted when the display is cold.***

INFORMATION MENU

▶***Vehicles with Navigation system****

▶***Vehicles without Navigation system***

**For other functions such as Maintenance and Calender, see "Navigation System Owner's Manual".*

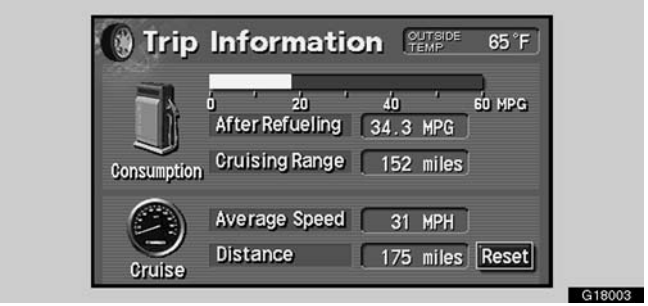
For "Lexus park Assist", see "Setting the park assist system" on page 385. For "Adjust clock", see "Clock" on page 103.

Trip information

Trip information such as driving time, driving distance, average vehicle speed, fuel consumption, etc. can be displayed on the screen.

1. Push the "INFO" button to display the Information Menu screen.

2. Touch the "Trip Info." switch.



Consumption

The consumption is calculated and displayed based on the driving distance and the fuel consumption for 2 seconds with engine running.

The value is updated every 0.5 seconds.

If you are driving at low speeds just before stopping, the accurate figure may not be shown.

After Refueling

The consumption after refueling is calculated and displayed based on the total driving distance and the total fuel consumption after refueling.

The value is updated every 10 seconds.

When refueling, be sure to stop your vehicle and turn the engine switch off.

Cruising Range

How far you can drive with the remaining fuel is displayed.

Even though the display indicates sufficient miles to run, if the fuel level on the fuel gauge approaches “E” or the low fuel level warning light comes on, fill the fuel tank as soon as possible.

INFORMATION

- ***When you first start driving your new vehicle, the correct cruising range may not be shown. One or more refills of 10 gallons or more may be required for the system to set its calibration.***
- ***The cruising range displayed is calculated based on past fuel consumption and may vary according to your driving style and road condition.***

Average Speed

The Average Speed is displayed. The average vehicle speed is calculated and displayed based on the total driving distance and the total driving time after the engine is started.

The displayed value is updated every 10 seconds.

To calculate from the beginning, touch the “Reset” switch.

Distance

The distance after engine starting is displayed.

When refueling, be sure to stop your vehicle and turn the engine switch off.

Hands−free system

Hands−free system allows you to make or receive a call without taking your hands off the steering wheel by connecting your cellular phone.

This system supports the Bluetooth. Bluetooth is a wireless data system by which you can call without your cellular phone connecting with a cable or placing on a cradle.

If your cellular phone does not support the Bluetooth, this system can not function.

⚠ CAUTION

While you are driving, do not use a cellular phone or connect the Bluetooth phone.

NOTICE

Do not leave your cellular phone in the vehicle. The temperature indoor may be high and damage the phone.

INFORMATION

In the following conditions, the system may not function.

- ***The cellular phone is turned off.***
- ***The current position is outside the communication area.***
- ***The cellular phone is not connected.***
- ***The cellular phone has a low battery.***

By pushing the telephone button above, you can receive a call or hang up without taking your hands off the steering wheel.

You can use the microphone above when talking on the phone.

The party's voice outputs from the driver's speaker. When the received calls or received voice outputs, the audio from the audio system or voice guidance from the Navigation system will be muted.

INFORMATION

- ***Talk alternately with your party on the phone. If you talk at the same time, the voice may not reach each other. (It is not a malfunction.)***
- ***Keep the volume of receiving voice down. Otherwise, echo is coming up. When you talk on the phone, speak clearly towards the microphone.***
- ***In the following situations, your voice may not reach the party.***
  - ***Driving on unpaved road. (Making a traffic noise.)***
  - ***Driving at the high speed.***
  - ***The window is open.***
  - ***Turning the air conditioning vents towards the microphone.***
  - ***The sound of the air conditioning fan is loud.***

1 Indicates a condition of Bluetooth connection.

"Blue" indicates excellent condition of Bluetooth connection.

"Yellow" indicates the condition easy to disconnect the Bluetooth, causing a deterioration in voice.

Not displayed: no connection to the Bluetooth.

2 Indicates the receiving area.

"Rm" is displayed when receiving in Roaming area.

"Hm" is displayed when receiving in Home area.

3 Indicates the level of reception.

The level of reception does not always correspond with the one of your cellular phone.

4 **"A"** is displayed when calling in analogue.
"D" is displayed when calling in digital.

Nothing is displayed when the system can get no information from your cellular phone.

INFORMATION

This system supports the following service.

- ***HFP (Hands Free Profile) Ver. 1.0***
- ***OPP (Object Push Profile) Ver. 1.1***

If your cellular phone does not support HFP, you cannot enter the Bluetooth phone, and take OPP service individually.

An antenna for the Bluetooth connection is built in the display. The indication of the Bluetooth connection may turn yellow and the system may not function when you use the Bluetooth phone in the following conditions and places.

- Your cellular phone is hiding behind the display (behind the seat or in the glove box and console box).
- Your cellular phone touches (or is covered with) metal materials.

Leave the Bluetooth phone on the place where “Blue” indication is displayed.

Bluetooth®

BLUETOOTH is a trademark owned by Bluetooth SIG. Inc.

FCC ID: HYQBTA01A
IC ID: 1551A−BTA01A
MADE IN JAPAN

This device complies with Part 15 of the FCC Rules and RSS−210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION

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

(a) Entering the Bluetooth phone

To use a hands−free system, you need to enter your phone in the system. Once you registered it, you can make a hands−free call.

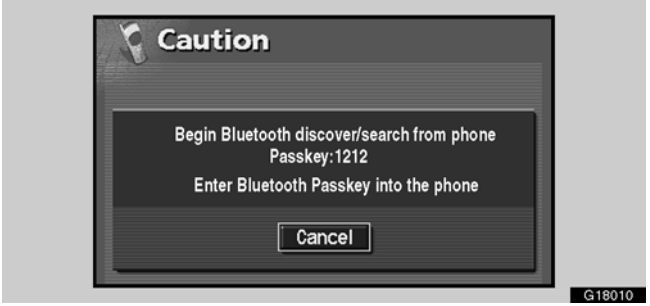
1. Push the “INFO” button to display the “Information Menu” screen.

2. Touch the “Telephone” switch to display “Telephone” screen.

You can also push of the telephone button to display this screen when the vehicle is stopped.

3. Touch the “Settings” switch to display “Settings” screen.

4. Touch the “Add Phone” switch to connect your cellular phone to the system.



5. When this screen is displayed, input the Passkey displayed on the screen into the phone.

For the operation of the phone, see the manual that comes with your cellular phone.

If you want to cancel it, touch “Cancel”.

6. When the connection is completed, device name and Bluetooth Device Address is displayed.

You do not need to enter it in case of using the same phone.

(b) Selecting the Bluetooth phone

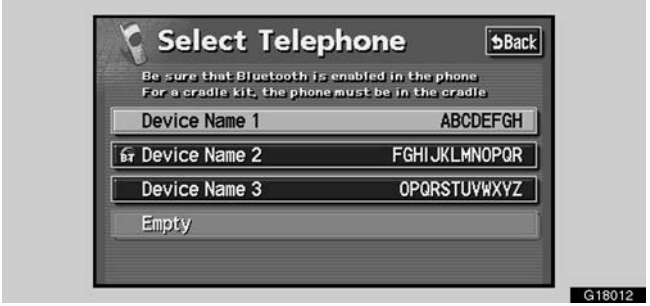
In case of registering a number of Bluetooth phones, you need to select the usual phone.

1. Touch the "Settings" switch to display "Settings" screen.

2. Touch the "Select" switch to display "Select Telephone" screen. You can select the Bluetooth phone from a maximum of 4 numbers.

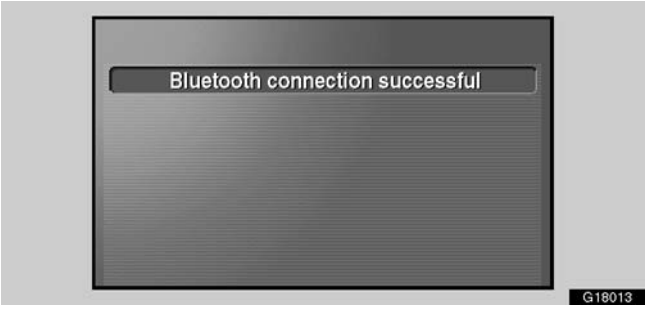
"Empty" is displayed when you do not register the Bluetooth phone yet.

Bluetooth mark is displayed when you choose the Bluetooth phone.



Although you can register up to 4 Bluetooth phones in the system, one Bluetooth phone can only function.

- **To connect the Bluetooth phone**



When you select the engine switch in “ACC” or “IG−ON” mode, the selected Bluetooth phone will be automatically connected and the connection result is displayed.

Always keep the Bluetooth phone to enable the connection.

This screen appears when the Bluetooth phone is first connected after you select the engine switch in “ACC” or “IG−ON”.

- **To reconnect the Bluetooth phone**

If the Bluetooth phone is disconnected with a poor reception from the Bluetooth network when the engine switch is selected in “ACC” or “IG−ON” mode, the system automatically reconnects the Bluetooth phone. In this case, the connection result is not displayed.

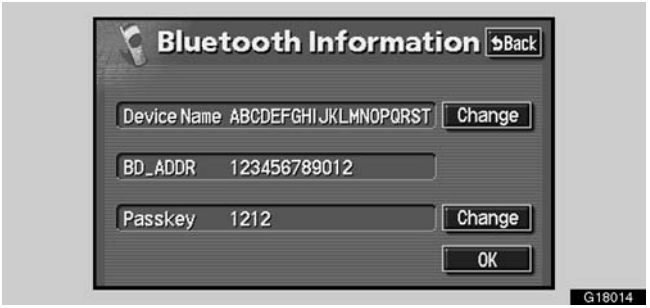
If the Bluetooth is disconnected on purpose such as you turned your cellular phone off, this does not happen. Reconnect it by the following methods.

- Select the Bluetooth phone again.
- Enter the Bluetooth phone.

- **To confirm the Bluetooth information**

You can confirm or change the detailed setting of the Bluetooth phone.

Touch the “Settings” switch of Bluetooth to display “Bluetooth Information” screen.



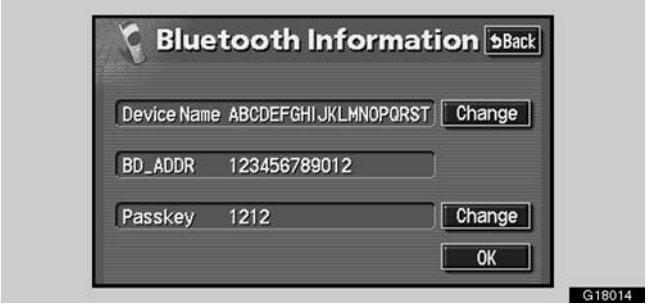
You can change the Device Name and Passkey.

BD_ADDR is Bluetooth device address. Do not change the Device Name to the same name as the one of the other Bluetooth phones. They cannot be identified.

BD_ADDR is different depending on the system. You can confirm the address when it cannot be identified.

To change the Device Name—

You can change the Device Name to the desired one from the name already registered in the system.

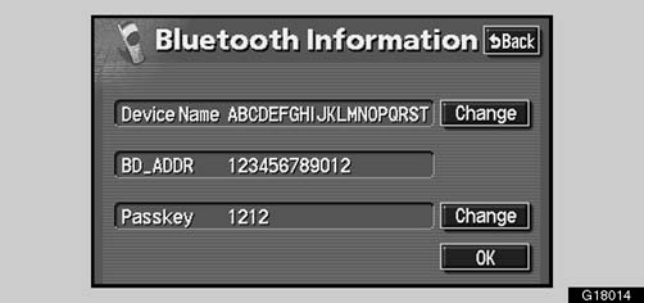


Touch the “Change” switch of Device Name to display the “Device Name List” screen.

Select the desired name and touch “OK”.

To change the Passkey—

The Passkey in the system is initially fixed. You can change the Passkey within 4–8 figures.



Touch the “Change” switch of Passkey to display “Enter Bluetooth Passkey” screen.

Touch the desired key to input the Passkey.

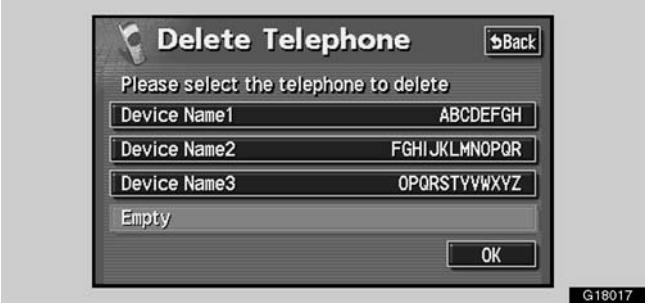
Each time you touch “◀”, an inputted number is deleted.

Touch “Enter”.

(c) Deleting the Bluetooth phone

1. Touch the "Settings" switch to display "Settings" screen.

2. Touch the "Delete" switch to display "Delete Telephone" screen. You can delete the Bluetooth phone which you registered.



Select the desired phone from the list and touch "OK".

(d) Calling on the Bluetooth phone

After you enter the Bluetooth phone, you can call by using hands−free system. This system has 6 methods below by which you call.

By dial—

You can call by inputting the telephone number.

This cannot be operated while you are driving.

Touch the desired key to input the telephone number.

Each time you touch "◀", an inputted number is deleted.

Touch "☎" or push ☎ of the telephone button.

By phone book—

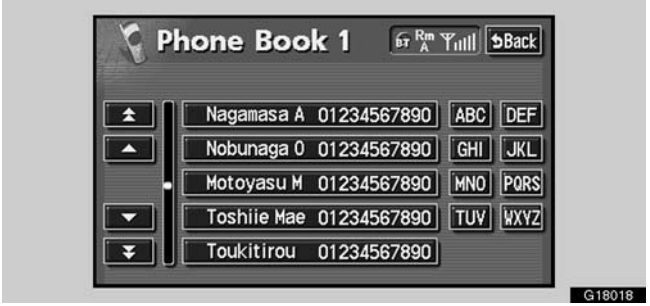
You can call by phone book data which is transferred from your cellular phone.

The system has two phone books. You can register up to 500 numbers in each book.

This cannot be operated while you are driving.

Touch the desired key to input the telephone number.

1. Touch the "Phone Book" switch to display "Phone Book" screen.



2. Select the desired number from the list.

Touch "" or push of the telephone button.

By dialed numbers—

You can call by dialed number. The system memorizes up to 5 dialed numbers. If it is over 5, the oldest number is deleted.

This cannot be operated while you are driving.

1. Touch the "Log" switch to display "Outgoing Calls" screen.

- When you call by phone book, the name (if registered) is displayed.
- When you call the same number continuously, the newest number is only registered.

2. Select the desired number from the list.

Touch “ ” or push of the telephone button.

By received calls—

You can call by received calls. When a call is received, the system memorizes up to 5 numbers. If it is over 5, the oldest number is deleted.

This cannot be operated while you are driving.

1. Touch the "Log" switch to display.

2. Touch the "Incoming Calls" switch to display "Incoming Calls" screen.

- When a telephone number registered in phone book is received, the name and the number is displayed.
- Received calls which you did not answer are also memorized in the system and “Abs.” is displayed on the left side of the number.
- Unnotified telephone number such as a public telephone is not memorized in the system.

3. Select the desired number from the list.

Touch “” or push of the telephone button.

- An international phone call may not be made depending on the cellular phone which you have.

By one touch call—

You can call by registered telephone number which you selected from a phone book, dialed numbers and received calls. (See page 244 for registering the one touch dial.)

1. Touch the "1−touch Dial" switch to display "1−touch Dial" screen.

2. Touch the desired number to call. You can change the page by touching "1−touch Dial 2" or "1−touch Dial 3".

When you push the telephone button while you are driving, the screen above appears. Touch the desired name to call. (The telephone number is not displayed.)

By POI call—

You can call by operating a switch when "Call" is displayed on the screen from Navigation system. (See the Navigation System Owner's Manual.)

(e) Receiving on the Bluetooth phone

When a call is received, this screen is displayed with a sound. Touch "" or push of the telephone button to talk on the phone.

To hang up the phone:

Touch "" or push of the telephone button again.

To refuse to receive the call:

Touch "" and hold it.

To adjust the volume of received call:

Touch "–" or "+".

On the international phone call, the party's name may not be displayed correctly depending on the cellular phone which you have.

(f) Talking on the Bluetooth phone

While you are talking on the phone, this screen is displayed. You can do the operation below on the screen.

To adjust the volume of the party's voice:

Touch "–" or "+" switch.

To hang up the phone:

Touch the "" switch or push of the telephone button.

To mute your voice:

Touch the "Mute ON" switch.

To input the Key:

Touch the "0–9" switch.

Touch the desired number to input the key.

To hang up the phone:

Touch "☎" or push ☎ of the telephone button.

This cannot be operated while you are driving.

If the continuous tone signal is registered in a phone book, this screen appears. (If not registered, "Send" and "Exit" is not displayed.)

Confirm the number displayed on the screen and touch "Send" switch. The number to the marked sign will be sent.

When you touch "Exit", this function will be finished and normal tone screen appears.

To hang up the phone:

Touch "☎" or push ☎ of the telephone button.

The continuous tone signal is the marked sign (p or w) and the number following telephone number. (ex. 056133p0123w#1*)

When you call the number registered in phone book and input a code number and the like to operate an answering machine or use a telephone service in bank, you can do this operation.

(g) Changing the settings of the Bluetooth phone

Touch the “Settings” switch to display “Settings” screen.

You can change the settings of the phone.

To change the phone book—

The system has two phone books. You can select either phone book.

Touch the “Phone Book 1” or “Phone Book 2” switch.

To transfer the telephone number—

You can transfer the telephone numbers in your Bluetooth phone to the system. Up to 500 numbers can be registered in one phone book.

Transfer it while the engine is running.

1. Touch the “Start Transfer” switch to display “Data Transfer” screen.

2. Touch the “Overwrite” or “Add” switch.

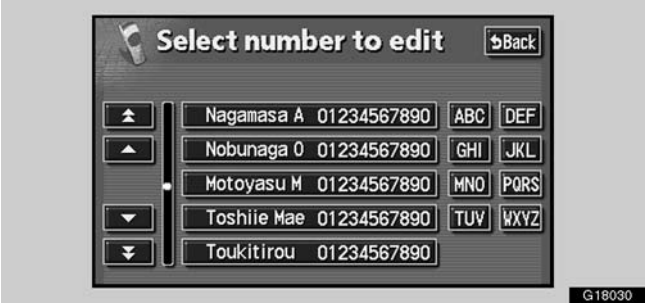
3. Transfer the phone book data to the system using the Bluetooth phone.

This screen appears while transferring. To cancel it, touch the “Cancel” switch. If the transferring is interrupted on the way, the phone book data transferred until then can be memorized in the system.

To register the one touch dial—

You can register the desired telephone number from phone books, dialed numbers and received calls. Up to 17 one touch dial numbers a phone book can be registered.

1. Touch the "Set One Touch" switch in which you want to register the phone number.



2. Touch the desired telephone number.

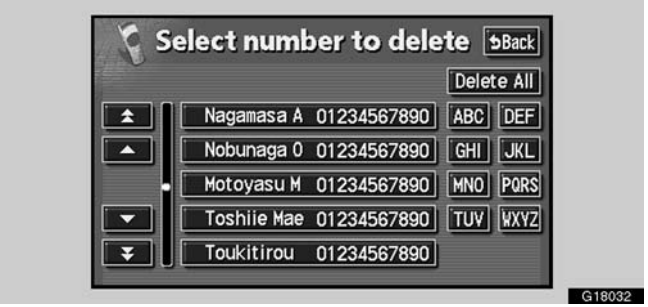
Select the new registration from 1−18 except 6 and touch the switch.

A latest received number is registered in the 6th item.

To delete the memory—

- **To delete the telephone number in the phone book.**

Touch the “Delete” switch of “Phone Book”.



Select the desired number from the list.

If you want to delete all the phone numbers in phone book, touch the “Delete All” switch.

Touch “YES” switch.

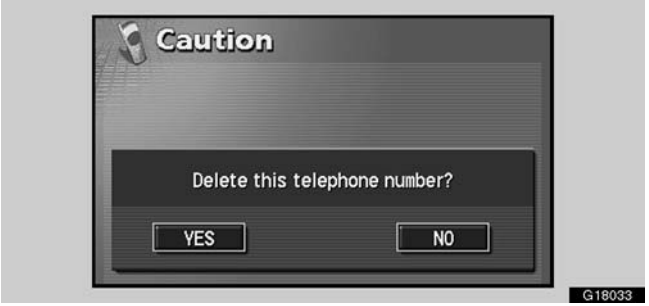
When you touch “NO”, the previous screen returns.

- **To delete the dialed number**

Touch the “Delete” switch of “Outgoing Calls”.

Select the desired number from the list.

If you want to delete all the dialed numbers, touch the “Delete All” switch.



Touch “YES” switch.

When you touch “NO”, the previous screen returns.

- **To delete the received calls**

Touch the “Delete” switch of “Incoming Calls”.

Select the desired number from the list.

If you want to delete all the received calls, touch the “Delete All” switch.

Touch “YES” switch.

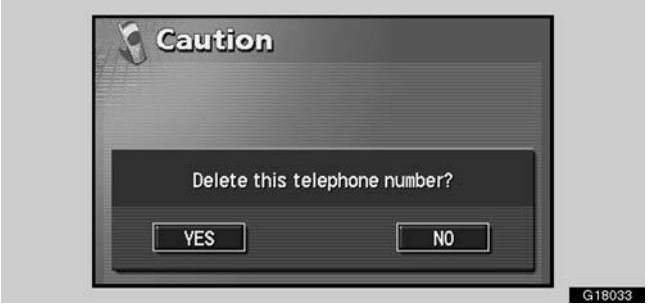
When you touch “NO”, the previous screen returns.

- **To delete the one touch dial**

Touch the “Delete” switch of “1−touch Dial”.

Select the desired number from the list.

If you want to delete all the one touch dial numbers, touch the “Delete All” switch.



Touch “YES” switch.

When you touch “NO”, the previous screen returns.

Language

You can select the language shown on the screen.

1. Push the “INFO” button on the bezel to display the “Information Menu” screen.

2. Touch the “Language” switch.

3. Touch the desired switch to select the language.

When you select the language, touch “OK”.

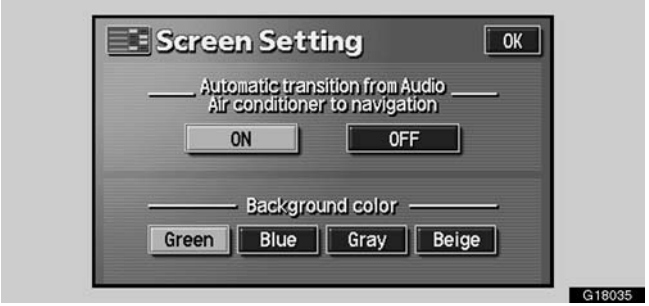
Setting screen

1. Push the “INFO” button on the bezel to display the “Information Menu” screen.

2. Touch the “Screen Setting” switch.

(a) Automatic transition

You can select a function that enables automatic return to the navigation screen from the audio screen.



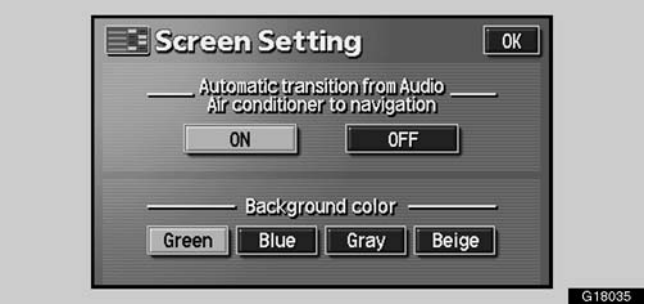
Select the “ON” or “OFF” and then touch the “OK”.

ON: The navigation screen automatically returns from the audio or air conditioning screen 20 seconds after the end of audio or air conditioning screen operation.

OFF: The audio or air conditioning screen remains on.

(b) Background color

You can select a background color.

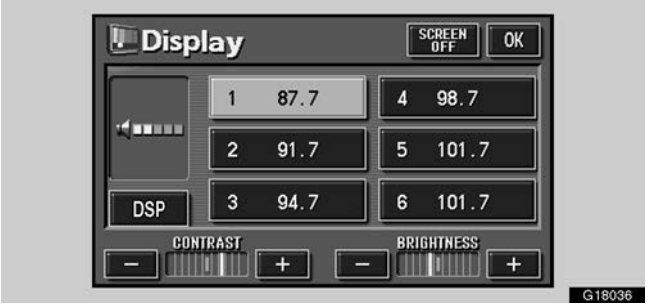


Select the desired background color and then touch the "OK".

Screen adjustment

You can adjust the brightness or contrast of the screen depending on the brightness of your surroundings. You also can turn the display off.

To display the "Display" screen, push the "DISPLAY" button.



Contrast and brightness adjustment

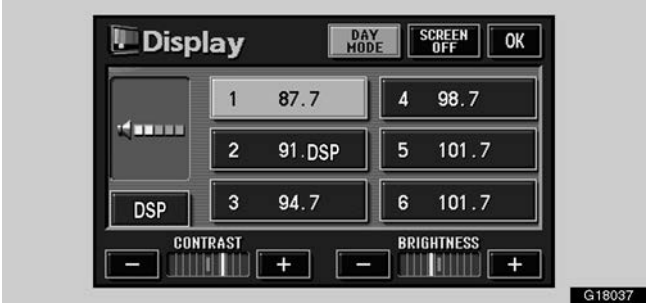
CONTRAST "+": Strengthens the contrast of the screen.

CONTRAST "–": Weakens the contrast of the screen.

BRIGHTNESS "+": Brightens the screen.

BRIGHTNESS "–": Darkens the screen.

The screen turns off when you push the "SCREEN OFF". To turn the display screen back on, push any bezel switch such as "INFO", etc. The selected screen appears.



Depending on the position of the headlight switch, the screen changes to either day mode or night mode.

To display the screen in the day mode even with the headlight switch on, touch “DAY MODE” on the adjustment screen for brightness and contrast control.

However, if the instrument panel light control switch is turned fully to the right, mode switching cannot be done. It remains in the day mode. In this case, “DAY MODE” is not shown on the screen.

If the screen is set in the day mode with the headlight switch turned on, this condition is memorized in the system even with the engine turned off.

Color and tone adjustment

You can adjust the color and the tone while the DVD video and video CD are being played.

COLOR “RED”: Strengthens the red color of the screen.

COLOR “GREEN”: Strengthens the green color of the screen.

TONE “+”: Strengthens the tone of the screen.

TONE “–”: Weakens the tone of the screen.

SECTION 2 – 1

AIR CONDITIONING AND AUDIO

Air conditioning

Automatic air conditioning controls 254

AUTOMATIC AIR CONDITIONING CONTROLS

▶ A *Vehicles with Navigation system* B *Vehicles without Navigation system*

1 ***Driver side temperature display (in degrees Fahrenheit or Centigrade)***

2 ***Passenger side temperature display (in degrees Fahrenheit or Centigrade)***

3 ***"DUAL" (temperature setting mode change) switch***

4 ***"A/C" switch***

5 ***Air flow control switches***

6 ***Fan speed control switches***

7 ***Air conditioning operation screen display button***

8 ***"TEMP" (driver side temperature control) buttons***

9 ***"OFF" button***

10 ***"AUTO" button***

11 ***Micro dust and pollen filter button***

12 ***Windshield air flow button***

13 ***Air intake control button***

14 ***"PASSENGER TEMP" (passenger side temperature control) buttons***

The automatic air conditioning automatically maintains the set temperature.

In the automatic operation mode, the air conditioning selects the most suitable fan speed, air flow, air intake and on–off of the air conditioning according to the temperature.

The engine switch must be selected in "IG–ON" mode.

"CLIMATE": Push this button to display switches for automatic air conditioning control.

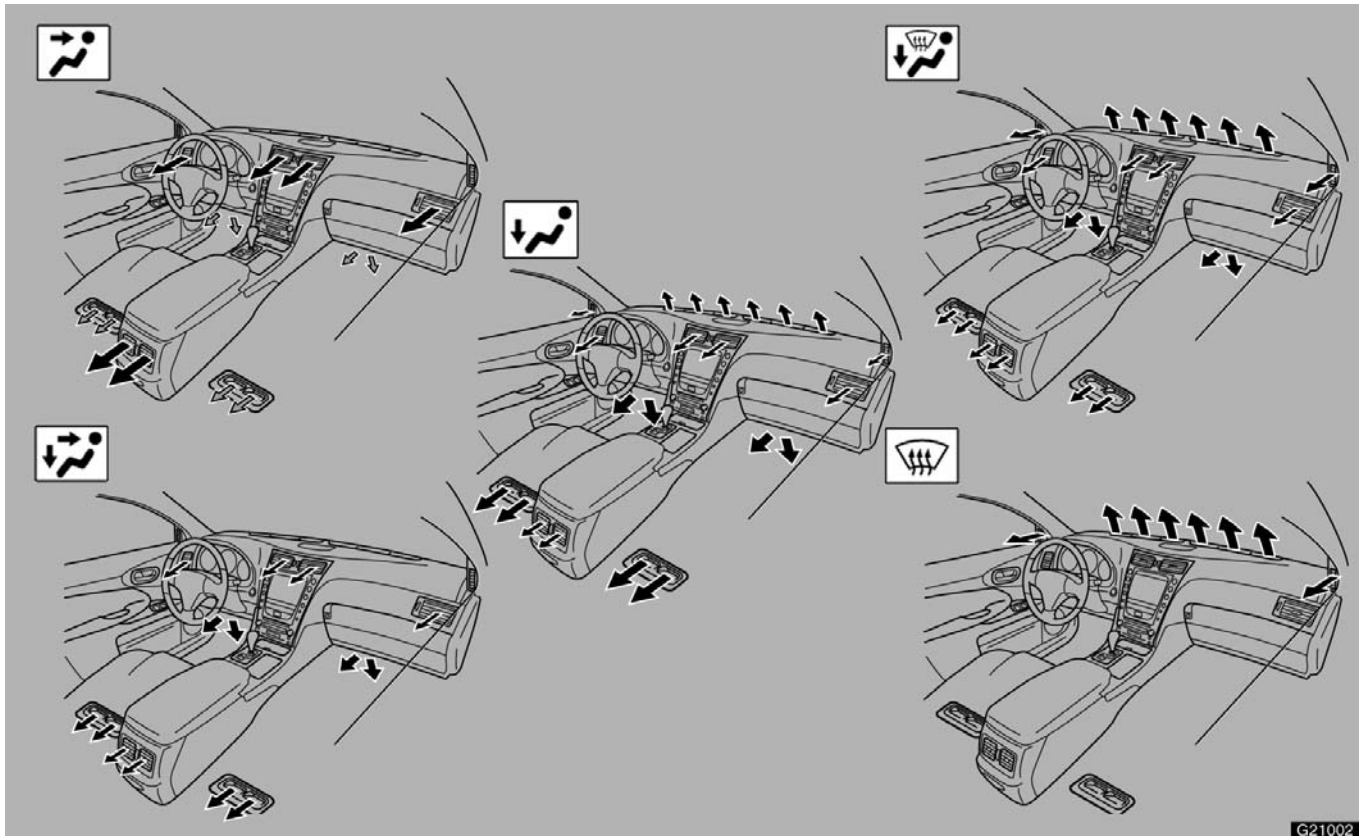
NOTICE

To prevent the battery from being discharged, do not leave the air conditioning on longer than necessary when the engine is not running.

Vehicles with navigation system only:

By pushing the button above, you can operate the speech command system.

For the operation of the speech command system, see the “Navigation System Owner’s Manual”.



▶*Air flow selection* ⇨*Automatic air flow mode only*

(a) Climate control

SETTING OPERATION − automatic control

1. Push the “AUTO” button.

An indicator light will illuminate to show that the automatic operation mode has been selected.

Air flow quantity, switching of the diffusers, on−off of the air conditioning, and switching of the air intake between RECIRCULATED AIR and OUTSIDE AIR are automatically adjusted. The operation status is shown by each indicator.

When one of the manual control buttons is depressed while operating in automatic mode, the mode relevant to the depressed button is set. Other conditions continue to be adjusted automatically.

Push the ”OFF” button to turn the air conditioning off.

2. Use the “TEMP” or ”PASSENGER TEMP” buttons to set the desired vehicle interior temperature.

The “TEMP” or “PASSENGER TEMP” (“∧”, “∨ ”) buttons are used to set the desired interior temperature. The interior temperature will be controlled on the driver and passenger side simultaneously or individually.

To increase the interior temperature, push the “∧” button, to decrease it, push the “∨ ” button.

If quick heating or cooling is desired—

“MAX COLD” appears when you hold “∨ ” until maximum cooling, and “MAX HOT” appears when you hold “∧” until maximum heating.

“TEMP” buttons—Changes the temperature on the driver and passenger sides simultaneously or the driver side only.

“PASSENGER TEMP” buttons—Changes the temperature settings separate from the driver side.

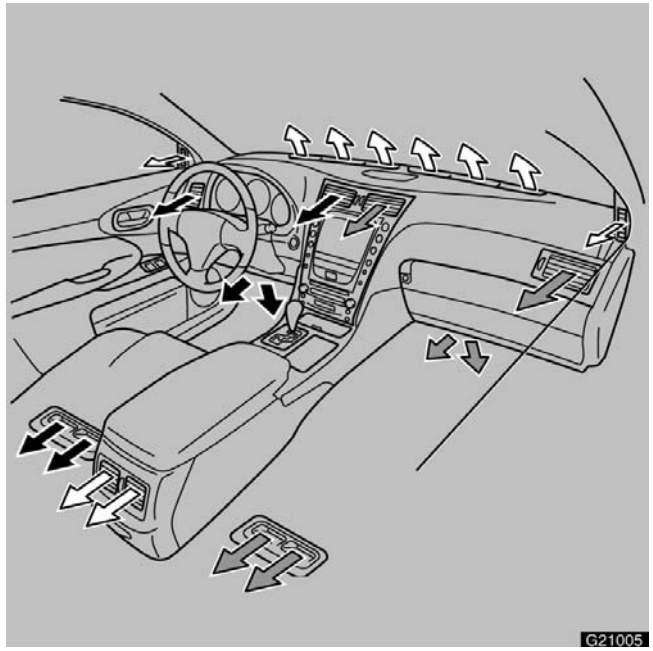
“DUAL” switch—

This switch is used to set the temperatures independently for the driver’s seat and front passenger seat.

Touching the switch changes from the independent mode to the linked mode.

- **Independent mode:** Temperatures can be set independently for the driver’s seat and front passenger’s seat. The indicator light will come on to show that the independent mode has been selected.
- **Linked mode:** The same temperature is set for the driver’s seat and front passenger’s seat. The indicator light will turn off to show that the simultaneous temperature setting mode has been selected.

When the temperature for the front passenger’s seat is changed in linked mode, the mode is changed automatically to independent mode.



➡ Driver side setting

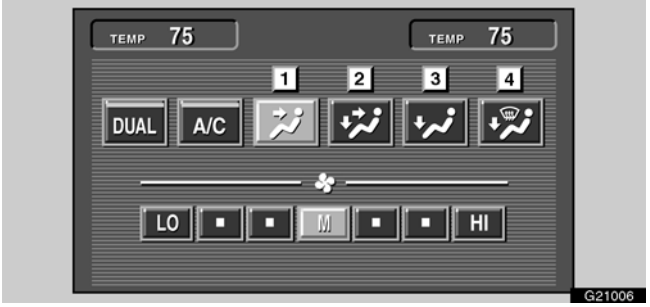
➡ Passenger side setting

⇨ Mixed setting

SETTING OPERATION—manual control

When one of the manual control switches is depressed while operating in automatic mode, the mode relevant to the depressed switch is set. Other conditions continue to be adjusted automatically.

If manual air flow selection is desired—



The outlets from which air is delivered can be selected manually by touching the switch. The function of each mode is as follows:

1 **Panel—**Air flows mainly from the instrument panel vents and rear vents.

2 **Bi−level—**Air flows from the floor vents, the instrument panel vents and rear vents.

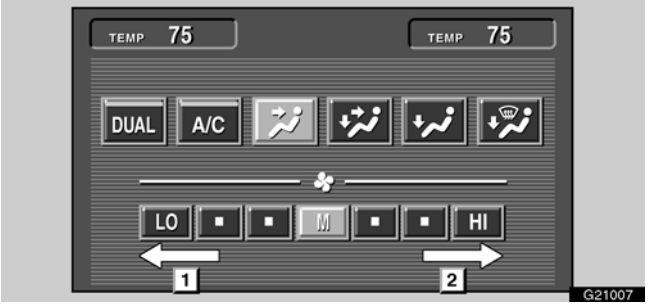
When you set the temperature selector setting at about the middle in automatic operation, warm air flows out of the floor vents and relatively low−temperature air flows out of the instrument panel vents and rear vents.

3 **Floor—**Air flows mainly from the floor vents and rear vents.

4 **Floor/Windshield—**Air flows mainly from the floor vents, windshield vents and rear vents.

Take in the fresh air by selecting the OUTSIDE AIR mode with the air intake control button.

If manual fan speed control is desired—



▶ 1 ***Fan speed at low*** 2 ***Fan speed at high***

The fan speed can be set to your desired speed by touching the appropriate air flow control switch. The higher the fan speed is, the more air is delivered. Pushing the ”OFF” button turns off the fan.

To remove exterior windshield frost and interior windshield fog, use the high speed setting.

If manual switching of air intake is desired—

Each time you push the air intake control button, the mode changes in order from the RECIRCULATED AIR mode to AUTOMATIC mode to OUTSIDE AIR mode, then back to the RECIRCULATED AIR mode. Each indicator light shows which mode is now selected.

1 **RECIRCULATED AIR mode—**If quick circulation of cooled air is desired, select this mode.

2 **EXHAUST GAS AUTOMATIC mode—**If the outside air contains harmful substances like exhaust gas (i.e., when the vehicle running just in front of your vehicle accelerates rapidly), the system changes automatically from the OUTSIDE AIR mode (with indicators 2 and 3 on) to the RECIRCULATED AIR mode (with indicators 1 and 2 on).

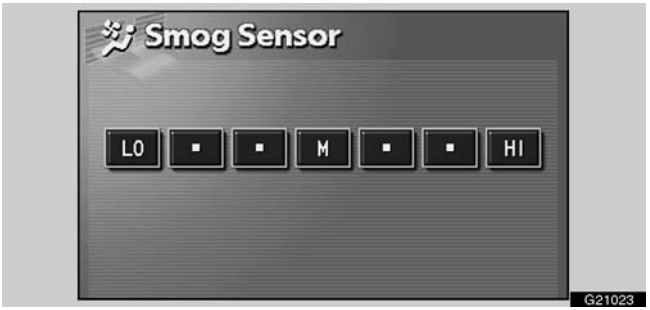
3 **OUTSIDE AIR mode—**The system will take fresh outside air into the vehicle.

Turning off the air conditioning manually will cancel the EXHAUST GAS AUTOMATIC mode. If you select the “AUTO” mode during fan operating, the air conditioning turns on and the EXHAUST GAS AUTOMATIC mode will operate.

For normal use, it is best to keep the air intake control button set to OUTSIDE AIR mode. If recirculated air is used during heating, the windows will fog up more easily.

To change the sensitivity of the sensor switching between the RECIRCULATED AIR and OUTSIDE AIR in the AUTOMATIC mode, push the air intake control button and hold it for a few seconds. The display changes to the one illustrated below.

The sensitivity of the sensor can be adjusted only while the vehicle has been stopped.



The sensitivity of the switches is set to be higher toward “HI” and lower toward “LO”.

Touch the desired switch on the screen.

When you push any button except the air intake control button, the above screen goes off.

If manual on−off of the air conditioning is desired—

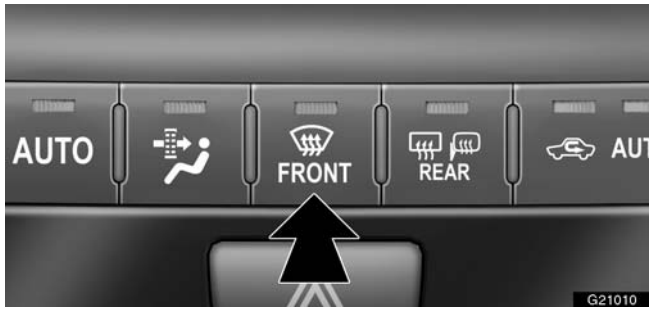
Touch the ”A/C” switch to turn the air conditioning on and touch it again to turn the air conditioning off. If you turn off the air conditioning manually, the EXHAUST GAS AUTOMATIC mode will be cancelled.

If the outside temperature is lowered down to around 0°C (32°F), the air conditioning will turn off automatically. At this time, the indicator on the A/C switch is off and the EXHAUST GAS AUTOMATIC indicator light remains on. However, the EXHAUST GAS AUTOMATIC mode does not operate. When the air conditioning turns on as with the raised temperature, the EXHAUST GAS AUTOMATIC mode resumes.

If the system is used for ventilation, heating in dry weather or removing frost or exterior fog on the windshield, turn the air conditioning off once it is no longer required. This will improve fuel economy. The air conditioning can be used for year−round automatic temperature control including cooling and dehumidifying operation.

If the air conditioning compressor does not operate, the indicator of the ”A/C” switch will blink. If the indicator of the ”A/C” switch blinks even when the ”A/C” switch is touched again, have the compressor checked by your nearest Lexus dealer.

(b) Windshield defogging and defrosting



To remove interior fog on the windshield—

Push the windshield air flow button.

To remove frost or exterior fog on the windshield—

1. Push the “TEMP” (”∧”) button to set the “MAX HOT”.
2. Push the windshield air flow button.
3. Touch fan speed control switch on the right side to obtain a maximum air flow.
4. Leave the “A/C” switch off.

When the windshield air flow button is pushed while operating in automatic mode, the air conditioning is set to operate and the OUTSIDE AIR mode is set.

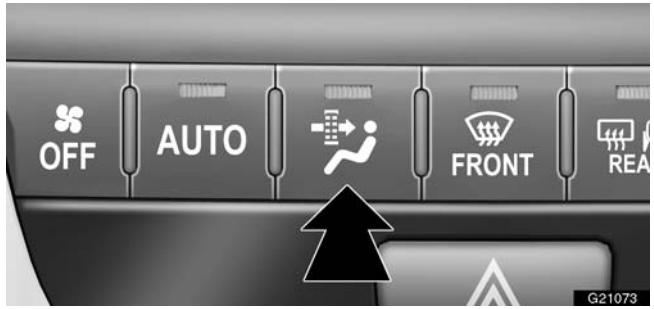
If you push the windshield air flow button once again while in the windshield air flow mode, the mode then returns to the last mode used.

⚠ CAUTION

Do not use the windshield air flow button during cooled air operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up blocking your vision.

(c) Micro dust and pollen filter

This vehicle is equipped with a micro dust and pollen filter mode. When this mode is activated, air from the vents will remove pollen on the driver and passengers.



Push the micro dust and pollen filter button.

The indicator light and “A/C” switch come on and RECIRCULATED AIR mode is turned on. Air is delivered from the instrument panel vents to the areas near the driver and passengers to remove pollen on them.

When the interior is purified sufficiently with fresh air (after about 3 minutes at normal outside temperature and about 1 minute at low outside temperature), this mode will be turned off automatically and the indicator light will go out.

When the micro dust and pollen filter is activated, this mode will be turned off by pushing the micro dust and pollen filter button again. The indicator light will also go out.

INFORMATION

- ***Use this mode to remove pollen quickly carried by the driver or passengers or through the window in the days with much pollen.***
- ***Use and push the windshield air flow button to remove the fog on the windshield in rainy days.***
- ***Fresh air is delivered even when the micro dust and pollen filter button is turned off.***

(d) Operating tips

- To help cool down the interior after parking in the hot sun, drive for the first few minutes with the windows open. After the excess heat has blown away, close the windows.
- Make sure the air inlet grilles in front of the windshield are not blocked by leaves or other obstructions.
- If air flow control is not satisfactory, check the dashboard vents and rear vents. (See (e) “Center vents, side vents and rear vents”.)
- Only humid days, do not blow cold air on the windshield. The windshield could fog up because of the difference in air temperature on the inside and outside of the windshield.
- Keep the area under the front seats clear to allow air to circulate throughout the vehicle.
- On cold days, set the fan speed to high for a minute to help clear the intake ducts of snow or moisture. This can reduce the amount of fogging on the windows.
- 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 control button be set to the OUTSIDE AIR mode to take in the fresh air and the fan speed selector to any setting except OFF.
- If following another vehicle on a dusty road, or driving in windy and dusty conditions, it is recommended that the air intake control button be temporarily pressed in to the RECIRCULATED AIR mode, which will close off the outside passage and prevent outside air and dust from entering the vehicle interior.

Heating

For best results, set controls to:

For automatic operation—

Push in the “AUTO” button.
Temperature—To the desired temperature
Air intake—OUTSIDE AIR
Air conditioning—OFF

For manual operation—

Fan speed—To the desired fan speed
Temperature—Towards high temperature
Air intake—OUTSIDE AIR
Air flow—FLOOR
Air conditioning—OFF

- For quick heating, select RECIRCULATED AIR mode for a few minutes. To keep the windows from fogging, select OUTSIDE AIR mode after the vehicle interior has been warmed.
- Touch the “A/C” switch on for dehumidified heating.
- Choose floor/windshield air flow to heat the vehicle interior while defrosting or defogging the windshield.

Air conditioning

For best results, set controls to:

For automatic operation—

Push in the “AUTO” button.
Temperature—To the desired temperature
Air intake—OUTSIDE AIR
Air conditioning—OFF

For manual operation—

Fan speed—To the desired fan speed
Temperature—Towards low temperature
Air intake—OUTSIDE AIR
Air flow—PANEL
Air conditioning—ON

- For quick cooling, select RECIRCULATED AIR mode for a few minutes.

Ventilation

For best results, set controls to:

For automatic operation—

Push in the “AUTO” button.
Temperature—Towards low temperature
Air intake—OUTSIDE AIR
Air conditioning—OFF

For manual operation—

Fan speed—To the desired fan speed
Temperature—Towards low temperature
Air intake—OUTSIDE AIR
Air flow—PANEL
Air conditioning—OFF

Defogging and defrosting

—The inside of the windshield

For best results, set controls to:

For automatic operation—

Temperature— Towards high temperature to heat; low temperature to cool
Air intake—OUTSIDE AIR
Air flow—WINDSHIELD

For manual operation—

Fan speed—To the desired fan speed
Temperature— Towards high temperature to heat; low temperature to cool
Air intake—OUTSIDE AIR
Air flow—WINDSHIELD

When the windshield air flow button is pushed, air flows mainly from the windshield vents and turns on the defogging function with the purpose of clearing the front view.

Pushing this button once again returns the air flow mode to the last one used.

This button allows the air intake to select OUTSIDE AIR mode automatically. This is to clean up the front view more quickly. If you want to return the setting to RECIRCULATED AIR mode, push the air intake control button once again.

Touch the “A/C” switch for dehumidified heating or cooling. This setting clears the front view more quickly.

- Only humid days, do not blow cold air on the windshield—the difference between the outside and inside temperatures could make the fogging worse.

—The outside of the windshield

For best results, set controls to:

For automatic operation—

Temperature— Towards high temperature
Air intake—OUTSIDE AIR
Air flow—WINDSHIELD

For manual operation—

Fan speed—To the desired fan speed
Temperature— Towards high temperature
Air intake—OUTSIDE AIR
Air flow—WINDSHIELD

When the windshield air flow button is pushed, air flows mainly from the windshield vents and turns on the defogging function with the purpose of clearing the front view.

Pushing this button once again returns the air flow mode to the last one used.

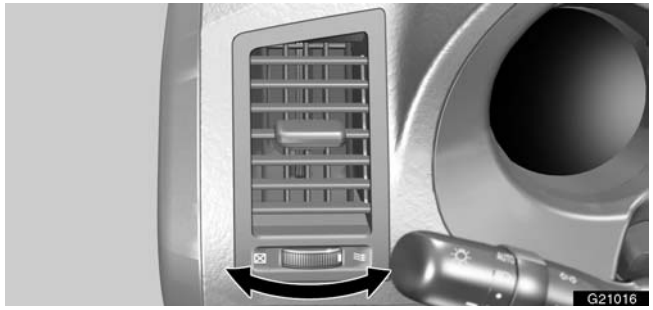
This button allows the air intake to select OUTSIDE AIR mode automatically. This is to clean up the front view more quickly. If you want to return the setting to RECIRCULATED AIR mode, push the air intake control button once again.

Touch the “A/C” switch for dehumidified heating or cooling. This setting clears the front view more quickly.

- To heat the vehicle interior while defrosting the windshield, choose floor/windshield air flow.

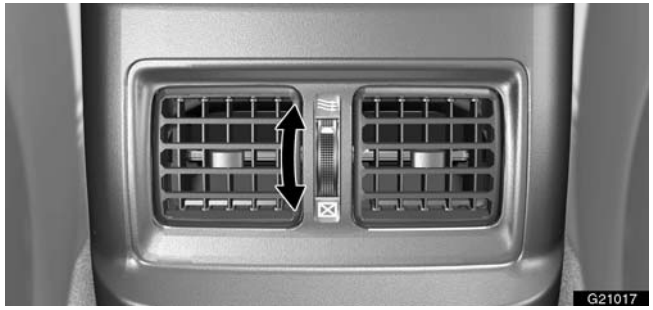
(e) Center vents, side vents and rear vents

▶*Center vents*



▶*Side vents (driver’s side)*

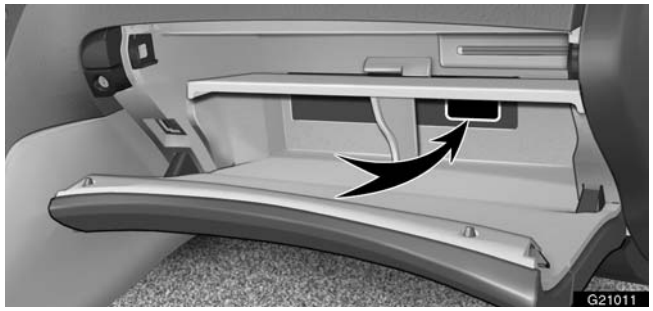
▶*Side vents (front passenger’s side)*



▶*Rear vents*

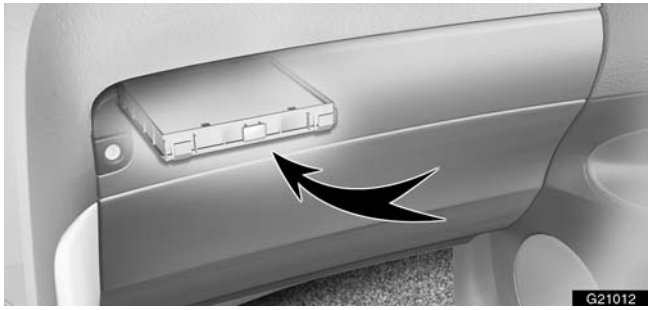
If air flow control is not satisfactory, check the center vents, side vents and rear vents. They may be opened or closed as shown.

(f) Replacing the air conditioning filter



The air conditioning filter information label is placed in the glove box as shown and indicates that a filter has been installed.

The air conditioning filter, in addition to removing odors, prevents dust and pollen from entering the vehicle through the air conditioning vent.



The air conditioning filter is behind the glove box.

The air conditioning filter may clog after long use. The filter may need to be replaced if the air flow of the air conditioning and heater experiences extreme reductions in operating efficiency, or if the windows fog up easily.

If the symptoms of air conditioning efficiency problems occur, contact your nearest Lexus dealer to have the filter replaced.

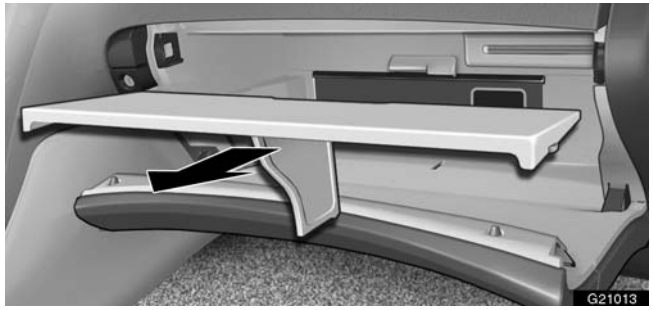
To maintain the air conditioning efficiency, replace the air conditioning filter according to the maintenance schedule. In dusty areas or areas with heavy traffic flow, such as inner city or desert areas, early replacement may be required. (For scheduled maintenance information, see the “Owner’s Manual Supplement / Scheduled Maintenance”).

1. Turn the air intake control to RECIRCULATED AIR mode.

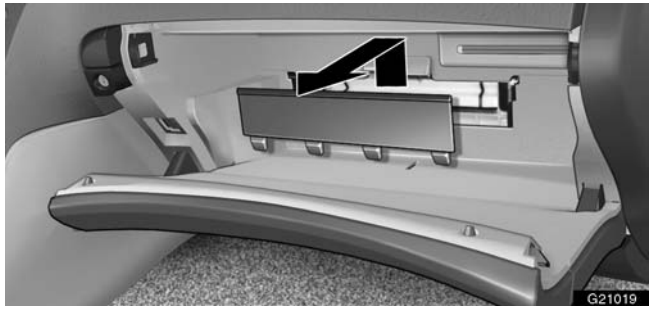
The filter case cannot be removed in the OUTSIDE AIR mode.

2. Turn off the engine switch.

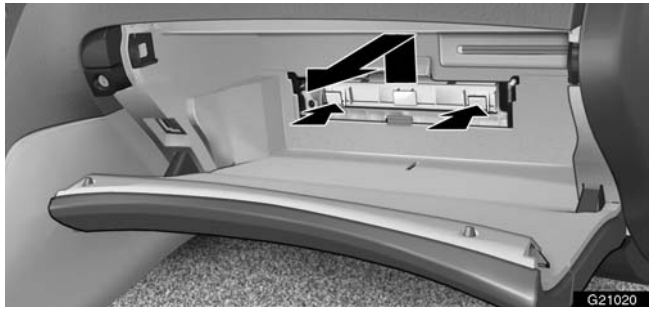
3. When you replace the filter, be sure to turn off the fan.



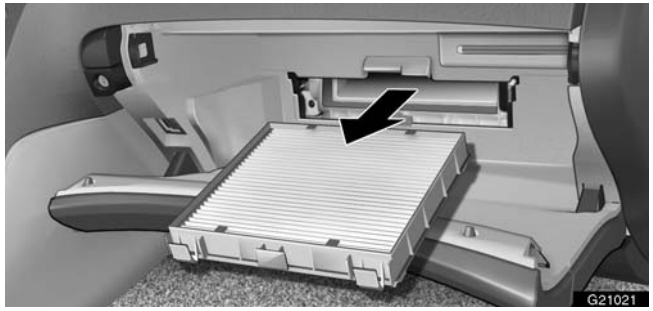
4. Open the glove box and remove the partition by pulling.



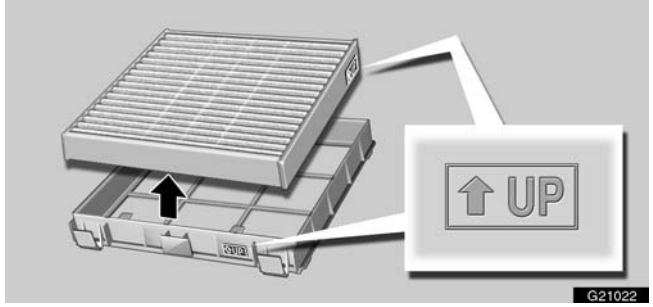
5. Pull the filter cover toward you.



6. Push the tabs and pull the filter case toward you.



7. Take out the filter.



8. Remove the filter from the filter case.

9. Inspect the filter on the surface.

If it is dirty, it should be replaced.

NOTICE
When setting the filter to the filter case, the UP marks shown on the filter and filter case should be noted and fitted as shown.

INFORMATION
The air conditioning filter should be installed properly in position. The use of air conditioning with the filter removed may cause deteriorated dustproof performance and then affect air conditioning performance.

SECTION 2 – 2

AIR CONDITIONING AND AUDIO

Audio

Audio system 274

AUDIO SYSTEM

Quick reference for your audio system

▶ A *Vehicles with Navigation system* B *Vehicles without Navigation system*

1 **Audio operation screen display button**
The audio operation screen is shown.

2 **Function switch display screen**
(See page 280 for details.)

3 **CD slot**
(See page 300 or details.)

4 **Mode selectors**
(See page 279 for details.)

5 **Frequency turning knob**
(See page 285 for details.)

6 **CD load button**
(See page 300 for details.)

7 **Radio mode:** Preset tuning
(See page 285 for details.)
Tape mode: Side change of cassette tape
(See page 298 for details.)
CD mode: Disc selection
(See page 303 for details.)

8 **Scan button**
(See page 286 for details.)

9 **Cassette tape slot**
(See page 296 for details.)

10 **Stopping and ejecting a cassette tape**
(See page 296 for details.)

11 **Radio mode:** Seek tuning
(See page 286 for details.)
Tape/CD mode: Direct access to a desired program
(See page 299 or 304 for details.)

12 **Ejecting a CD**
(See page 301 or details.)

13 **Turning the system on and adjusting the volume**
(See page 279 for details.)

Quick reference for your audio system

▶ A *Vehicles with Navigation system* B *Vehicles without Navigation system*
For a Mark Levinson brand audio system

1 **Audio operation screen display button**
The audio operation screen is shown.

2 **Touch screen**
(See page 280 for details.)

3 **Disc slot**
(See page 300 or details.)

4 **Mode selectors**
(See page 279 for details.)

5 **Frequency turning knob**
(See page 285 for details.)

6 **Disc load button**
(See page 300or details.)

7 **Radio mode:** Preset tuning
(See page 285 for details.)
Tape mode: Side change of cassette tape
(See page 297 for details.)
DISC mode: Disc selection
(See page 303 for details.)

8 **Scan button**
(See page 286 for details.)

9 **Cassette tape slot**
(See page 296 for details.)

10 **Stopping and ejecting a cassette tape**
(See page 296 for details.)

11 **Radio mode:** Seek tuning
(See page 286 for details.)
Tape/DISC mode: Direct access to a desired program
(See page 299 or 304 for details.)

12 **Ejecting a disc**
(See page 301 or details.)

13 **Turning the system on and adjusting the volume**
(See page 279 for details.)

Using your audio system: some basics

This section describes some of the basic features of the Lexus audio system. Some information may not pertain to your system.

Your audio system works when the engine switch is selected in “ACC” or “IG–ON” mode.

NOTICE

To prevent the battery from being discharged, do not leave the audio system on longer than necessary when the engine is not running.

Vehicles with navigation system only:

By pushing the button above, you can operate the speech command system.

For the operation of the speech command system, see the “Navigation System Owner’s Manual”.

(a) Turning the system on, volume control and mode selection

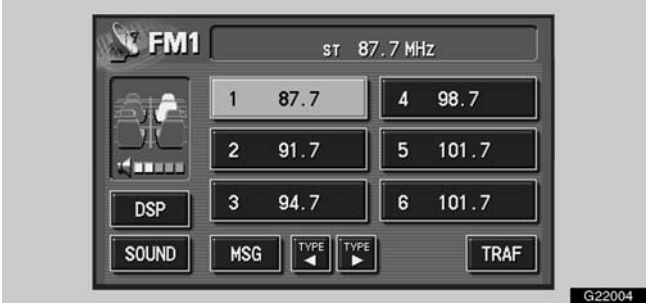
POWER−VOL: Push this knob to turn the audio system on and off. Turn this knob to adjust the volume. The system turns on in the last mode used.

Push the "AM (AM·SAT)", "FM", "TAPE" or "DISC" button to turn on that mode. The selected mode turns on directly.

Push these buttons if you want to switch from one mode to another.

If the tape or disc is not set, the tape mode or disc mode does not turn on.

You can turn off the cassette player by ejecting the cassette tape. If the audio system was previously off, then the entire audio system will be turned off when you eject the cassette tape. If another function was previously playing, it will come on again.



▶*Radio mode*

▶*Disc mode*

▶*Tape mode*

▶*Disc mode (for a Mark Levinson audio system)*

The switches for radio, cassette tape and CD player or DVD player (if a Mark Levinson audio system is installed) operation are displayed on the liquid crystal display. Touch them lightly and directly on the screen.

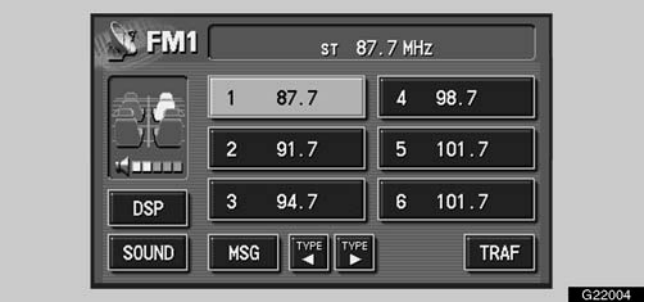
The selected switch is highlighted in green, or the bar on the upper side is highlighted in yellow.

(b) Tone and balance

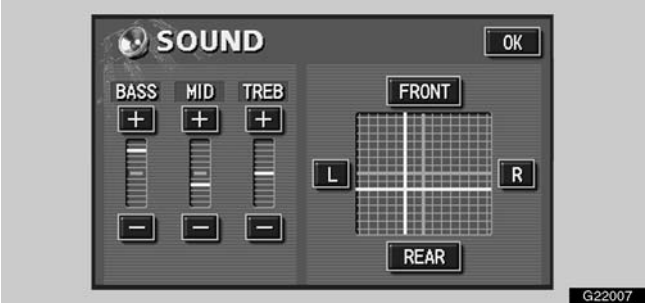
How good an audio program sounds to you is largely determined by the mix of the treble, mid–range, and bass levels. In fact, different kinds of music and vocal programs usually sound better with different mixes of treble, mid–range, and bass.

A good balance of the left and right stereo channels and of the front and rear sound levels is also important.

Keep in mind that if you are listening to a stereo recording or broadcast, changing the right/left balance will increase the volume of one group of sounds while decreasing the volume of another.



Touching the "SOUND" switch on the screen displays the sound adjustment screen.



BASS "+" or "–": Adjusts low–pitched tones.

MID "+" or "–": Adjusts mid–pitched tones.

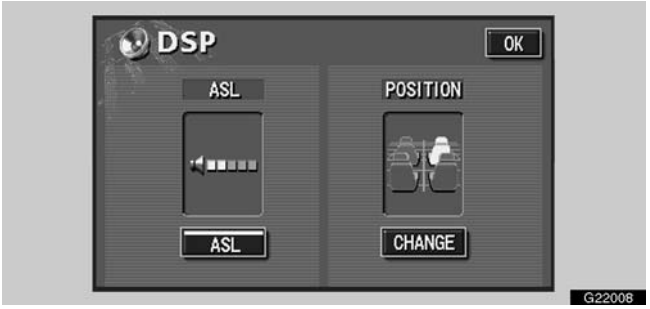
TREB "+" or "–": Adjusts high–pitched tones.

"FRONT" or "REAR": Adjusts sound balance between the front and rear speakers.

"L" or "R": Adjusts sound balance between the left and right speakers.

"OK": The previous screen returns.

(c) DSP control



To display the DSP control mode, touch the "DSP" switch displayed on the audio control mode screen. You can turn on/off the automatic sound levelizer, or select the position on the DSP screen.

Automatic sound levelizer (ASL):
When the audio sound becomes difficult to be heard due to road noise, wind noise, etc. during driving, touch the "ASL" switch. The system adjusts to the optimum volume and tone quality according to the noise level.

When the system is on, the sound adjustment level is displayed on the screen.

Positioning selector:
By selecting the listening position, the system controls the output timing of the speakers to allow sound to be heard evenly, creating the ideal music environment.

Touching "CHANGE" the position switches in the following order; all seats, driver's seat, front seats and rear seats.

The POSITION currently selected is displayed on the screen.

- **If a Mark Levinson brand audio system is installed:**

Automatic sound levelizer (ASL):
When the audio sound becomes difficult to be heard due to road noise, wind noise, etc. during driving, touch the “ASL” switch. The system adjusts to the optimum volume and tone quality according to the noise level.

When the system is on, the sound adjustment level is displayed on the screen.

SURROUND:
If you touch “SURROUND”, surround sound will be enabled.

(d) Your radio antenna

The wire antenna is mounted inside the rear window.

NOTICE

- ***When cleaning the inside of the rear window, be careful not to scratch or damage the wire antenna.***
- ***Putting a window tint (especially, conductive or metallic type) on the rear window may affect the reception of radio or mobile telephone. For the installation of the window tint, consult with your Lexus dealer.***

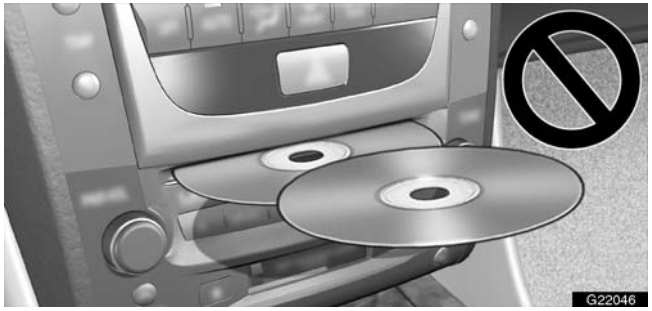
(e) Your cassette player

When you insert a cassette, the exposed tape should be to the right.

NOTICE

Do not oil any part of the cassette player, and do not insert anything except a cassette tape into the slot.

(f) Your automatic changer



This vehicle is equipped with an automatic changer which can store up to 6 discs, and play selected discs or continuously play all the discs set in the player.

When you insert discs into the player, make sure their labels face upward. If the disc is inserted incorrectly, the player will display “CD CHECK” or “DISC CHECK”.

NOTICE

- ***Never try to disassemble or oil any part of the CD player or DVD player. Do not insert anything except a disc into the slot.***
- ***Do not insert a disc upon another one, or it will damage to the automatic changer. Insert only one disc into the slot at a time.***

Your CD player or DVD player is intended for use with 12 cm (4.7 in.) discs only.

Radio operation

(a) Listening to the radio

Push “AM (AM·SAT)” or “FM” button to choose either an AM or FM band.

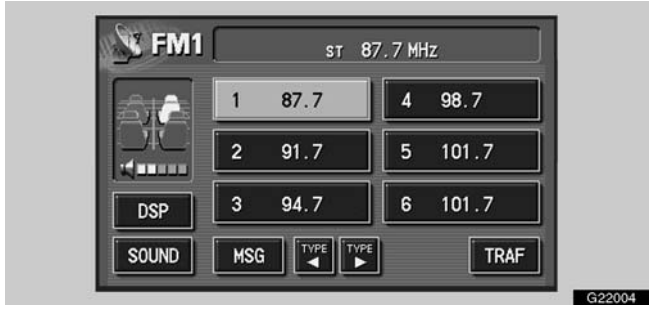
The “AM”, “FM1” or “FM2” screen appears on the display.

If your vehicle is equipped with satellite radio broadcast system, when you push the “AM·SAT” button, “AM”, “SAT1”, “SAT2” or “SAT3” station appears on the display. For details about satellite radio broadcast, see “Radio operation (XM satellite radio broadcast)” on page 289

Turn this knob to step up or down the frequency.

Your radio automatically changes to stereo reception when a stereo broadcast is received. “ST” appears on the display. If the signal becomes weak, the radio reduces the amount of channel separation to prevent the weak signal from creating noise. If the signal becomes extremely weak, the radio switches from stereo to mono reception. In this case, “ST” disappears from the display.

(b) Presetting a station



1. Tune in the desired station.

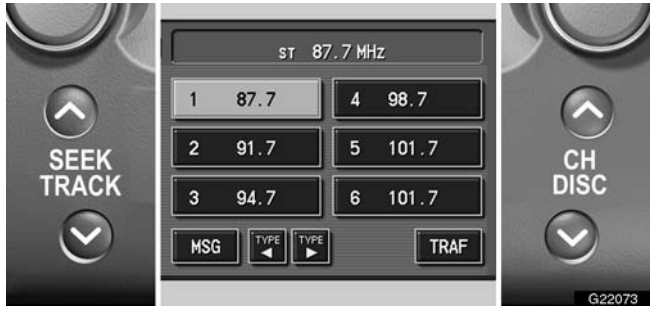
2. Touch one of the station selector switches (1−6) and hold it until a beep is heard. This sets the station to the switch and the frequency appears on the switch.

Each switch can store AM, FM1 and FM2. To change the preset station to a different one, follow the same procedure.

The preset station memory is cancelled when the power source is interrupted by battery disconnection or a blown fuse.

(c) Selecting a station

Your Lexus has an electronic tuning radio (ETR). Tune in the desired station using one of the following methods.



Preset tuning: Touch the switch (1–6) or push the “CH DISC ∧ ” or “ ∨ ” button for the station you want. The switch (1–6) is highlighted in green and station frequency appears on the display.

Manual tuning: Turn the “TUNE” knob briefly. When you turn the knob, the radio will step up or down to another frequency.

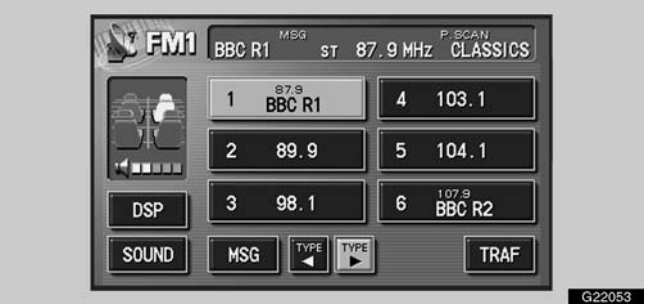
Seek tuning: Push the “SEEK TRACK ∧ ” or “ ∨ ” button. The radio will begin seeking up or down for a station of the nearest frequency and will stop on reception. Each time you push the button, the stations will be searched out one after another.

Scan tuning: Push the “SCAN” button. “SCAN” appears on the display. The radio will find the next station up or down the band, stay there for a few seconds, and then scan again. To select a station, push the “SCAN” button a second time.

Preset scan tuning: Push the “SCAN” button and hold it until you hear a beep. “P. SCAN” appears on the display. The radio will tune in the next preset station up or down the band, stay there for a few seconds, and then move to the next preset station. To select a station, push the “SCAN” button a second time.

(d) RDS (Radio Data System)

- **Program type**



When you touch the “TYPE ◀” or “TYPE ▶” switch on the screen, the current program type receiving from RDS station appears on the display.

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

Each time you touch the “TYPE ◀” or “TYPE ▶” switch, the program type changes as in the following:

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

When a program is set, “TYPE SEEK” switch appears. Touch the switch and the system starts to seek the station in the relevant program type.

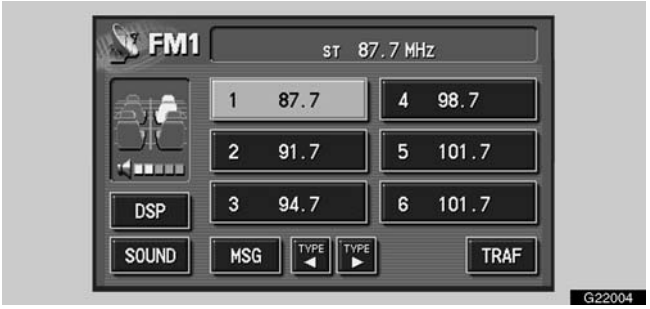
Traffic program: A station that regularly broadcasts traffic information is automatically located.

When you touch the “TRAF” switch, “TRAF SEEK” appears on the display and the radio will start seeking any traffic program station.

If any traffic program station is not found, “NOTHING” appears and the previous mode returns.

If the traffic program station is found, the name for traffic program station is displayed and “TRAF” is lit for a while until traffic announcement is received.

- **Radio text**



If the system receives a radio text from RDS station, “MSG” appears on the display. Touch the “MSG” switch, and a text message is displayed on the screen.

In case a text message is not accepted in a screen, you can touch the “MSG” switch and hold it to display the rest of the message.

When the system can show the station name, “RDS” appears on the display. Each time you touch the “MSG” switch, indication on the display changes from the band to the station name, a radio text in this order. After six seconds passes, indication returns to the band.

Radio operation (XM satellite radio broadcast)

To listen to a satellite radio broadcast in your vehicle, an additional genuine Lexus satellite receiver and antenna must be purchased and installed, and the subscription to the XM satellite radio is necessary.

(a) How to subscribe to an XM satellite radio

An XM satellite radio is a tuner designed exclusively to receive broadcasts provided under a separate subscription. Availability is limited to the 48 contiguous states.

How to subscribe:

You must enter into a separate service agreement with the XM radio in order to receive satellite broadcast programming in the vehicle. Additional activation and service subscription fees apply that are not included in the purchase price of the vehicle and optional digital satellite tuner. For complete information on subscription rates and terms, or to subscribe to the XM radio, visit XM on the web at www.xmradio.com or call an XM's Listener Care at (800) 852–9696. The XM radio is solely responsible for the quality, availability and content of the satellite radio services provided, which are subject to the terms and conditions of the XM radio customer service agreement.

Customers should have their radio ID ready; the radio ID can be found by selecting the "channel 000" on the radio. For details, see the "Displaying the radio ID" that follows.

All fees and programming are the responsibility of the XM satellite radio and are subject to change.

Satellite tuner technology notice:

Lexus satellite radio tuners are awarded Type Approval Certificates from XM Satellite Radio Inc. on "October 14, 2004" as proof of compatibility with the services offered by the XM satellite radio.

(b) Displaying the radio ID

Each XM tuner is identified with a unique radio ID. You will need the radio ID when activating XM service or when reporting a problem.

If you select the "CH 000" using the "TUNE" knob, the ID code of 8 alphanumeric characters appears. If you select another channel, display of the ID code is canceled. The channel (000) alternates the display between the radio ID and the specific radio ID code.

(c) Listening to the satellite radio

Push the “AM·SAT” button to choose a SAT channel.

Besides “AM”, “SAT1”, “SAT2” or “SAT3” appears on the display.

Turn this knob to select the next or previous channel.

If you turn continuously, you can rapidly scroll forward or down through the channels.

(d) Presetting a channel

1. Tune in the desired channel.

2. Touch one of the channel selector switches (1−6) and hold it until a beep is heard. This sets the channel to the switch and the frequency appears on the switch.

Each switch can store three SAT channels. To change the preset channel to a different one, follow the same procedure.

The preset channel memory is cancelled when the power source is interrupted by battery disconnection or a blown fuse.

(e) Selecting a channel

Tune in the desired channel using one of the following methods.

Preset tuning: Touch the switch (1−6) or push the “CH DISC ∧ ” or “ ∨ ” button for the channel you want. The switch (1−6) is highlighted in green.

Manual tuning within the channel category: Turn the “TUNE” knob. The radio will step up or down the channel.

Manual tuning within the current channel category: Push the “SEEK TRACK ∧ ” or “ ∨ ” button. The radio will step up or down the channel within the current channel category. Touch the “TYPE SEEK” switch. The radio will step up the channel within the current channel category.

To scan the currently selected channel category: Touch the "TYPE SCAN" switch or push the "SCAN" button briefly. "SCAN" appears on the display. The radio will find the next channel in the same channel category, stay there for a few seconds, and then scan again. To select a channel, push the "SCAN" button a second time.

To scan the preset channels: Touch the "TYPE SCAN" switch or push the "SCAN" button and hold it until you hear a beep. "P.SCAN" appears on the display. The radio will find the next preset channel, stay there for a few seconds, and then move to the next preset channel. To select a channel, push the "SCAN" button a second time.

(f) Channel category

Touch either "TYPE◀" or "TYPE▶" switch to switch to the next or previous category.

(g) Displaying the title and name

When you touch the “TEXT” switch, the song/program title and the artist name/feature are displayed.

Up to 10 alphanumeric characters can be displayed. (Some information will not be fully displayed.)

(h) If the satellite radio tuner malfunctions

When problems occur with the XM tuner, a message will appear on the display. Referring to the table below to identify the problem, take the suggested corrective action.

ANTENNA	The XM antenna is not connected. Check whether the XM antenna cable is attached securely.
	A short−circuit occurs in the antenna or the surrounding antenna cable. See a Lexus certified dealer.
UPDATING	You have not subscribed to the XM satellite radio. The radio is being updated with the latest encryption code. Contact the XM satellite radio for subscription information. When a contact is canceled, you can choose the “CH000” and all free−to−air channels.
	The premium channel you selected is not authorized. Wait for about 2 seconds until the radio returns to the previous channel or “CH001”. If it does not change automatically, select another channel. If you want to listen to the premium channel, contact the XM satellite radio.
NO SIGNAL	The XM signal is too weak at the current location. Wait until your vehicle reaches a location with a stronger signal.
LOADING	The unit is acquiring audio or program information. Wait until the unit has received the information.
OFF AIR	The channel you selected is not broadcasting any programming. Select another channel.
−−−−−	There is no song/program title or artist name/feature associated with the channel at that time. No action needed.
−−−	The channel you selected is no longer available. Wait for about 2 seconds until the radio returns to the previous channel or “CH001”. If it does not change automatically, select another channel.

The XM Listener Care Center is also available on the phone, please call (800) 852−9696 during the following hours:
Monday – Saturday: 7 a.m. – 1 a.m. Sunday: 12 p.m – 12 a.m.

NOTICE

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

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

– Reorient or relocate the receiving antenna.

– Increase the separation between the equipment and receiver.

– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

– Consult the dealer or an experienced radio/TV technician for help.

Information to user

Alternation or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

NOTICE

This XM tuner supports "Audio Services" (Music and Talk) of only XM satellite radio and "Text Information", linked to the respective "Audio Services".

****Text Information includes, Station Name, (Artist) Name, (Song) Title and Category Name.***

Cassette tape player operation

(a) Playing a cassette tape

When you insert a cassette tape, the exposed tape should face to the right.

The player will automatically start when you insert a cassette tape. At this time, the "TAPE" screen appears on the display.

If a metal or chrome equivalent cassette tape is put in the cassette player, the player will automatically recognize it and "MTL" appears on the display.

To stop or eject the cassette tape, push the **"⏏"** (eject) button.

If a cassette is already in the slot, push the "TAPE" button.

Dolby® Noise Reduction* feature: If you are listening to a tape that was recorded with Dolby® Noise Reduction, touch the "DD" switch. The bar on the upper side will be highlighted in yellow. Touch the switch again to turn off Dolby® NR.

The Dolby NR mode reduces tape noise by about 10 dB. For best sound reproduction, play your tapes with this switch on or off according to the mode used for recording the tape.

To play a tape recorded without Dolby NR, touch the switch again to turn off the Dolby NR.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double–D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

(b) Manual program selection

Reverse switch: You can reverse the tape by touching the " ◀I▶ " switch or pushing the "CH DISC ∧ " or " ∨ " button. The display will show the opposite direction after reversing the tape. Also if the tape reaches the end of one side, it is automatically reversed to the other side.

Fast forward and Rewind switches: You can fast forward or fast rewind by touching the **"◀◀"** or **"▶▶"** switch.

To stop the tape while it is fast forwarding, touch **"▶▶"**, to stop the tape while it is rewinding, touch **"◀◀"**.

If a tape rewinds completely, the cassette player will stop and then play the same side. If a tape fast forwards completely, the cassette player will play the other side of the tape using the auto−reverse feature.

Auto−reverse feature: After the cassette player reaches the end of a tape, it automatically reverses and begins to play the other side, regardless of whether the cassette was playing or fast forwarding.

(c) Automatic program selection

“RPT” switch: The repeat feature automatically replays the current program.

Touch the “RPT” switch while the program is playing. When the program ends, it will automatically be rewound and replayed. Touch the switch again to turn off the repeat feature.

There must be at least 3 seconds of blank space between programs for the repeat feature to work correctly.

“SKIP” switch: The skip feature allows you to fast forward past long stretches of blank tape. This is especially useful at the end of cassettes.

Touch the “SKIP” switch. The player will automatically skip any blank portions of 15 seconds or more and play the next program. To cancel it, touch the switch once again.

"Automatic program selection" button: The automatic program selection feature allows you to program your cassette player to skip forward or backward to locate the song you want to hear. You can skip up to 9 programs at a time.

Push the "SEEK TRACK ∧ "button to skip forward. "FF" and the number will appear on the display. Push the button until the number you want to skip appears on the display. After that, the player will automatically skip forward.

When the end of the tape is reached, the player automatically reverses sides and resumes normal play.

Push the "SEEK TRACK ∨ " button on the lower side to skip backward. Push the button until "REW" and the number you want to skip appear on the display.

- If you set "REW 1", the player will rewind to the beginning of the current program.
- When counting the number of programs you want to rewind, remember to count the current program as well. For example, if you want to rewind to a song that is two before the song you are listening to, push this button until "REW 3" appears on the display.

When the beginning of the tape is reached, the player automatically resumes normal play.

There must be at least 5 seconds of blank space between programs for this feature to work correctly.

"RPT", "SKIP" or "Automatic program selection" features: These features may not work well with some spoken word, live or classical recordings.

CD player operation

(a) Inserting or ejecting CDs

The engine switch must be in “ACC” or “IG−ON” mode.

Your automatic changer can store up to 6 discs.

- **Setting a single CD:**

1. Push the “LOAD” button briefly.

The green indicators at both ends of the slot start blinking and “WAIT” appears on the display. After the blinking indicators stay on and the “WAIT” changes to the “LOAD”, the CD door opens.

2. Insert only one disc while the CD door is open.

You can set a disc at the lowest empty disc number.

After insertion, the set disc is automatically loaded.

If the label faces downward, the disc cannot be played. In this case, “CD CHECK” appears on the display.

If you need to insert the next disc, repeat the same procedure to insert another disc.

- **Setting all the discs:**

1. Push the “LOAD” button until you hear a beep.

The green indicators at both ends of the slot start blinking and “WAIT” appears on the display. After the blinking indicators stay on and the “WAIT” changes to the “LOAD”, the CD door opens.

2. Insert only one disc while the CD door is open.

The CD door closes and “WAIT” appears again.

3. Insert the next disc after the “WAIT” changes to the “LOAD” and the CD door opens.

4. Repeat this procedure until you insert all the discs.

To cancel the operation, push the “LOAD” or “DISC” button.

If you do not insert the discs within 15 seconds after pushing the “LOAD” button and “LOAD” is displayed, the operation will be canceled automatically.

NOTICE

Do not insert one disc stacked on top of another one or feed them in continuously, to prevent discs from getting stuck in the player.

- **Ejecting a single CD:**

1. Push the "CH DISC ∧ " or " ∨ " button to highlight the disc number you want to eject.

2. Push the "⏏" (eject) button for the CD briefly.

At this time, the green indicators of the slot start blinking.

- **Ejecting all the discs:**

Push the "⏏" (eject) button for the CD until you hear a beep.

The numbers of the trays where the CD is not set are dimmed.

(b) Playing a CD

Push the “DISC” button if CDs are already loaded in the player.

The “CD CHANGER” screen appears on the display.

The discs set in the player are played continuously, starting with the last disc you inserted. The disc number of the disc currently being played, the track number and the time from the beginning of the program are shown on the display.

When play of one disc ends, the first track of the following disc starts. When play of the final disc ends, play of the first disc starts again.

The player will skip any empty disc trays.

(c) Selecting a desired disc

On the screen: Touch the desired disc number.

The selected disc number is highlighted in green.

The player will start playing the selected disc from the first track.

On the audio panel: Push the "CH DISC ∧ " or " ∨ " button.

When you release the button, the player will start playing the selected disc from the first track.

(d) Searching for a desired disc

Touch the "DISC SCAN" switch.

With the bar on the upper side highlighted in yellow, the program at the beginning of each disc will be played for 10 seconds. To continue listening to the program of your choice, touch the "DISC SCAN" switch a second time.

After all the tracks are scanned in one pass, normal play resumes.

(e) Selecting a desired track

"SEEK TRACK" button: Use for direct access to a desired track.

Push the "SEEK TRACK ∧ " or " ∨ "button and hold it until the desired track number appears on the display. As you release the button, the player will start playing the selected track from the beginning.

Fast forward: Touch the "⏶" switch and hold it to fast forward the disc. When you release the switch, the CD player will resume playing from that position.

Reverse: Touch the "⏷" switch and hold it to reverse the disc. When you release the switch, the CD player will resume playing.

(f) Searching for a desired track

Touch the "SCAN" switch.

The bar on the upper side is highlighted in yellow. The CD player will play the next track for 10 seconds, then scan again. To select a track, touch the "SCAN" switch a second time. If the player reaches the end of the disc, it will continue scanning at track 1.

After all the tracks are scanned in one pass, normal play resumes.

(g) Other CD player functions

"RPT" switch: Use it for automatic repeat of the track you are currently listening to.

Touch the switch while the track is playing. When the track is finished, the player will automatically go back to the beginning of the track and play the track again. To cancel it, touch the switch once again.

"DISC RPT" switch: Use it for automatic repeat of the disc you are currently listening to.

Touch the switch while the disc is playing. When the disc is finished, the player will automatically go back to the beginning of the disc and play the disc again. To cancel it, touch the button once again.

"DISC RAND" switch: Use it for automatic track selection for all the discs and play by the system.

When the switch is touched, the system selects a track in all the discs which are set and plays it. To cancel it, touch the switch once again.

When a track is skipped or the system is inoperative, touch the switch to reset.

"RAND" switch: Use it for automatic and random selection of the disc which you are currently listening to.

When the switch is touched, the system selects a track in the disc you are currently listening to. To cancel it, touch the switch once again.

"TITLE" switch: Use it for displaying the disc title and track title while the CD−TEXT disc is playing.

Up to 29 letters can be displayed. “NO TITLE” is displayed while the CD–TEXT disc is not playing. To cancel it, touch the “TITLE OFF” switch.

(h) If the player malfunctions

If the player or another unit equipped with the player malfunctions, our audio system will display one of the following error messages.

If “CD CHECK” appears on the display: It indicates that the disc is dirty, damaged or it was inserted up side down. Clean the disc or insert it correctly.

If “CD ERROR” appears on the display: The following causes are possible.

- There is trouble inside the system. Eject the disc.
- The inside of the player unit may be too hot due to the very high ambient temperature. Eject the disc and allow the player to cool down.

If the malfunction is not rectified: Take your vehicle to your Lexus dealer.

DVD player operation (For a Mark Levinson brand audio system)

The DVD player can play audio CDs, DVD video discs and video CDs.

For appropriate discs for this paper, see “Audio system operating hints” on page 333.

For safety reasons, you can enjoy DVD video discs and video CDs only when the vehicle is completely stopped with the engine switch in “ACC” or “IG−ON” mode and the parking brake applied. While you are driving, you can hear audio alone even in the DVD video or video CD mode.

The DVD player can play the discs labeled as shown below.

(a) Inserting or ejecting discs

The engine switch must be in “ACC” or “IG−ON” mode.

Your automatic changer can store up to 6 discs.

- **Setting a single disc:**

1. Push the “LOAD” button briefly.

The green indicators at both ends of the slot start blinking and “WAIT” appears on the display. After the blinking indicators stay on and the “WAIT” changes to the “LOAD”, the DVD door opens.

2. Insert only one disc while the DVD door is open.

You can set a disc at the lowest empty disc number.

After insertion, the set disc is automatically loaded.

If the label faces downward, the disc cannot be played. In this case, “DISC CHECK” appears on the display.

If you need to insert the next disc, repeat the same procedure to insert another disc.

- **Setting all the discs:**

1. Push the “LOAD” button until you hear a beep.

The green indicators at both ends of the slot start blinking and “WAIT” appears on the display. After the blinking indicators stay on and the “WAIT” changes to the “LOAD”, the DVD door opens.

2. Insert only one disc while the DVD door is open.

The DVD door closes and “WAIT” appears again.

3. Insert the next disc after the “WAIT” changes to the “LOAD” and the DVD door opens.

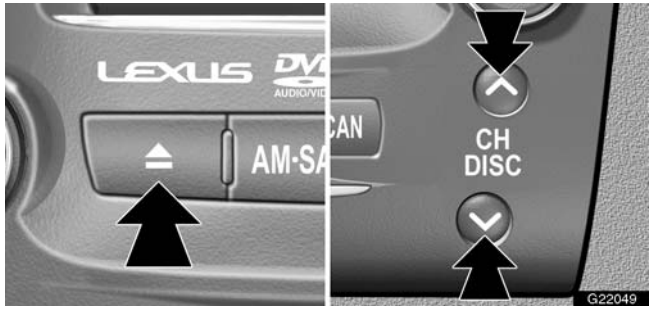
4. Repeat this procedure until you insert all the discs.

To cancel the operation, push the “LOAD” or “DISC” button.

If you do not insert the discs within 15 seconds after pushing the “LOAD” button and “LOAD” is displayed, the operation will be canceled automatically.

NOTICE

Do not insert one disc stacked on top of another one or feed them in continuously, to prevent discs from getting stuck in the player.



- **Ejecting a single disc alone:**

1. Push the "CH DISC ∧ " or " ∨ " button to highlight the disc number you want to eject.

2. Push the "⏏" (eject) button for the disc briefly.

At this time, the green indicators of the slot start blinking.

- **Ejecting all the discs:**

Push the "⏏" (eject) button for the disc until you hear a beep.

The numbers of the trays where the disc is not set are dimmed.

(b) Playing a disc

Push the “DISC” button if discs are already loaded in the player.

The “DVD CHANGER” screen appears on the display.

The discs set in the player are played continuously, starting with the last disc you inserted. The disc number of the disc currently being played, the track number and the time from the beginning of the program are shown on the display.

When play of one disc ends, the first track of the following disc starts. When play of the final disc ends, play of the first disc starts again.

The player will skip any empty disc trays.

(c) Selecting a desired disc

On the screen: Touch the desired disc number.

The selected disc number is highlighted in green.

The player will start playing the selected disc from the first track.

On the audio panel: Push the “CH DISC ∧ ” or “ ∨ ” button.

When you release the button, the player will start playing the selected disc from the first track.

(d) Operating an audio CD

Playing an audio CD—

Push the "AUDIO" button to display this screen. You can operate the switches and choose the number of the disc you want to play. The selected disc is automatically played.

Selecting a desired track—

"SEEK TRACK" button: Use for direct access to a desired track.

Push the "SEEK TRACK ∧ " or " ∨ " button and hold it until the desired track number appears on the display. As you release the button, the player will start playing the selected track from the beginning.

Fast forward: Touch the "⏶" switch and hold it to fast forward the disc. When you release the switch, the player will resume playing from that position.

Reverse: Touch the "⏷" switch and hold it to reverse the disc. When you release the switch, the player will resume playing.

Searching for a desired track or a disc—

Touch the “SCAN” switch.

The bar on the upper side will be highlighted in yellow. The player will play the next track for 10 seconds, then scan again. To select a track, touch the “SCAN” switch a second time. If the player reaches the end of the disc, it will continue scanning at track 1.

After all the tracks are scanned in one pass, normal play resumes.

Touch the “DISK SCAN” switch.

The bar on the upper side will be highlighted in yellow. The program at the beginning of each disc will be played for 10 seconds. To continue listening to the program of your choice, touch the “DISC SCAN” switch a second time.

After all the audio disc are scanned in one pass, normal play resumes.

Other functions—

“RPT” switch: Use it for automatic repeat of the track you are currently listening to.

Touch the switch while the track is playing. When the track is finished, the player will automatically go back to the beginning of the track and play the track again. To cancel it, touch the switch once again.

“DISC RPT” switch: Use it for automatic repeat of the disc you are currently listening to.

Touch the switch while the disc is playing. When the disc is finished, the player will automatically go back to the beginning of the disc and play the disc again. To cancel it, touch the switch once again.

“RAND” switch: Use it for automatic and random selection of the disc which you are currently listening to.

When the switch is touched, the system selects a track in the disc you are currently listening to. To cancel it, touch the switch once again.

“DISC RAND” switch: Use it for automatic track selection for all the audio discs and play by the system.

When the switch is touched, the system selects a track in all the audio discs which are set and plays it. To cancel it, touch the switch once again.

“TITLE” switch: Use it for displaying the disc title and track title while the CD−TEXT disc is playing.

Up to 29 letters can be displayed. “NO TITLE” is displayed while the CD−TEXT disc is not playing. To cancel it, touch the “TITLE OFF” switch.

(e) Operating a DVD video disc

NOTE: The playback condition of some DVD video discs may be determined by a DVD video software producer. This DVD player plays a disc as the software producer intended. So some functions may not work properly. Be sure to read the instruction manual for the DVD video disc separately provided. For the detailed information about DVD video discs, see "(h) DVD player and DVD video disc information"

Precautions on DVD video disc

When recording with a DVD video or video CD, audio tracks may not record in some cases while the menu is displayed. As audio will not play in this case, verify that the video tracks are playing and then activate playback.

When playback of a disc is completed:

- If an audio CD is playing, the next CD will be selected and playback will begin automatically.
- If a DVD video or video CD is playing, playback will stop or the menu screen will be displayed. The next disc will not play back automatically. (Audio tracks cannot be heard while the disc is stopped)

The title/chapter number and playback time display may not appear while playing back certain DVD video discs.

⚠ CAUTION

Conversational speech on some DVDs is recorded at a low volume to emphasize the impact of sound effects. If you adjust the volume assuming that the conversations represent the maximum volume level that the DVD will play, you may be startled by louder sound effects or when you change to a different audio source. The louder sounds may have a significant impact on the human body or pose a driving hazard. Keep this in mind when you adjust the volume.

The “DVD Hint !” screen appears when the video screen is first displayed after you select the engine switch in “ACC” or “IG−ON” mode.

Touch the “OK” switch when you read the message.

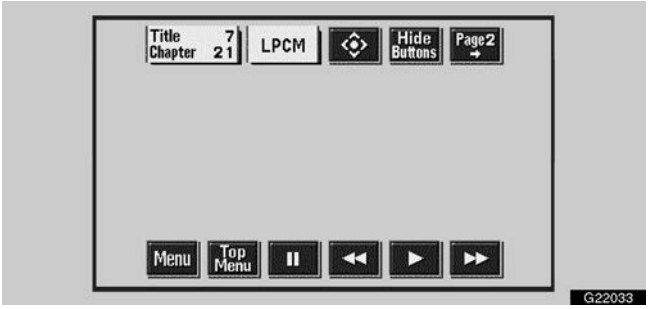
Playing a DVD video disc—

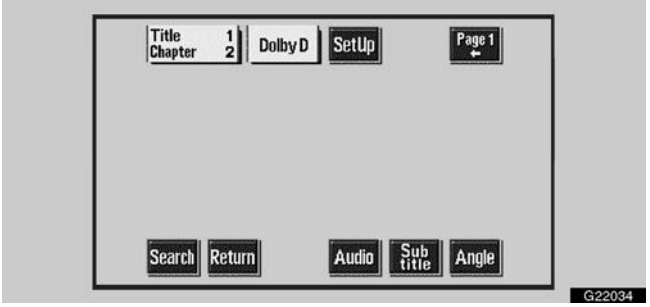
Push the “AUDIO” button to display this screen. You can operate the switches and choose the number of the disc you want to play. The selected disc is automatically played.

When you touch the “WIDE MODE” switch, the screen mode can be changed.

When you touch the “PICTURE” switch, the video screen returns.

Displaying operation switches—





If you touch a part of the screen, where switches are not located while you are watching video, DVD video operation switches will appear.

"Page 2" switch: Use this switch to display the operation switches on the second page.

"Page 1" switch: Use this switch to display the operation switches on the top page.

"Hide Buttons" switch: Use this switch to turn off the operation switches from the display.

If "⊘" appears on the display when you touch a switch, the operation relevant to the switch is not permitted.

Description of each switch—

- **Switches on top page**

"Menu" and "Top Menu" switches: If you touch any of the above switches, the menu screen for DVD video appears. (For the operation, see the manual that come with the DVD video disc provided separately.)

"" switch: The menu control key appears on the screen. (See page 318.)

"" switch: Use this switch to pause the video screen. When you touch this switch again, the video screen advances frame by frame.

"◀◀" switch: Touch this switch to fast reverse during playback and reverse slowly during pause.

"▶" switch: Use this switch to resume normal play after stop or pause.

"▶▶" switch: Touch this switch to fast forward during playback and forward slowly during pause.

- **Switches on second page**

"Set Up" switch: The initial setup screen appears. (See page 320.)

"Search" switch: The title search screen appears. (See page 318.)

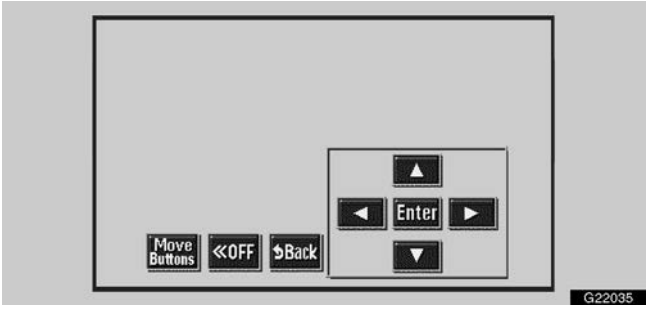
"Return" switch: Use this switch to display the predetermined scene and start playing from there.

"Audio" switch: The audio changing screen appears. (See page 319.)

"Sub Title" switch: The subtitle changing screen appears. (See page 319.)

"Angle" switch: The angle selection screen appears. (See page 320.)

Selecting a menu item—



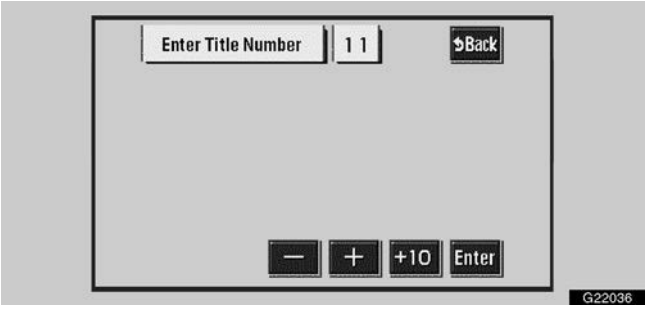
Enter the menu item using "▲", "▶", "▼" or "◀" switches and touch "Enter". The player starts playing video for that menu item. (For details, see the manual that comes with the DVD video disc provided separately.)

Each time you touch"Move Buttons" switch, the switches on the screen move upward and downward.

When you touch "OFF" switch, the displayed switches are not displayed. To display them again, touch "ON" switch.

Touch "Back", and the previous screen returns.

Searching by title—



Enter the title number using "–", "+" and "+10" switches and touch "Enter". The player starts playing video for that title number.

When you push "SEEK TRACK ∧ " or " ∨ " button, you can select a chapter.

Touch "Back", and the previous screen returns.

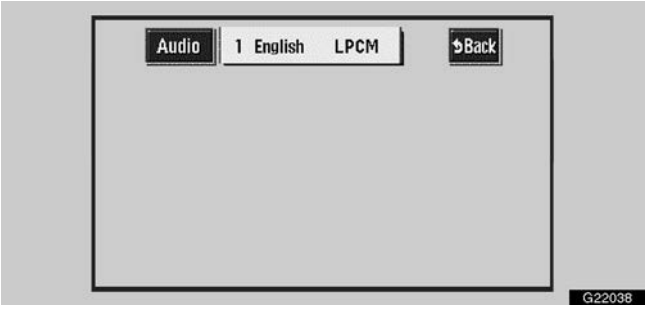
Changing the subtitle language—

Each time you touch “Sub title”, the language is selected from the ones stored in the discs and changed.

To turn off the subtitle, touch “Hide”.

Touch “Back”, and the previous screen returns.

Changing the audio language—



Each time you touch “Audio”, the language is selected from the ones stored in the discs and changed.

Touch “Back”, and the previous screen returns.

Changing the angle—

The angle can be selected for discs that are multi−angle compatible when the angle mark appears on the display.

Each time you touch “Angle”, the angle changes.

Touch “Back”, and the previous screen returns.

Setup menu—

The initial setting can be changed.

- **Audio language**

You can change the audio language.

1. Touch “Audio Lang.”.

2. Touch the language you want to hear on the “Select Audio Lang.” screen and “Enter”.

If you cannot find the language you want to hear on this screen, touch “Others” and enter a language code. For the entry of language code, see the following “Entry of language code—” on page 322.

- **Subtitle language**

You can change the subtitle language.

1. Touch “Subtitle Lang.”.

2. Touch a language you want to read on the “Select Subtitle Lang.” screen and “Enter”.

If you cannot find the language you want to read on this screen, touch “Others” and enter a language code. For the entry of language code, see the following “Entry of language code—” on page 322.

- **DVD language**

You can change the language on the DVD video menu.

1. Touch “DVD Language”.

2. Touch the language you want to read on the “Select DVD Language” screen and “Enter”.

If you cannot find the language you want to read on this screen, touch “Others” and enter a language code. For the entry of language code, see the following “Entry of language code—” on page 322.

- **Angle mark**

The multi−angle mark can be turned on or off on the screen while the disc which is multi−angle compatible is being played.

Each time you touch “Angle Mark”, the angle mark on the display turns on or off alternately.

- **Parental**

The level of viewer restrictions can be changed.

1. Touch “Parental”.

2. Touch the numbers of your personal code on the “Enter personal code” screen and touch “Enter”. If you enter the wrong numbers, touch “Clear” to delete the numbers.

10 touches of “Clear” will initialize the personal code.

3. Touch a parental level (1−8) on the “Select Restriction Level” and “Enter”.

When you touch “Default”, all the settings except “Parental”of this menu will be initialized.

Entry of language code—

If you touch “Others” on the “Select Audio Lang.” screen, “Select Subtitle Lang.” screen or “Select DVD language” screen, you can select the language you want to hear or read by entering a language code.

1. Touch the numbers of the language code.

If you enter the wrong numbers, touch “Clear” to delete the numbers.

2. Touch “Enter”.

Code	Language
1001	Japanese
0514	English
0618	French
0405	German
0920	Italian
0519	Spanish
2608	Chinese
1412	Dutch
1620	Portuguese
1922	Swedish
1821	Russian
1115	Korean
0512	Greek
0101	Afar
0102	Abkhazian
0106	Afrikaans
0113	Amharic
0118	Arabic
0119	Assamese
0125	Aymara
0126	Azerbaijani
0201	Bashkir
0205	Byelorussian
0207	Bulgarian
0208	Bihari

0209	Bislama
0214	Bengali
0215	Tibetan
0218	Breton
0301	Catalan
0315	Corsican
0319	Czach
0325	Welsh
0401	Danish
0426	Bhutani
0515	Esperanto
0520	Estonian
0521	Basque
0601	Persian
0609	Finnish
0610	Fiji
0615	Faroese
0625	Frisian
0701	Irish
0704	Scots−Gaelic
0712	Galician

0714	Guarani
0721	Gujarati
0801	Hausa
0809	Hindi
0818	Croatian
0821	Hungarian
0825	Armenian
0901	Interlingua
0905	Interlingue
0911	Inupiak
0914	Indonesian
0919	Icelandic
0923	Hebrew
1009	Yiddish
1023	Javanese
1101	Georgian
1111	Kazakh
1112	Greenlandic
1113	Cambodian
1114	Kannada
1119	Kashmiri

1121	Kurdish
1125	Kirghiz
1201	Latin
1214	Lingala
1215	Laothian
1220	Lithuanian
1222	Latvian
1307	Malagasy
1309	Maori
1311	Macedonian
1312	Malayalam
1314	Mongolian
1315	Moldavian
1318	Marathi
1319	Malay
1320	Maltese
1325	Burmese
1401	Nauru
1405	Nepali
1415	Norwegian
1503	Occitan

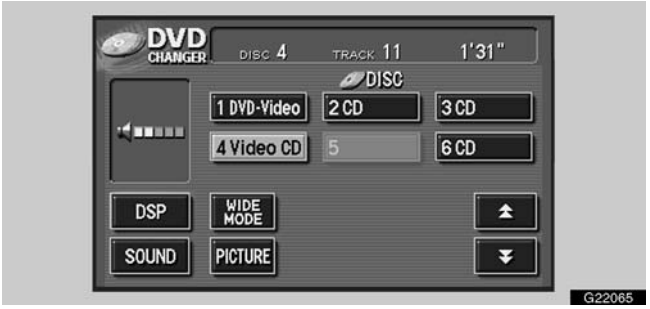
1513	(Afan)Oromo
1518	Oriya
1601	Panjabi
1612	Polish
1619	“Pashto,Pushto”
1721	Quechua
1813	Rhaeto−Romance
1814	Kirundi
1815	Romanian
1823	Kinyarwanda
1901	Sanskrit
1904	Sindhi
1907	Sangho
1908	Serbo−Croatian
1909	Sinhalese
1911	Slovak
1912	Slovenian
1913	Samoan
1914	Shona
1915	Somali
1917	Albanian

1918	Serbian
1919	Siswati
1920	Sesotho
1921	Sundanese
1923	Swahili
2001	Tamil
2005	Telugu
2007	Tajik
2008	Thai
2009	Tigrinya
2011	Turkmen
2012	Tagalog
2014	Setswana
2015	Tonga
2018	Turkish
2019	Tsonga
2020	Tatar
2023	Twi
2111	Ukrainian
2118	Urdu
2126	Uzbek

2209	Vietnamese
2215	Volapük
2315	Wolof
2408	Xhosa
2515	Yoruba
2621	Zulu

(f) Operating a video CD

Playing a video CD—

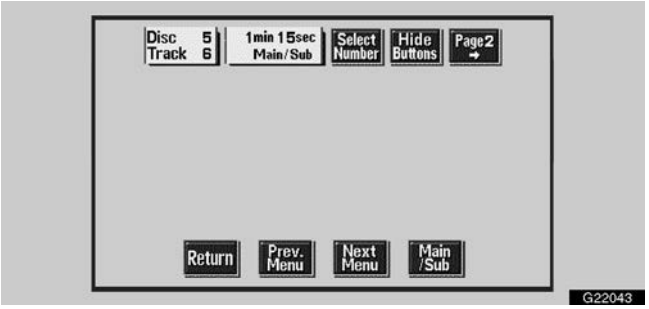


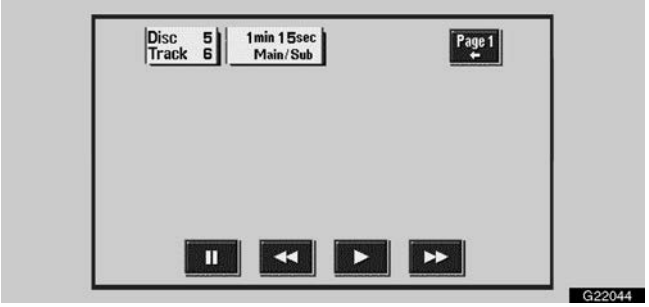
Push the "AUDIO" button to display this screen. You can operate the switches and choose the number of the disc you want to play.

When you touch the "WIDE MODE" switch, the screen mode can be changed.

When you touch the "PICTURE" switch, the video screen returns.

Displaying operation switches—





If you touch the part where switches are not located while you are watching video on the video CD, video CD operation switches will appear.

"**Page 2" switch:** Use this switch to display the operation switches on the second page.

"Page 1" switch: Use this switch to display the operation switches on the top page.

"Hide Buttons" switch: Use this switch to turn off the operation switches from the display.

If "⊘" appears on the display when you touch the switch, the operation is not permitted.

Description of each switch—

- **Switches on top page**

"Select Number" switch: The track or number search screen appears. (See "Searching by track" that follows.)

"Prev. Menu" switch: When you touch this switch while the disc menu is displayed, the previous page appears on the screen. If you touch this switch while the player is playing video, the previous track is searched and played.

"Next Menu" switch: When you touch this switch while the disc menu is displayed, the next page appears on the display. If you touch this switch while the player is playing video, the next track is searched and played.

"Main/Sub" switch: A multiplex transmission changing switch. The mode changes from Main/Sub to Main, to Sub and back to Main/Sub by touching this switch.

- **Switches on second page**

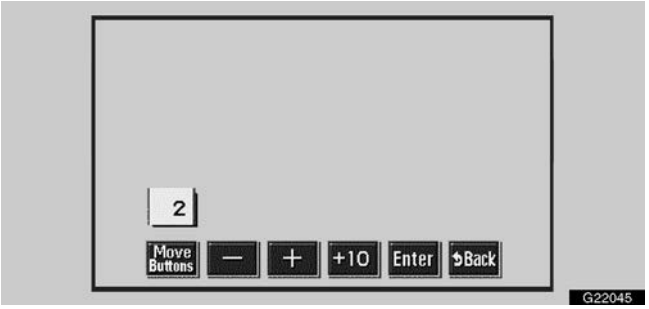
“II” switch: Use this switch to pause the video screen. When you touch this switch again, the video screen advance frame by frame.

“◀◀” switch: Touch this switch to fast reverse during playback.

“▶” switch: Touch this switch during pause to resume playing.

“▶▶” switch: Touch this switch to fast forward during the playback and start playing slowly during pause.

Searching by track—



Enter the track numbers using “–”, “+” and “+10” switches and touch “Enter”. The player starts playing video for that title number.

You can select a track number by pushing “SEEK TRACK ∧ ” or “ ∨ ” button.

Touch “Back”, and the previous screen returns.

(g) If the player malfunctions

If the player or another unit equipped with the player malfunction, your audio system will display one of the six following messages.

If "DISC CHECK" appears on the display: It indicates that the disc is dirty, damaged, or it was inserted upside down. Clean the disc or insert it correctly.

If "NO DISC" appears on the display: It indicates that there is no disc in the DVD player.

If "REGION CODE ERROR" appears on the display: It indicates that the DVD region code is not set properly.

If "DVD ERROR" appears on the display: It indicates that the inside of the player unit may be too hot due to the very high ambient temperature. Eject a disc from the player and allow the player to cool down.

If the malfunction is not rectified: Take your vehicle to your Lexus dealer.

(h) DVD player and DVD video disc information

DVD video discs—

This DVD player conforms to NTSC color TV formats. The DVD video disc conforming to another formats such as PAL or SECAM cannot be used.

Region codes: Some DVD video discs have a region code indicating a country where you can use the DVD video disc on this DVD player. If the DVD video disc is not labeled as "ALL" or "1", you cannot use it on this DVD player. If you attempt to play an inappropriate DVD video disc on this player, "REGION CODE ERROR" appears on the screen. Even if the DVD video disc does not have a region code, there is a case that you cannot use it.

Marks shown on DVD video discs:

NTSC	Indicates NTSC format of color TV.
2	Indicates the number of audio tracks.
2	Indicates the number of language subtitles.
3	Indicates the number of angles.

16:9 LB 4:3	Indicates the screen to be selected. Wide screen: 16 : 9 Standard: 4 : 3
ALL 1	Indicates a region code by which this video disc can be played. ALL: in all countries Number: region code

DVD video disc glossary—

DVD video discs: Digital versatile disc that holds video. DVD video discs have adopted "MPEG2", one of the world standards of digital compression technologies. The picture data is compressed by 1/40 on average and stored. Variable rate encoded technology in which the volume of data assigned to the picture is changed depending on the picture format has also been adopted. Audio data is stored using PCM and Dolby digital, which enables higher quality of sound. Furthermore, multi−angle and multi−language features will also help you enjoy the more advanced technology of DVD video.

Viewer restrictions: This feature limits what can be viewed in conformity with a level of restrictions of the country. The level of restrictions varies depending on the DVD video disc. Some DVD video discs cannot be played at all, or violent scenes are skipped or replaced with other scenes.

Level 1: DVD video discs for children can be played.

Level 2 – 7: DVD video discs for children and G−rated movie can be played.

Level 8: All types of the DVD video discs can be played.

Multi−angle feature: You can enjoy the same scene at different angles.

Multi−language feature: You can select a language of the subtitle and audio.

Region codes: The region codes are provided on DVD players and DVD discs. If the DVD video disc does not have the same region code as the DVD player, you cannot play the disc on the DVD player. For region codes, see page 329.

Audio: This DVD player can play liner PCM, Dolby digital and MPEG audio format DVD. Other decoded type cannot be played.

Title and chapter: Video and audio programs stored in DVD video disc are divided in parts by title and chapter.

Title: The largest unit of the video and audio programs stored on DVD video discs. Usually, one piece of movie, one album, or one audio program is assigned as a title.

Chapter: The unit smaller than that of title. A title comprises plural chapters.

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Audio remote control (steering switches)

The steering switches are installed on the left side of the steering wheel.

"MODE" switch: Use this switch to change the mode. If a tape or disc is not inserted, the "TAPE" or "DISC" mode is skipped. When you push the switch with the audio system turned off, the audio system turns on.

"VOL" switches: Use these switches to adjust the volume. Push " +" to increase the volume and " – " to decrease the volume. The volume continues to increase or decrease while the switch is being pressed.

(a) When the radio mode is selected

“ ∧ ” or “ ∨ ”**switch:** Push this switch for seek tuning or to select a station.

- Push this switch briefly to select a station that you assigned to a switch on the audio system.
- Push this switch and hold it until you hear a beep. The radio will begin seeking up or down for a station, and will stop on reception.

(b) When the “TAPE” mode is selected

“ ∧ ” or “ ∨ ”**switch:** Push this switch to fast forward, rewind the tape or for automatic program selection.

- Push this switch until you hear a beep to fast forward or rewind the tape. To stop fast forwarding or rewinding, push the same side on the switch until you hear a beep.
- Push this switch briefly for automatic program selection. When automatically selecting a program, you can skip up to 9 programs at a time. For details, see page 299 for details.

(c) When the “DISC” mode is selected

<CD player>

“ ∧ ” or “ ∨ ”**switch:** Use this switch to select a desired track or disc.

- Push this switch briefly to select a desired track.
- Push and hold this switch until you hear a beep to select a desired disc.

<DVD player>

“ ∧ ” or “ ∨ ”**switch:** Use this switch to select a desired track, disc or chapter.

- Push this switch briefly to select a desired track or chapter.
- Push and hold this switch until you hear a beep to select a desired disc.

⚠ CAUTION

Operate the steering switches with due care while you are driving to avoid accidents.

Audio system operating hints

NOTICE

To ensure correct audio system operations:

- ***Be careful not to spill beverages over the audio system.***
- ***Do not put anything other than a cassette tape or disc into the cassette tape slot or disc slot.***
- ***The use of a cellular phone inside or near the vehicle may cause a noise from the speakers of the audio system which you are listening to. However, this does not indicate a malfunction.***

Radio reception

FM broadcasts have a range of about 40 km or 25 miles. When driving away from a station, you may have to fine−tune your radio and turn up the volume as the station gets weaker. Because FM uses a line−of−sight signal, tall buildings or hills may sometimes block reception. These are all normal characteristics of FM reception and do not indicate any problem with the radio itself.

Caring for your cassette player and tapes

For the best performance for your cassette player and tapes:

Clean the tape head and other parts regularly.

- A dirty tape head or tape path can decrease sound quality and tangle your cassette tapes. The easiest way to clean them is by using a cleaning tape. (A wet type is recommended.)

Use high−quality cassettes:

- Low−quality cassette tapes can cause many problems, including poor sound, inconsistent playing speed, and constant auto−reversing. They can also get stuck or tangled in the cassette player.
- Do not use a cassette if it has been damaged or tangled or if its label is peeling off.
- Do not leave a cassette in the player if you are not listening to it, especially if it is hot outside.
- Store cassettes in their cases and out of direct sunlight.
- Avoid using cassettes with a total playing time longer than 100 minutes (50 minutes per side). The tape used in these cassettes is thin and could get stuck or tangled in the cassette player.

Caring for your CD player or DVD player, and discs

- Your CD player or DVD player is intended for use with 12 cm (4.7 in.) discs only.
- Extremely high temperature can keep your CD player or DVD player from working. On hot days, use air conditioning to cool the vehicle interior before you listen to a disc.
- Bumpy roads or other vibrations may make your CD player or DVD player skip.
- If moisture gets into your CD player or DVD player, you may not hear any sound even though the player appears to be working. Eject all discs from the player and wait until the player dries.

CAUTION

CD players or DVD players use an invisible laser beam which could cause hazardous radiation exposure if directed outside the unit. Be sure to operate the player correctly.

CD player

- Use only CDs marked as shown above. The following products may not be playable on your CD player.

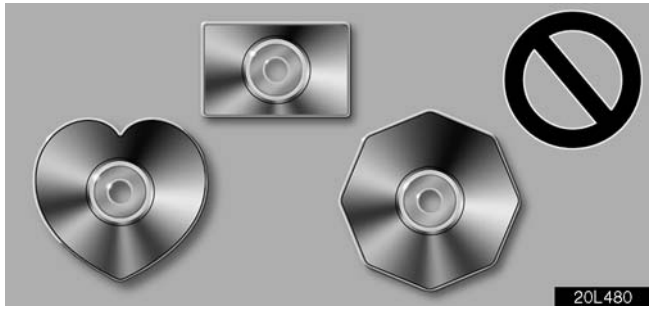
  Copy–protected CD
  CD–R (CD–Recordable)
  CD–RW (CD–Re–writable)
  CD–ROM

Audio CDs	COMPACT disc DIGITAL AUDIO / COMPACT disc DIGITAL AUDIO TEXT
DVD video discs	DVD VIDEO / DVD VIDEO
Video CDs	VIDEO CD / COMPACT disc DIGITAL VIDEO

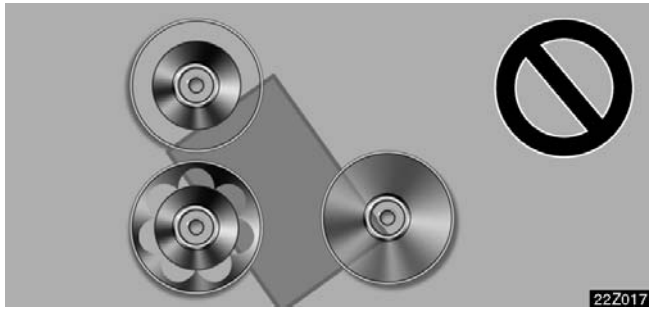
DVD player

- Use only discs marked as shown above. The following products may not be playable on your DVD player.

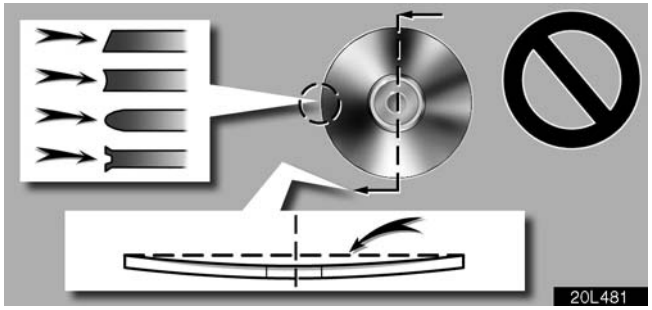
  SACD dts–CD
  Copy–protected CD
  CD–R(CD–Recordable)
  CD–RW(CD–Re–writable)
  CD–ROM
  DVD–R
  DVD+R
  DVD–RW
  DVD+RW
  DVD–ROM
  DVD–RAM



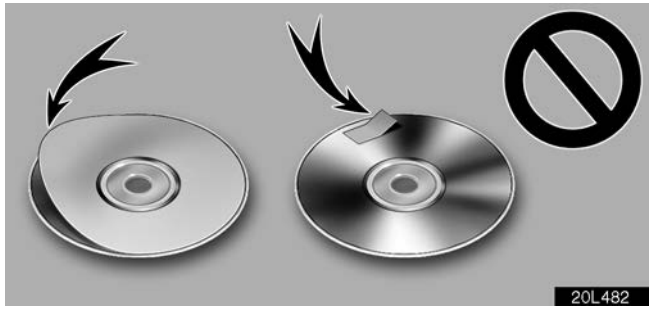
▶***Special shaped discs***



▶***Transparent/translucent discs***



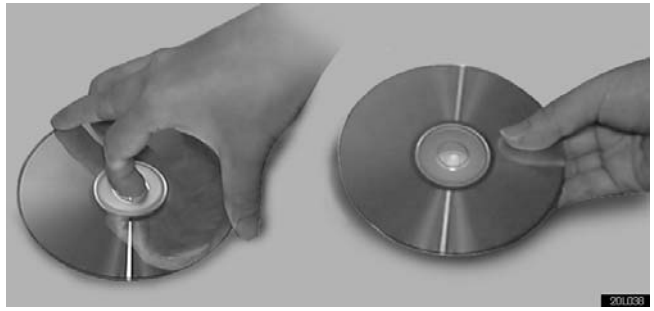
▶*Low quality discs*



▶*Labeled discs*

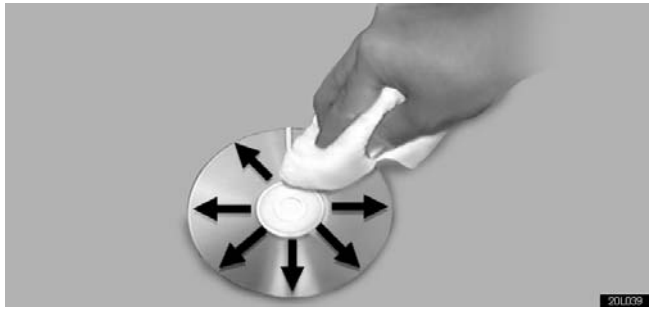
NOTICE

Do not use special shaped, transparent/translucent, low quality or labeled discs such as those shown in the illustrations. The use of such discs may damage the player or changer, or it may be impossible to eject the disc.



▶***Correct*** ▶***Wrong***

- Handle discs carefully, especially when you set them into the player. Hold them on the edge and do not bend them. Avoid getting fingerprints on them, particularly on the shiny side.
- Dirt, scratches, warping, pin holes, or other disc damage could cause the player to skip or to repeat a section of a track. (To see a pin hole, hold the disc up to the light.)



To clean a disc: Wipe it with a soft, lint–free cloth that has been dampened with water. Wipe in a straight line from the center to the edge of the disc (not in a circle). Do not use a conventional record cleaner or anti–static device.

SECTION 3 – 1

STARTING AND DRIVING

Starting and driving

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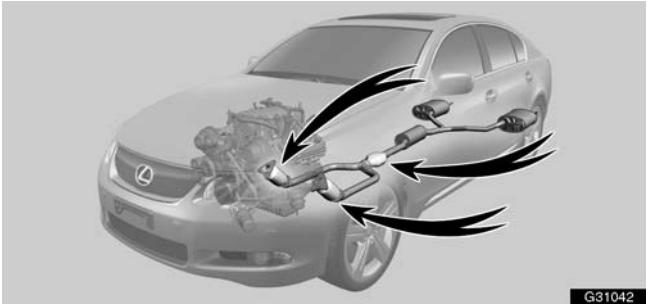
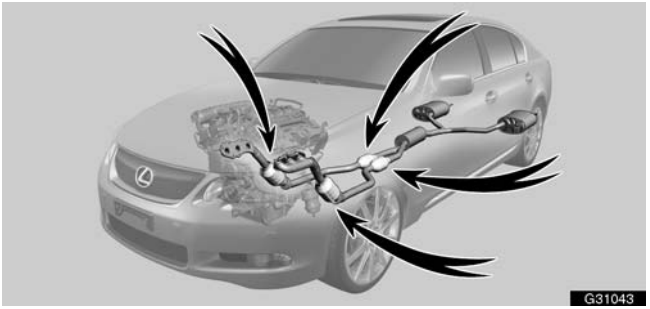
THREE−WAY CATALYTIC CONVERTERS



▶*GS430*



▶*GS300*

Three−way catalytic converters are emission control devices installed in the exhaust system.

The purpose is to reduce pollutants in the exhaust gas.

⚠ CAUTION

- **Keep people and combustible materials away from the exhaust pipe while the engine is running. The exhaust gas is very hot.**
- **Do not drive, idle or park your vehicle over anything that might burn easily such as grass, leaves, paper or rags.**

NOTICE

A large amount of unburned gases flowing into the three−way catalytic converter may cause it to overheat and create a fire hazard. To prevent this and other damage, observe the following precautions:

- ***Use only unleaded gasoline.***
- ***Do not drive with an extremely low fuel level; running out of fuel could cause the engine to misfire, creating an excessive load on the three−way catalytic converter.***
- ***Do not allow the engine to run at idle speed for more than 20 minutes.***

- *Avoid racing the engine.*
- *Do not push−start or pull−start your vehicle.*
- *Do not turn off the engine while the vehicle is moving.*
- *Keep your engine in good running order. Malfunctions in the engine electrical system, electronic ignition system or fuel system could cause an extremely high three−way catalytic converter temperature.*
- *If the engine becomes difficult to start or stalls frequently, take your vehicle in for a check−up as soon as possible. Remember, your Lexus dealer knows your vehicle and its three−way catalytic converter system best.*
- *To ensure that the three−way catalytic converter and the entire emission control system operate properly, your vehicle must receive the periodic inspections required by the Lexus Maintenance Schedule. For scheduled maintenance information, refer to the "Owner's Manual Supplement / Scheduled Maintenance".*

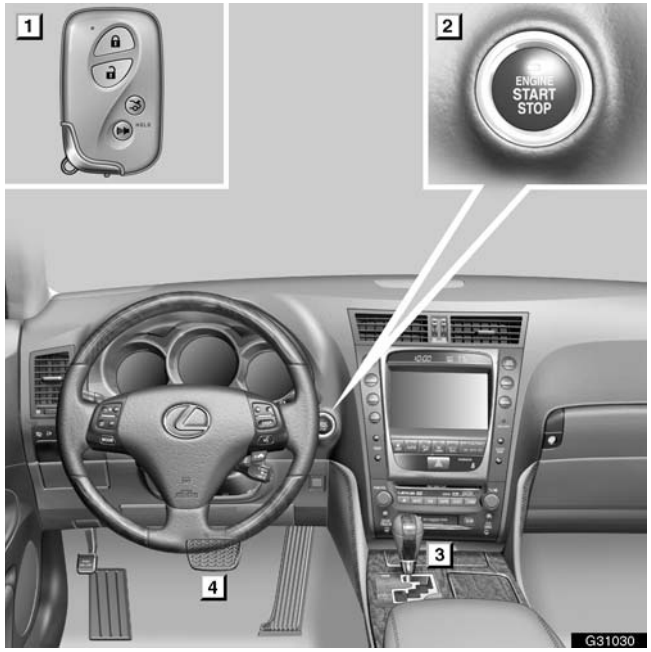
ENGINE EXHAUST CAUTION

CAUTION

- **Avoid inhaling the engine exhaust. It contains carbon monoxide, which is a colorless and odorless gas. It can cause unconsciousness or even death.**
- **Make sure the exhaust system has no holes or loose connections. The system should be checked from time to time. If you hit something, or notice a change in the sound of the exhaust, have the system checked immediately.**
- **Do not run the engine in a garage or enclosed area except for the time needed to drive the vehicle in or out. The exhaust gases cannot escape, making this a particularly dangerous situation.**
- **Do not remain for a long time in a parked vehicle with the engine running. If it is unavoidable, however, do so only in an unconfined area and adjust the heating or cooling system to force outside air into the vehicle.**
- **Keep the trunk lid closed while driving. An open or unsealed trunk lid may cause exhaust gases to be drawn into the vehicle.**

- **To allow proper operation of your vehicle's ventilation system, keep the inlet grilles in front of the windshield clear of snow, leaves, or other obstructions.**
- **If you smell exhaust fumes in the vehicle, drive with the windows open and the trunk lid closed. Have the cause immediately located and corrected.**

OPERATING THE ENGINE SWITCH



▶ 1 *Electronic key* 2 *Engine switch*
3 *Automatic transmission selector lever*
4 *Brake pedal*

Engine switch

By pushing the engine switch with an electronic key in possession, you can select "ACC", "IG−ON" or "OFF" mode and start or stop the engine. (For details, see "Selecting the mode" on page 344 and "Starting the engine" on page 350 and "Stopping the engine" on page 351.)

When an electronic key is in the vehicle, it is automatically detected and checked if it corresponds to the registered ID code for the vehicle, thereby allowing engine operation and mode selection.

Press the engine switch slowly and firmly. Quick operation may not activate the desired mode.

In the following conditions, the system malfunctions. Contact your Lexus dealer.

- If the engine switch is not illuminated when the clearance lights are turned on.
- If the engine switch indicator light flashes amber.
- If the switch movement seems unusual.

If, in an emergency, you must turn the engine off while the vehicle is moving, press the engine switch for more than 3 seconds. At this time, "ACC" mode is selected.

⚠ CAUTION

- **Do not press the engine switch during driving, except in an emergency situation.**
- **If you leave your vehicle in hot weather, the switch surface may get hot. Take care not to get burned.**

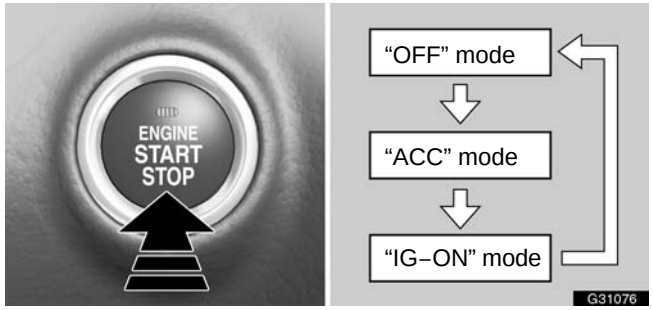
NOTICE

Observe the following instructions, or the engine switch may not work properly.

- ***The switch should be operated with your clean finger. Do not use an oily or dirty finger.***
- ***Be careful not to spill water or other liquid on the switch.***

Do not modify the engine switch without consulting your Lexus dealer. Doing so may cause system problem.

Selecting the mode

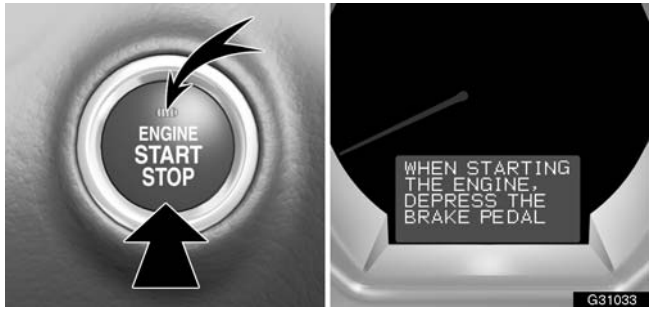


To select “ACC”, “IG−ON” or “OFF” mode, press the engine switch while carrying an electronic key with the selector lever in the “P” position, and the brake pedal not depressed.

Each time you press the engine switch, the mode changes in order of “OFF”, “ACC”, “IG−ON” mode then back to “OFF” mode.

To start the engine in each mode, push the engine switch while the brake pedal is depressed. For details, see “Starting the engine” on page 350.

“ACC” mode



This mode allows some accessories to be operable such as the radio, even if the engine is not running. An amber indicator light turns on at the engine switch.

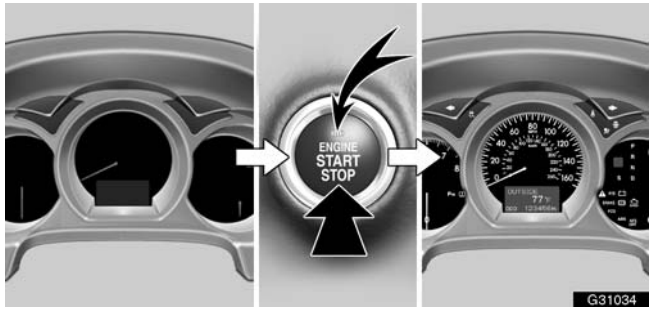
To select the “ACC” mode from “OFF” mode, push the engine switch once without depressing the brake pedal. The engine immobilizer is disabled and the security indicator light goes out. (For details, see “Engine immobilizer” on page 11.)

If you cycle once through all the modes (“OFF”, “ACC”, “IG−ON”) with the driver’s door closed, the second time you select the “ACC” mode, the above message will appear for a few seconds.

If the vehicle is left in “ACC” mode for about an hour, the engine switch is automatically off.

If the driver’s door is opened with the transmission in “P”, a buzzer will remind you in “ACC” mode.

“IG−ON” mode



“IG−ON” mode has two conditions: all gauges, meters and accessories on and the engine is not running, or engine running.

To select the “IG−ON” mode while the engine is not running:

- From “OFF” mode—push the engine switch twice without depressing the brake pedal.
- From “ACC” mode—push the engine switch once without depressing the brake pedal.

The engine switch indicator light will be illuminated amber if the engine is not running, and will turn off when the engine is running.

If you push the engine switch while the brake pedal is depressed with the transmission not in “P” or “N”, “IG−ON” mode is selected with the engine not running.

It is not a malfunction if the needles on all meters and gauges move slightly when selected in “IG−ON” mode.

NOTICE

Do not leave the engine switch in “IG−ON” mode while the engine is not running. The battery will be discharged.

“OFF” mode

This mode turns the engine and all accessories off.

To select the “OFF” mode from “IG−ON” mode:

- If the engine is not running, push the engine switch once while the brake pedal is not depressed.
- If the engine is running, push the engine switch once regardless of brake pedal position while the vehicle is completely stopped.

To select the “OFF” mode from “ACC” mode, push the engine switch twice while the brake pedal is not depressed.

The engine immobilizer is automatically set, the security indicator light blinks and the engine switch indicator light is turned off. (For details, see “Engine immobilizer” on page 11.)

The steering wheel can be locked only in this mode.

Steering lock

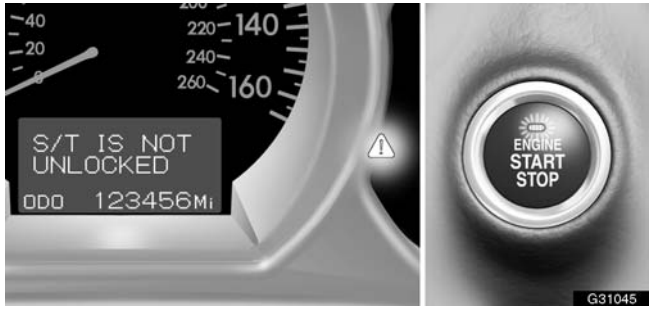
The steering wheel is locked in “OFF” mode.

When the steering lock is activated, you may hear a sound coming from the steering column, it is not a malfunction. If you select the “OFF” mode while the driver’s door is open, the steering wheel is not locked until the driver’s door is closed.

If you select the mode other than “OFF” or start the engine, the steering lock is disabled.

If there is trouble somewhere in the steering lock system, either of the following warning messages will appear on the multi–information display.

- S/T IS NOT UNLOCKED
- CHECK S/T LOCK

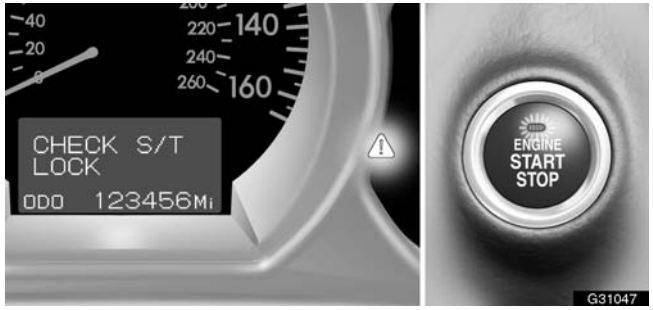


When pushing the engine switch while the brake pedal is depressed, the steering lock is not unlocked if load is applied to the steering wheel, and the above message appears.

The engine will not start. At this time, the master warning light comes on and the engine switch indicator light blinks green.

To start the engine in this condition, push the engine switch again while turning the steering wheel in either direction as shown in the above illustration.

The steering wheel is unlocked, and the engine will start.



If the steering lock system is malfunctioning, the above message appears.

At this time, the master warning light comes on and the engine switch indicator light blinks amber. The engine will not start. In this case, contact your Lexus dealer.

How to start the engine

Before starting the engine, be sure to follow the instructions.

CRANKING HOLD FUNCTION

Once you push the engine switch while the brake pedal is depressed, the cranking hold function continues to crank the engine in “IG−ON” mode until it starts.

The function stops cranking the engine after about 25 seconds at maximum if the engine has not started yet. When you crank the engine again, wait a few seconds and restart it.

BEFORE STARTING THE ENGINE

1. Check the area around the vehicle before entering it.
2. Adjust seat position, seatback angle, seat cushion angle, seat cushion height, head restraint height and steering wheel angle.
3. Adjust the inside and outside rear view mirrors.
4. Lock all doors.
5. Fasten seat belts.

Remember to check that the service reminder indicators function when the engine switch is selected in “IG−ON” mode, and check the fuel gauge to see that you have sufficient fuel.

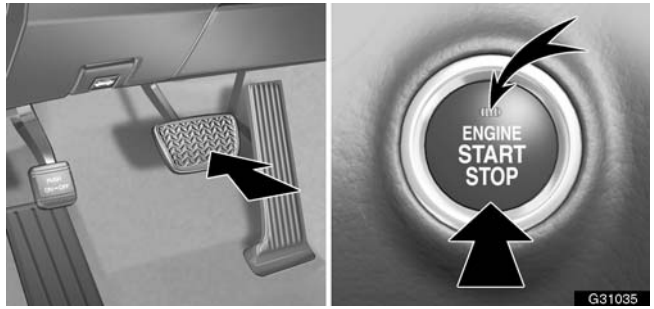
BEFORE CRANKING

1. Apply the parking brake firmly.
2. Turn off unnecessary lights and accessories.
3. Put the selector lever in ”P”. If you need to restart the engine while the vehicle is moving, put the selector lever in ”N”. A starter safety device will prevent the starter from operating if the selector lever is in any drive position.
4. Depress the brake pedal and hold it to the floor until driving off.

The multiport fuel injection system/sequential multiport fuel injection system in your engine automatically controls the proper air−fuel mixture for starting. You can start a cold or hot engine as follows:

Starting the engine

Normal starting procedure



When depressing the brake pedal while carrying an electronic key, make sure the green engine switch indicator light comes on. And then push the engine switch to start the engine.

If you press the engine switch while the brake pedal is depressed and the transmission is in “P” or “N”, the engine will start even if initially in “OFF”, “ACC” or “IG–ON” mode.

If you start the engine in “OFF” mode, the engine immobilizer is disabled, and the security indicator light goes off.

If you push the engine switch while the brake pedal is depressed with the transmission not in “P” or “N”, “IG–ON” mode will be selected with the engine not running.

If the engine stalls ...

Simply restart it , using the correct procedure given in normal starting.

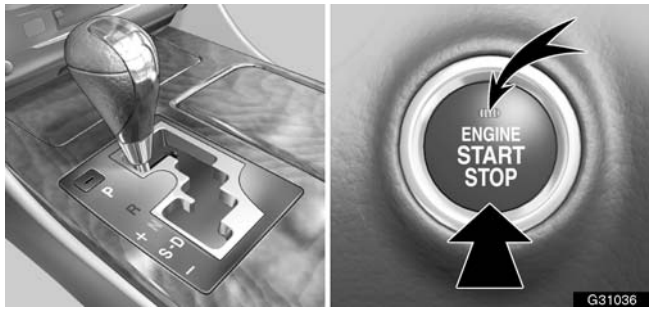
If the engine will not start

See ”If your vehicle will not start” on page 462.

NOTICE

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

Stopping the engine



If you press the engine switch while the selector lever is in "P" and the engine is running, regardless of brake pedal position, the engine will be turned off.

With the transmission not in "P", the engine switch is selected in "ACC" mode.

If, in an emergency, you must turn the engine off while the vehicle is moving, press the engine switch for more than 3 seconds. At this time, "ACC" mode is selected.

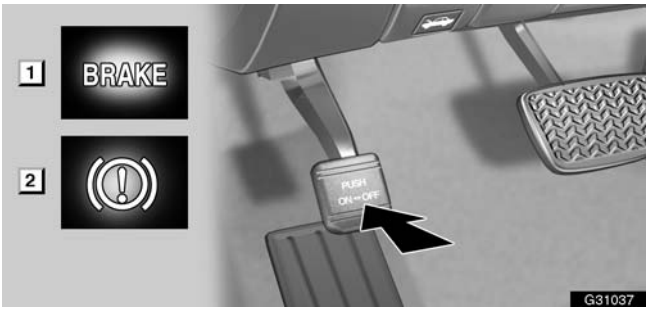
Several hours after the engine is turned off, you may hear a sound coming from underneath the luggage compartment for several minutes. This is normal operation and does not indicate a malfunction. (See page v.)

CAUTION

To avoid serious personal injury or an accident, observe the following precautions.

- **Turn off the engine, only when the vehicle is completely stopped.**
- **When you leave the vehicle, the selector lever must be in "P" and the parking brake must be applied, or the vehicle may suddenly move.**

PARKING BRAKE



▶ 1 *U.S.A.* 2 *Canada*

To set: Hold the regular brake pedal down with your right foot. Push down the parking brake pedal with your left foot.

To release: Hold the regular brake pedal down with your right foot and push the parking brake pedal with your left foot. When you lift your left foot, the parking brake pedal will follow it to the released position.

Before leaving your vehicle, firmly apply the parking brake.

To remind you that the parking brake is set, the parking brake reminder light in the instrument cluster remains on until you release the parking brake.

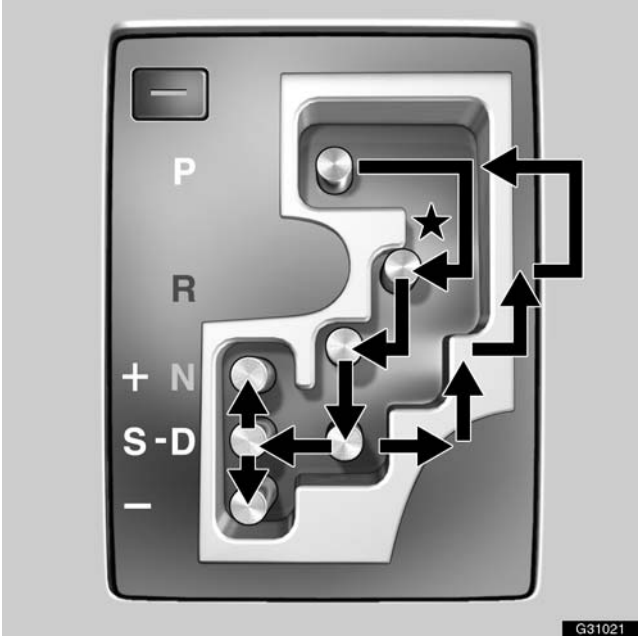
The buzzer will remind you to release the parking brake when the vehicle speed rises above 5 km/h (3mph) with the parking brake is applied. At this time the master warning light blinks and the message "PARK BRAKE" appears on the multi–information display.

⚠ CAUTION

Before driving, make sure the parking brake is fully released and that the parking brake reminder light is off.

AUTOMATIC TRANSMISSION

Your automatic transmission has a shift lock system to minimize the possibility of incorrect operation. This means you can only shift out of "P" position when the brake pedal is depressed with the engine switch in "IG−ON" mode. (★)



▶ ***The shift position or shift range position is displayed on the instrument cluster.***

P: Parking and engine starting

R: Reverse position

N: Neutral position

D: Normal driving position (Shifting into overdrive possible)

S: "S" mode driving

+: Upshifting

−: Downshifting

Correct use of the automatic transmission is explained in the following parts.

(a) Normal driving

(b) Driving in “S” mode

(c) Using engine braking

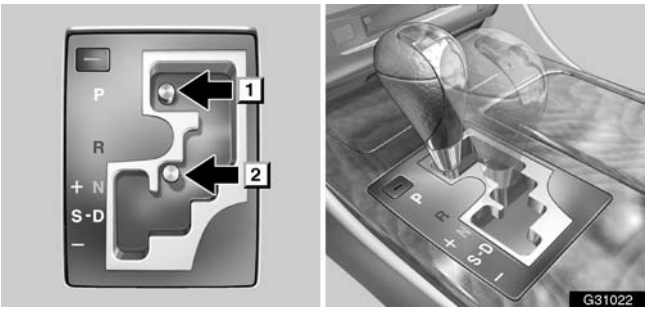
(d) Backing up

(e) Parking

(f) Good driving practice

(g) If you cannot shift the selector lever

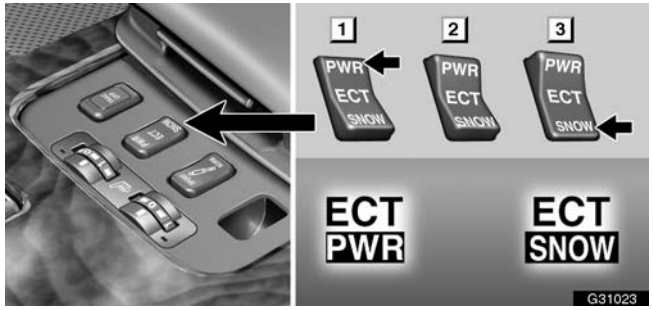
(a) Normal driving



▶ 1 *“P” (Park) position* 2 *“N” (Neutral) position*

1. Start the engine as instructed in “Operating the engine switch” on page 342.

The transmission must be in “P” or “N” position. The engine will not start in any drive position even if engine switch is pushed while the brake pedal is depressed.



▶ 1 *Power position* 2 *Normal position*
3 *Snow position*

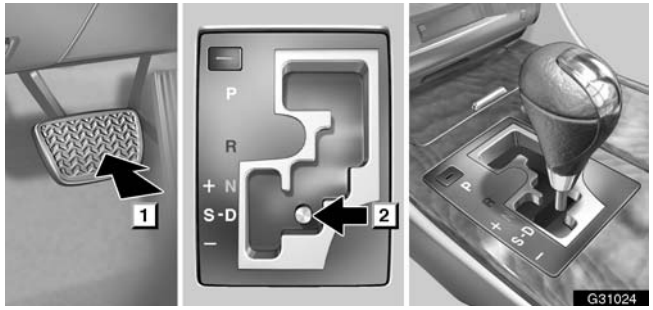
2. Set the driving pattern selector switch to the normal position.

Your transmission has a driving pattern selector switch which allows you to select power, normal or snow mode to suit your driving condition. For ordinary driving, Lexus recommends that you use the normal mode to improve fuel economy.

3. For more powerful acceleration and sporty driving, use the power position.

In the power mode, the "ECT PWR" light in the instrument cluster is on and the most suitable shift pattern is selected depending on the driver's operation of accelerator and brake pedal and on the vehicle condition. See "Automatic shifting point change control" on page 356.

For snow mode, see "Electronic Throttle Control System" on page 364.



▶ 1 *Brake pedal* 2 *"D" (Drive) position*

4. With your foot holding down the brake pedal, shift the selector lever to "D".

Always use the "D" position to improve fuel economy and quiet driving. Only in this position, shifting into the overdrive gear is possible. However, while the engine coolant temperature is low, the transmission will not shift into the overdrive gear even in the "D" position. (See "(c) Using engine braking" and "(f) Good driving practice" for exceptions.)

⚠ CAUTION

Never put your foot on the accelerator pedal while shifting.

5. Release the parking brake and brake pedal. Depress the accelerator pedal slowly for smooth starting.

In normal cruising, the vehicle will start in first gear and automatically shift up to the most suitable gear. On inclines, declines or winding roads, etc., the vehicle shifts up and down automatically according to the running conditions to obtain the suitable driving power and engine braking.

If you need to accelerate rapidly while driving, depress the accelerator pedal to the full throttle position. This provides more acceleration by automatically downshifting the transmission to the next lower gear or beyond, depending on the vehicle speed.

If engine braking is needed, such as in descending a long hill, see “(c) Using engine braking”.

- **AI (Artificial Intelligence) shifting control**

AI shifting control selects the most suitable shift range automatically according to the driver’s operation and driving condition.

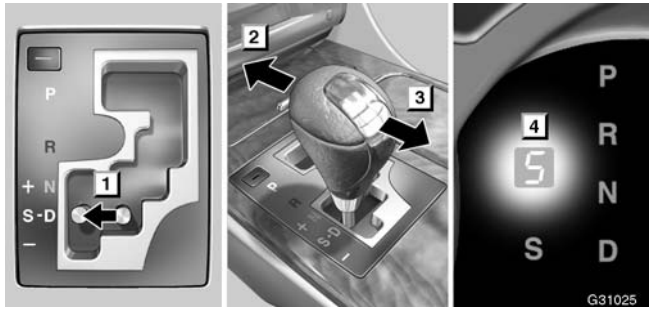
AI shifting control operates automatically with the selector lever in the “D” position. When the lever is moved to the “S” position, this function will be canceled.

Shifting control on the slope: On inclines, you can drive smoothly with reduced shifting quantity. On declines, the vehicle will shift down automatically to obtain optimum engine braking and reduce the driver’s foot braking load.

Automatic shifting point change control: The automatic shifting point control is controlled in the following way to respond to the driver’s operation.

- When the accelerator is depressed quickly, the vehicle downshifts rapidly in order to improve acceleration.
- When the accelerator is quickly released, the gear position is maintained in order to improve engine braking and reacceleration capabilities.
- During hard deceleration the vehicle downshifts rapidly in order to improve engine braking and reacceleration capabilities.

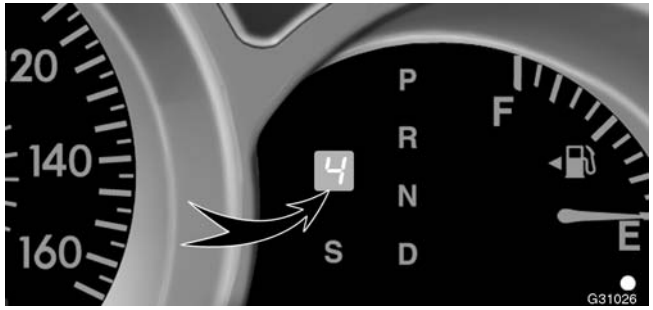
(b) Driving in “S” mode



▶ 1 *“S” mode position*
2 *Upshifting*
3 *Downshifting*
4 *Shift range position indicator*

You can change the shift range position in the “S” mode. The shift range position can be switched between “6” (sixth range) and “1” (first range) by moving the selector lever up to the “+” side or down to the “–” side. The first shift range position is “5” (fifth range) when the selector lever is shifted to the “S” position.

However, if you move the lever to the “S” position in AI shifting control, “5” (fifth range), “4” (fourth range) or “3” (third range) will be the first shift range. This is because the suitable shift range is selected depending on the driving condition.



▶ *Shift range position indicator*

The shift range position is displayed on the instrument cluster.

- **Shift range positions**

  “6” (sixth range): The most suitable gear is automatically selected between first and overdrive (sixth) gears according to vehicle speed and driving conditions. Always use the “6” (sixth range) position to improve fuel economy and for quiet driving.

  “5” (fifth range): The most suitable gear is automatically selected between first and fifth gears according to vehicle speed and driving conditions. This range is suitable for acceleration such as when you want to pass a vehicle running ahead of you during high speed driving.

"4" (fourth range): The most suitable gear is automatically selected between first and fourth gears according to vehicle speed and driving conditions. In the "4" (fourth range) position, the automatic transmission system will select the most suitable gear to handle current running conditions such as hill climbing, hard towing, etc.

"3" (third range): The most suitable gear is automatically selected between first and third gears according to vehicle speed and driving conditions. This range is best used when stronger engine braking is necessary.

"2" (second range): First or second gear will automatically be selected according to vehicle speed and driving conditions. This range is to be used when engine braking stronger than that of the "3" (third range) position is necessary.

"1" (first range): This gear is fixed in first regardless of vehicle speed or driving conditions. This range is to be used when maximum engine braking is necessary.

If you attempt to downshift the transmission when it is not possible to downshift due to high vehicle speed, a warning tone sounds twice.

- **Maximum allowable speeds**

To get on a highway or to pass slower traffic, maximum acceleration may be necessary. Make sure you observe the following maximum allowable speeds in each range:

	range	km/h (mph)
GS430:	1	57 (35)
	2	97 (60)
	3	141 (88)

	range	km/h (mph)
GS300 (2WD):	1	54 (33)
	2	93 (58)
	3	137 (85)

	range	km/h (mph)
GS300 (4WD):	1	52 (32)
	2	90 (56)
	3	131 (81)

NOTICE

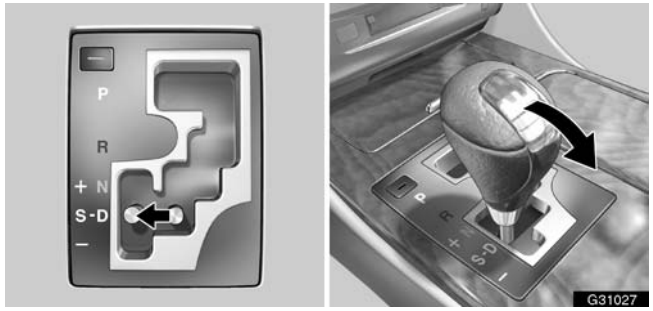
Do not downshift if you are going faster than the maximum allowable speed for the next lower range.

- **“S” mode indicator light**

  “S” mode allows you to use the shift range positions.

  The “S” mode indicator light comes on when the selector lever is shifted into the “S” position. When the “S” mode indicator light does not come on even with the selector lever moved to the “S” position, there may be a problem somewhere in the system. Have your vehicle checked/repaired by your Lexus dealer as soon as possible. In this case, you can drive in the same condition as in the “D” position.

(c) Using engine braking



▶ ***“S” mode position***

To use the braking power of the engine, downshift the range in the “S” mode position as follows:

- Shift into the “5” (fifth range) position. The transmission will downshift to fifth gear and engine braking will be enabled.

  If you drive in the “D” position: Shift the selector lever to the “S” position and “5” (fifth range) will automatically be selected.

  If you drive in the “S” position: Shift the selector lever down to the “–” position by selecting the “5” (fifth range).

When the cruise control is being used, even if you downshift from “D” or “6” (sixth range) to “5” (fifth range), engine braking will not be enabled because the cruise control is not cancelled. For vehicle speed reduction, see page 394.

Vehicles with the dynamic radar cruise control —
When the cruise control is being used in the conventional (fixed speed) cruise control mode or in the vehicle–to–vehicle distance control mode, even if you downshift from “D” or “6” (sixth range) to “5” (fifth range), engine braking will not be enabled because the cruise control is not cancelled. For vehicle speed reduction, see pages 416 and 404.

- Shift into the “4” (fourth range) position. The transmission will downshift to fourth gear when the vehicle speed is or becomes lower than the speed listed below and more powerful engine braking will be enabled.

GS430	193 km/h	(120 mph)
GS300 (2WD)	187 km/h	(116 mph)
GS300 (4WD)	178 km/h	(111 mph)

If you drive in the “D” position: Shift the selector lever to the “S” position and shift the lever down to the “–” position once to select “4” (fourth range). However, when you move the lever to the “S” position while the AI shifting control is operating, the first shift range will be “5” (fifth range), “4” (fourth range) or “3” (third range) because the suitable shift range is selected depending on the driving condition.

If you drive in the “S” position: Shift the selector lever down to the “–” position to select the “4” (fourth range).

When the cruise control is being used, even if you downshift from “D” or “5” (fifth range) to “4” (fourth range), engine braking will not be enabled because the cruise control is not cancelled. For vehicle speed reduction, see page 394.

Vehicles with the dynamic radar cruise control —
When the cruise control is being used in the conventional (fixed speed) cruise control mode or in the vehicle–to–vehicle distance control mode, even if you downshift from “D” or “5” (fifth range) to “4” (fourth range), engine braking will not be enabled because the cruise control is not cancelled. For vehicle speed reduction, see pages 416 and 404.

- Shift into the “3” (third range) position. The transmission will downshift to third gear when the vehicle speed is or becomes lower than the speed listed below and more powerful engine braking will be enabled.

GS430	144 km/h	(90 mph)
GS300 (2WD)	135 km/h	(84 mph)
GS300 (4WD)	129 km/h	(80 mph)

If you drive in the “D” position: Shift the selector lever to the “S” position and shift the lever down to the “–” position twice to select the “3” (third range). However, when you move the lever to the “S” position while the AI shifting control is operating, the first shift range will be “5” (fifth range), “4” (fourth range) or “3” (third range) because the suitable shift range is selected depending on the driving condition.

If you drive in the “S” position: Shift the selector lever down to the “–” position to select “3” (third range).

- Shift into the “2” (second range) position. The transmission will downshift to second gear when the vehicle speed is or becomes lower than the speed listed below and more powerful engine braking than that of the “3” (third range) position will be enabled.

GS430	99 km/h	(62 mph)
GS300 (2WD)	93 km/h	(58 mph)
GS300 (4WD)	89 km/h	(55 mph)

  If you drive in the “D” position: Shift the selector lever to the “S” position and shift the lever down to the “–” position three times to select “2” (second range).

  If you drive in the “S” position: Shift the selector lever down to the “–” position to select “2” (second range).

- Shift into the “1” (first range) position. The transmission will downshift to first gear when the vehicle speed is or becomes lower than the speed listed below and maximum engine braking will be enabled.

GS430	37 km/h	(23 mph)
GS300 (2WD)	38 km/h	(23 mph)
GS300 (4WD)	36 km/h	(22 mph)

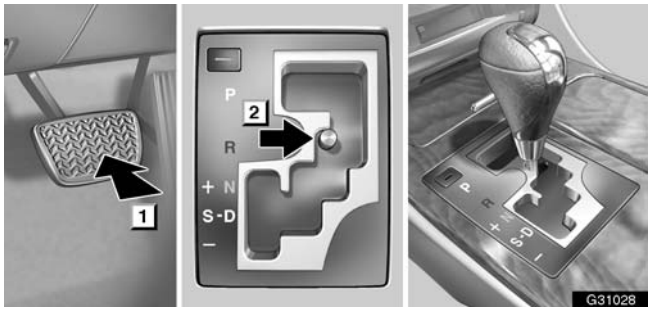
  If you drive in the “D” position: Shift the selector lever to the “S” position and shift the lever down to the “–” position four times to select “1” (first range).

  If you drive in the “S” position: Shift the selector lever down to the “–” position to select “1” (first range).

CAUTION

Be careful when downshifting on a slippery surface. The abrupt change in engine speed could cause the vehicle to skid or spin.

(d) Backing up



▶ 1 ***Brake pedal*** 2 ***"R" (Reverse) position***

1. Bring the vehicle to a complete stop.

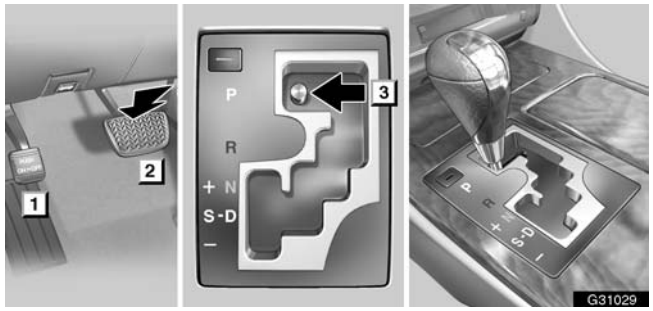
2. With the brake pedal held down with your foot, shift the selector lever to the "R" position.

NOTICE
Never shift into reverse while the vehicle is moving.

When the selector lever is shifted into the "R" position, the outside rear view mirrors automatically down to help backing up. For details, see "Power rear view mirror control" on page 206.

Vehicles with rear view monitor system: When the selector lever is shifted into the "R" position with the engine switch in "IG–ON" mode, rear view monitor system will activate. For instructions, see "Rear view monitor system" on page 388.

(e) Parking



▶ 1 *Parking brake pedal* 2 *Brake pedal*
3 *"P" (Park) position*

1. Bring the vehicle to a complete stop.

2. Depress the parking brake pedal fully to securely apply the parking brake.

3. With the brake pedal held down with your foot, shift the selector lever to the "P" position.

⚠ CAUTION

Never attempt to move the selector lever into "P" under any circumstances while the vehicle is moving. Serious mechanical damage and loss of vehicle control may result.

(f) Good driving practice

If the transmission repeatedly shifts up and down between fourth and overdrive gears when climbing a gentle slope, shift the selector lever to the "4" position. Be sure to shift the selector lever to the "D" position after climbing the slope.

⚠ CAUTION

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

NOTICE

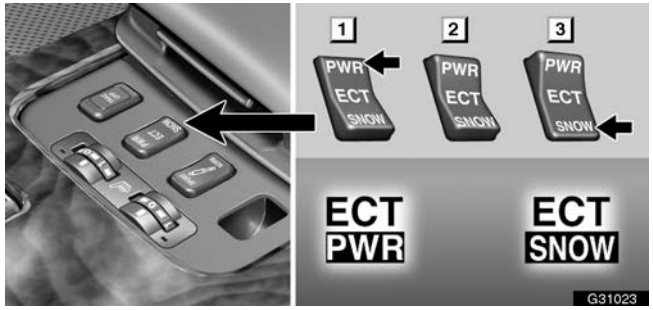
Always use the brake pedal or the parking brake to hold the vehicle on an upgrade. Do not attempt to hold the vehicle using the accelerator pedal, as this can cause the transmission to overheat.

(g) If you cannot shift the selector lever

If you cannot shift the selector lever even though the brake pedal is depressed, use the shift lock override button. For instructions, see “If you cannot shift automatic transmission selector lever” on page 489.

ELECTRONIC THROTTLE CONTROL SYSTEM

The electronic throttle control system always maintains appropriate engine output in relation to the accelerator opening in all driving conditions.



▶ 1 *Power position* 2 *Normal position*
3 *Snow position*

The electronic throttle control system has 3 modes: normal, power and snow modes.

Normal mode: For ordinary driving, Lexus recommends that you use this mode to improve fuel economy.

Power mode: For more powerful acceleration and sporty driving.

In the power mode, the “ECT PWR” light in the instrument cluster is on and the most suitable shift pattern is selected depending on the driver’s operation of accelerator and brake pedal and on the vehicle condition. See “Automatic shifting point change control” on page 356.

To return to the normal mode, push the driving pattern selector switch lightly on the “SNOW” side.

Snow mode: For slippery road surfaces such as in snow. In this mode, the spinning of the rear wheels is controlled appropriately.

When you push the driving pattern selector switch on the “SNOW” side, the snow mode is turned on and the ”ECT SNOW” light in the instrument cluster comes on.

To return to the normal mode, push the driving pattern selector switch on the “SNOW” side again.

When you turn the engine switch off in the snow mode, the electronic throttle control system automatically changes to the normal mode.

INTUITIVE PARKING ASSIST

The intuitive parking assist is a warning system used when parking the vehicle at low speed (e.g. into a garage). It uses an ultrasonic sensor, which checks the approximate distance to an obstacle. It will inform you of the approximate distance to an obstacle by displaying information on the multi−information display and the screen, and with beeping sounds.

1 Dual sensors

There are four of these steering guidance sensors installed in the front bumper.

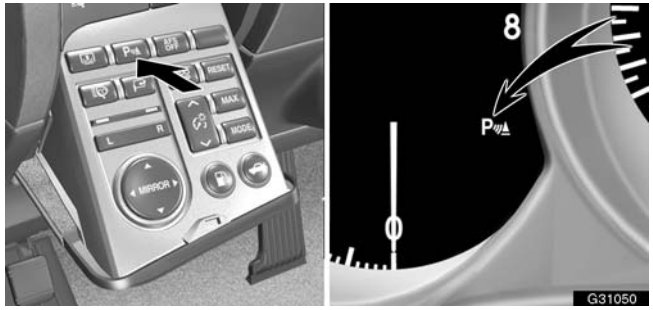
Steering guidance means that when an obstacle is inspected, not only is the distance estimated, this function judges whether collision with the obstacle within detection range is avoidable if the vehicle is steered in a certain direction, and informs the driver. There will be no warning if it judges that there is no possibility of collision with the obstacle within detection range. (See page 369.)

2 Rear corner sensors

There is one of these installed on each corner of the rear bumper, they inspect obstacles and will sound a warning depending on the distance to the obstacle. (See page 373.)

3 Back sensors

There are two of these installed near the center of the rear bumper, they inspect obstacles and will sound a warning depending on the distance to the obstacle. (See page 374.)



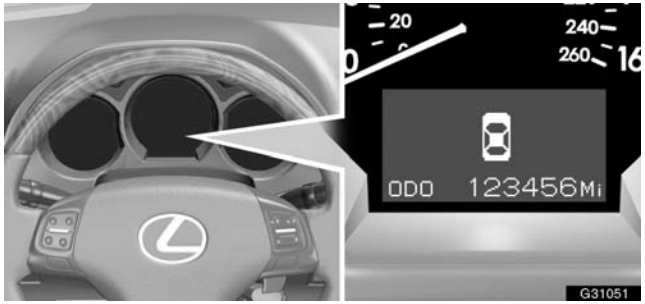
To use the intuitive parking assist, push the main switch in the switch box with the engine switch in “IG−ON” mode. Pushing the main switch again will turn the intuitive parking assist off.

When you push the main switch, the indicator light in the instrument cluster comes on and a beep sounds for one second, indicating that the intuitive parking assist is turned on.

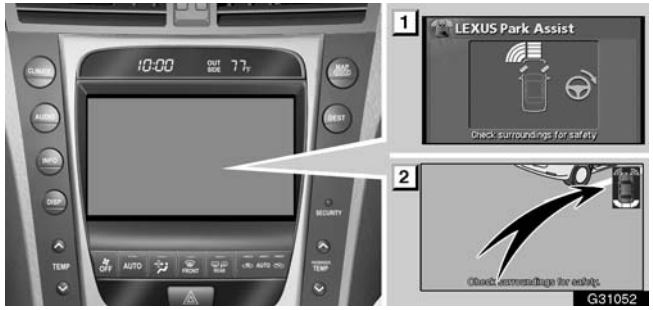
The intuitive parking assist will remain on even after turning the engine switch to “OFF” and then to “IG−ON” mode with the main switch on. However, a beep does not sound at this time.

If an error is detected in the intuitive parking assist while self−checking, beeps sound and a warning appears in the multi−information display and on the screen. For details, see “Intuitive parking assist failure warning” on page 378.

Where to display



▶*Multi−information display*



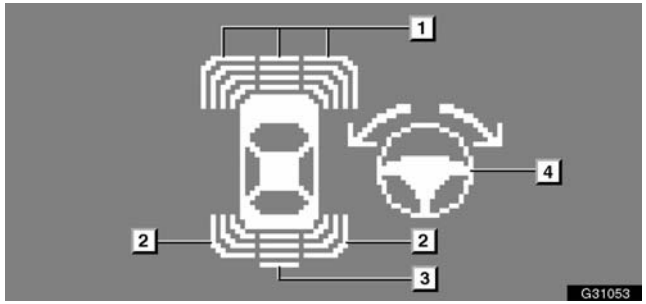
▶ 1 *Touch screen (full screen display)*
2 *Touch screen*
(vehicles with rear view monitor system)
(For details, see page 382.)

When an obstacle is detected, the indicator bars will come on or flash, accompanied by beeping. How many bars are lit or flashing depends on the distance to the obstacle.

When the obstacle is not detected any longer, beeps will stop sounding and the multi−information display and the screen will return to the previous display.

The volume of the beeps and the display on the screen can be changed. See “Setting the intuitive parking assist” on page 385.

Indicators and steering guide symbol



▶ 1 *Detection by dual sensors*
2 *Detection by rear corner sensors*
3 *Detection by back sensors*
4 *Steering guide symbol (See page 371)*

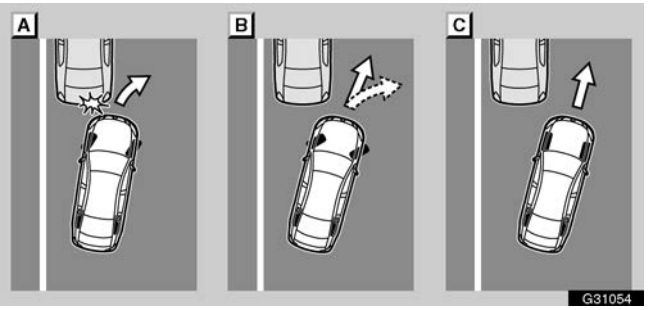
The approximate distance to the obstacle is shown with up to 4 bars on the front, front corners and rear of the vehicle and up to 3 bars on the rear corners of the vehicle.

⚠ CAUTION

To avoid an accident or injury, observe the following instructions, and then drive slowly using the brakes while confirming a safe distance around your vehicle with your eyes.

- **The sensor detection range is limited around the bumper. Be sure to confirm safety outside sensor detection with your eyes. For the sensor detection range, see page 376.**
- **It might take time for the sensors to detect the obstacle.**
- **Depending on the shape of the obstacle, indicators or beeps may not warn you properly, and the detection range may also be shortened.**
- **It might be difficult to hear beeps due to the volume of audio or air flow noise of air conditioning.**

Dual sensors



(A) Collision will be unavoidable: Collision with the detected obstacle cannot be avoided even by changing the steering.

(B) Collision will be avoided by changing the steering: Collision with the obstacle can be avoided by changing the steering.

(C) Collision will be avoided with the present steering angle: Even if you continue moving at the present steering angle, the distance to the obstacle within sensor detection range will not be less than about 25 cm (0.8 ft.).

The dual sensors detect an obstacle in front of the vehicle or at an angle to the front of the vehicle, and estimate the distance to the obstacle and also the steering angle required. They will evaluate which of the above 3 conditions is applicable.

The selector lever must be in any position other than “P” or “R” for these sensors to operate, however the obstacle at an angle to the front of the vehicle will also be detected while the selector lever is in “R”.

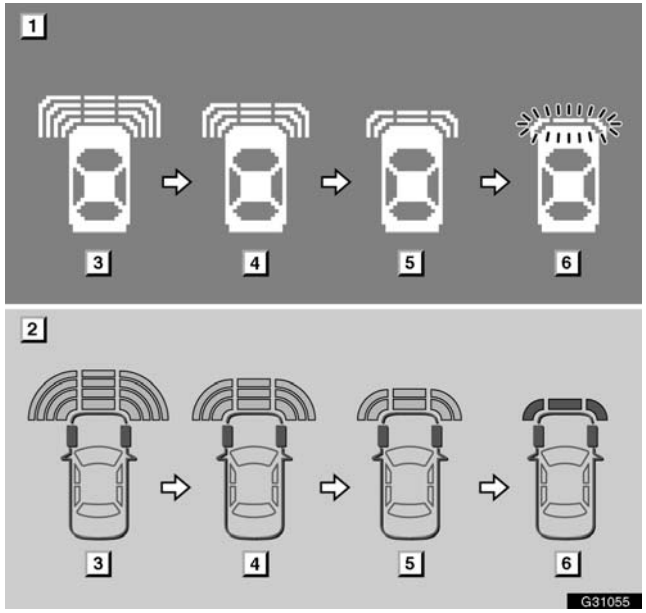
CAUTION

With long obstacles such as walls, the decision of the sensor may change as the obstacle gets closer; from certain avoidance to avoidance if steering is changed; from certain avoidance to unavoidable collision; and there are also times when the decision will be changed from avoidance if steering is changed, to certain collision. When you move your vehicle, be sure to confirm a safe distance around your vehicle with your eyes and drive slowly, or an accident or injury may result.

The steering guidance may not operate properly in the following conditions:

- **Tires other than those of Lexus genuine size are installed.**
- **The steering sensor information cannot be received properly. (See “Intuitive parking assist failure warning” on page 378.)**

(A) Collision will be unavoidable



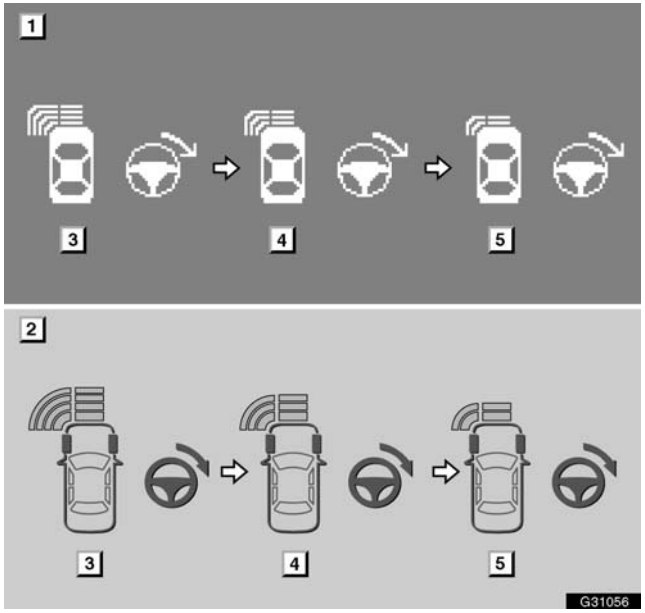
▶ 3 ***About 50 cm (1.5 ft.) to about 100 cm (3.0 ft.)***
4 ***About 37.5 cm (1.1 ft.) to about 50 cm (1.5 ft.)***
5 ***About 25 cm (0.8 ft.) to about 37.5 cm (1.1 ft.)***
6 ***Less than about 25 cm (0.8 ft.)***

1 **Multi−information display:**
The indicator bars will come on depending on the distance to the obstacle and will flash when the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.).

2 **Screen:**
The indicator bars will come on in yellow according to the distance to the obstacle. When the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.), the yellow indicator bars will turn red. In addition, the current direction of the tires is also indicated in 3 stages.

Beeps:
As distance to the obstacle gets closer, the interval of the intermittent sound gets shorter, and then finally to a continuous sound when the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.).

(B) Collision will be avoided by changing the steering



▶ 3 ***About 50 cm (1.5 ft.) to about 100 cm (3.0 ft.)***
4 ***About 37.5 cm (1.1 ft.) to about 50 cm (1.5 ft.)***
5 ***About 25 cm (0.8 ft.) to about 37.5 cm (1.1 ft.)***

The steering guide symbol and the arrow indicating which direction should be steered appear along with the bar indicators and beeps.

The above illustration indicates that the collision will be avoided by turning the steering wheel clockwise.

When the possibility that the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.) is eliminated by turning the steering wheel more, the steering guide symbol will go out and the beeps will stop sounding.

The steering guide symbol and arrow are not instructions you must observe. They are just a guide to avoid a collision.

1 **Multi−information display:**
The indicator bars will come on depending on the distance to the obstacle . The steering guide symbol and arrow will also come on.

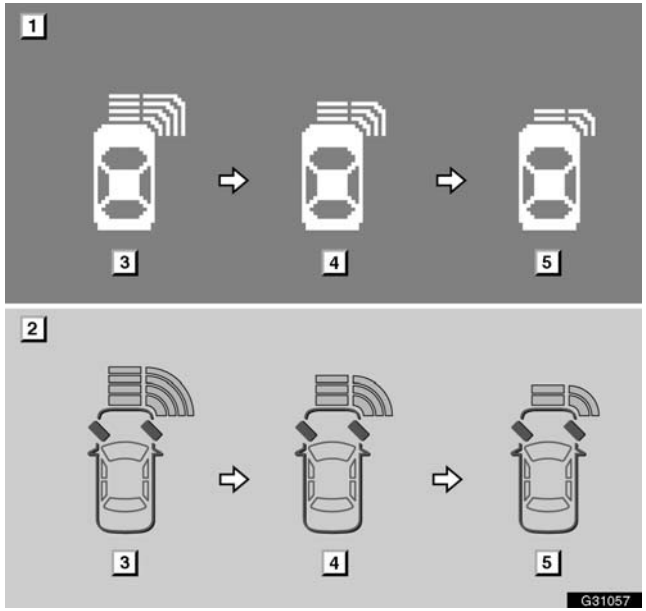
2 **Screen:**
The indicator bars will come on in yellow depending on the distance to the obstacle. The steering guide symbol and arrow will also come on. In addition, the current direction of the tires is also indicated in 3 stages.

Beeps:
As distance to the obstacle gets closer, the interval of the intermittent sound gets shorter, and then finally to a continuous sound when the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.).

⚠ CAUTION

When an obstacle is detected within about 25 cm (0.8 ft.) from the vehicle, the dual sensors will change the determination to an unavoidable collision. To avoid an accident or injury, be sure to confirm a safe distance around your vehicle with your eyes and drive slowly.

(C) Collision will be avoided with the present steering angle



▶ 3 *About 50 cm (1.5 ft.) to about 100 cm (3.0 ft.)*
4 *About 37.5 cm (1.1 ft.) to about 50 cm (1.5 ft.)*
5 *About 25 cm (0.8 ft.) to about 37.5 cm (1.1 ft.)*

1 **Multi−information display:**
The indicator bars will come on depending on the distance to the obstacle.

2 **Screen:**
The indicator bars will come on in green depending on the distance to the obstacle. In addition, the current direction of the tires is also indicated in 3 stages.

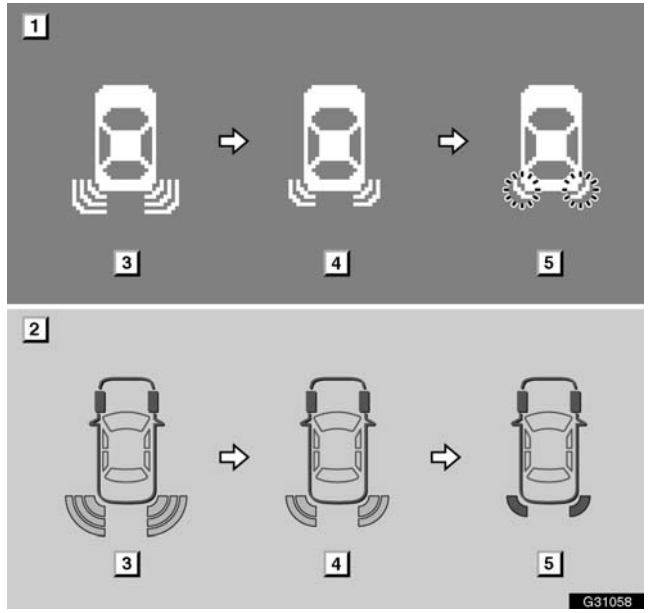
Beeps:
Beeps will not sound.

CAUTION

To avoid an accident or injury, observe the following. When you move your vehicle, be sure to confirm a safe distance around your vehicle with your eyes and drive slowly.

- **With long obstacles such as walls, the decision of the sensor may change as the obstacle gets closer; from certain avoidance to avoidance if steering is changed; from certain avoidance to unavoidable collision; and there are also times when the decision will be changed from avoidance if steering is changed, to certain collision.**
- **When an obstacle is detected within about 25 cm (0.8 ft.) from the vehicle, the dual sensors will change the determination to an unavoidable collision.**

Rear corner sensors



▶ 3 *About 37.5 cm (1.1 ft.) to about 50 cm (1.5 ft.)*
4 *About 25 cm (0.8 ft.) to about 37.5 cm (1.1 ft.)*
5 *Less than about 25 cm (0.8 ft.)*

The rear corner sensor only operates when the transmission is in "R", it checks the approximate distance to obstacles at an angle to the rear of the vehicle, and sounds a warning depending on the distance.

1 **Multi−information display:**
The indicator bars will come on depending on the distance to the obstacle and will flash when the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.).

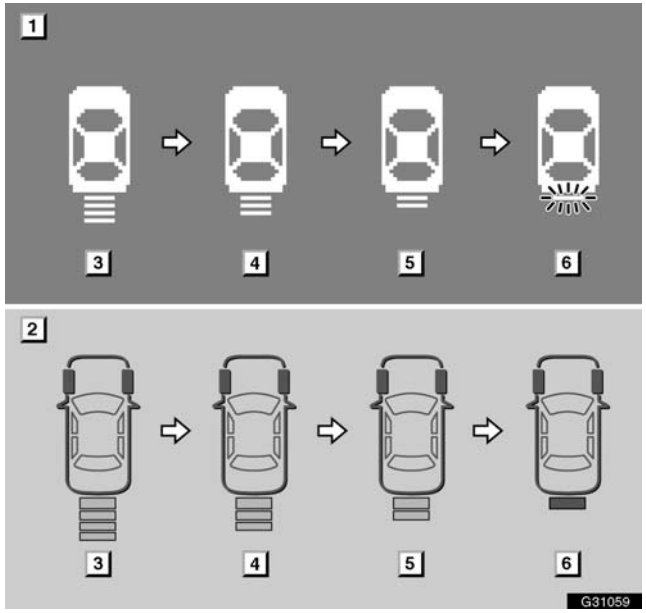
2 **Screen:**
The indicator bars will come on in yellow depending on the distance to the obstacle. When the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.), the yellow indicator bars will turn red.

Beeps:
As distance to the obstacle gets closer, the interval of the intermittent sound gets shorter, and then finally to a continuous sound when the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.).

CAUTION

When backing up, be sure to confirm a safe distance around your vehicle with your eyes to avoid an accident.

Back sensors



▶ 3 *About 60 cm (2.0 ft.) to about 150 cm (5.0 ft.)*
4 *About 45 cm (1.4 ft.) to about 60.0 cm (2.0ft.)*
5 *About 35 cm (1.1 ft.) to about 45.0 cm (1.4 ft.)*
6 *Less than about 35 cm (1.1 ft.)*

The back sensor only operates when the transmission is in “R”, it checks the approximate distance to obstacles close to the rear of the vehicle, and sounds a warning depending on the distance.

1 **Multi−information display:**
The indicator bars will come on depending on the distance to the obstacle and will flash when the distance between the vehicle and the obstacle is less than about 35 cm (1.1 ft.).

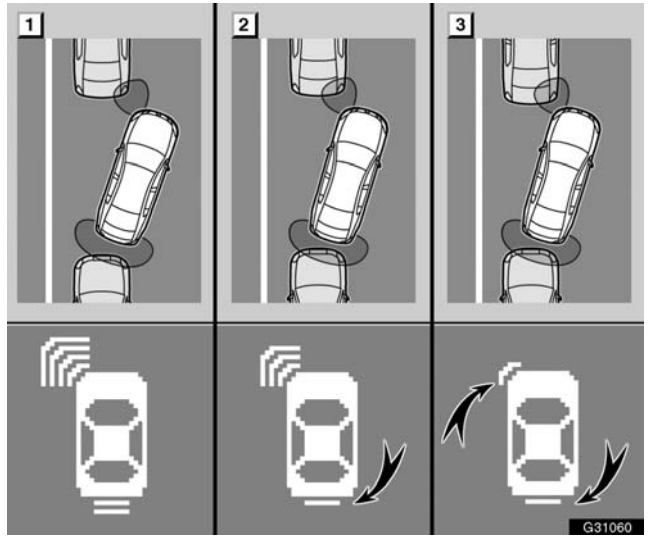
2 **Screen:**
The indicator bars will come on in yellow depending on the distance to the obstacle. When the distance between the vehicle and the obstacle is less than about 35 cm (1.1 ft.), the yellow indicator bars will turn red.

Beeps:
As distance to the obstacle gets closer, the interval of the intermittent sound gets shorter, and then finally to a continuous sound when the distance between the vehicle and the obstacle is less than about 35 cm (1.1 ft.).

CAUTION

When backing up, be sure to confirm a safe distance around your vehicle with your eyes to avoid an accident.

Numerous obstacles are detected on the front and rear of the vehicle simultaneously



When obstacles are detected on the front and rear of the vehicle at the same time; the multi−information display and screen illuminate their relevant indicator bars. And beeps are as follows:

1 **Obstacles detected on the front and rear of the vehicle are not in areas where continuous beeping should sound:**

The warning for the obstacle closer to the vehicle will be issued. The above illustration indicates the obstacle detected by the back sensors is closer to the vehicle. So, the warning for the obstacle detected by the back sensors will be given.

2 The obstacle detected on the front or rear of the vehicle is in an area where continuous beeping should sound:

If the possibility of collision with the obstacle is high as shown, the system warns the driver by continuous beeping (repeating 6 intermittent beeps and one longer beep as one cycle).

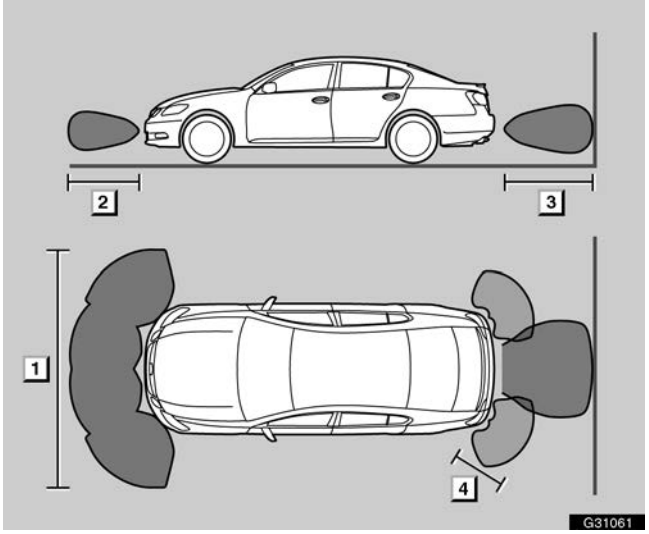
3 Both obstacles detected on the front and rear of the vehicle are in areas where continuous beeping should sound:

If the possibility of collision with the obstacles is very high as shown, the system warns the driver by continuous beeping (repeating 2 quick beeps and one longer beep as one cycle).

⚠ CAUTION

It might be difficult to hear beeps due to the volume of audio or air flow noise of air conditioning. To avoid an accident or injury, drive slowly using the brakes while confirming a safe distance around your vehicle with your eyes.

Detection range of sensors*



▶ 1 *About 3 m (10 ft.)* 2 *About 1 m (3 ft.)*
3 *About 1m 50 cm (5 ft.)* 4 *About 50 cm (1.5 ft.)*

The sensor detection range is limited around the bumper. Be sure to confirm a safe distance around your vehicle and drive slowly.

NOTE:
** The detection range can be changed from about 50 cm (1.5 ft.) for dual sensors and about 60 cm (2 ft.) for back sensors.*
Ask your Lexus dealer for details.

The intuitive parking assist may not work properly in the following cases:

- When the bumper is damaged.
- When the part near the sensors is subjected to a strong impact.
- When an accessory is installed within the sensor detection range.
- When snowflakes or mud gets on the sensors.
  (If removed, the system will work properly.)
- When water is splashed from a high pressure car wash or steam on the sensors.
- When a sensor is covered with your hand.
- When the vehicle is tilted.
- In extreme hot or cold weather
  (In extreme cold weather, the error display appears and the system becomes inoperative.)
- When driving on bumpy roads, slopes, gravelled roads or grass.
- Devices issuing ultrasonic waves are operated around your vehicle, such as a horn from another vehicle, motorcycle engine, air braking sound from heavy−duty vehicles.
- When another vehicle equipped with ultrasonic sensors gets close to your vehicle.
- When heavy rain or water is splashed over the vehicle.
  (Drive carefully as the braking distance may be affected.)
- When a radio antenna or fender pole is mounted on your vehicle.
- If towing eyelet is installed on your vehicle.
- When you are driving towards a tall curb stone or curb stone having right angle.
- The detection range for an object such as a traffic sign may be shortened.
- An object just under the bumper cannot be detected. Although an object lower than the location of sensors is once detected, the detection might be stopped when your vehicle gets closer to the object.
- When an obstacle is very close to the sensors.

The intuitive parking assist may not detect the following:

- Thin objects such as wire or rope
- Sound wave absorbing objects such as cotton or snow
- Objects with a sharp edge
- Tall objects with the upper part projected
- Shorter objects

Intuitive parking assist failure warning

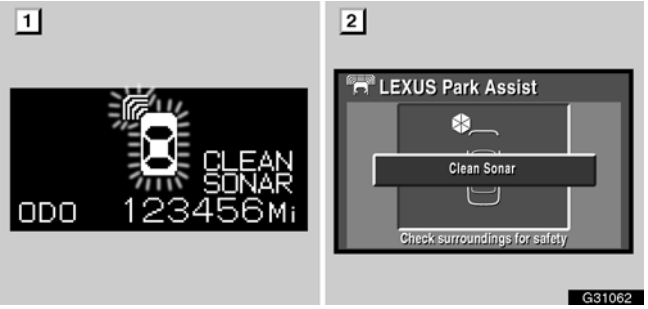
If an error is detected when the intuitive parking assist is turned on, the vehicle symbol comes on or flashes with beeping sounds.

At this time steering guidance is temporarily stopped. However, the sensors functioning properly continue their obstacle detection. For details, see “When the detection range of the sensors is shorter” on page 381.

The intuitive parking assist failure warning display is not given in either of the following operations:

- Changing to another screen
- Turning off the main switch for the intuitive parking assist

When snowflakes or mud gets on the sensors



▶ 1 *Multi−information display* 2 *Screen*

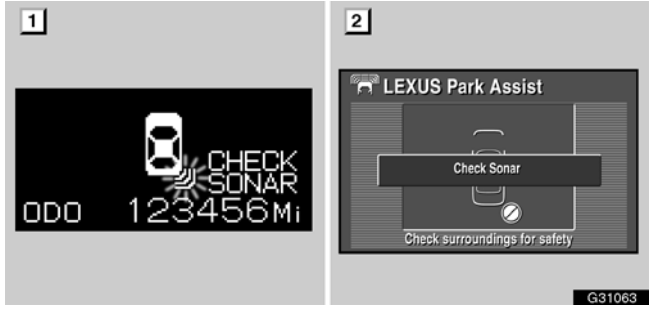
If foreign matter gets on the sensors and the intuitive parking assist cannot detect the object properly, the above message appears. At this time, the vehicle symbol and the indicator bars corresponding to the faulty sensors flash for about 7 seconds and 2 beeps sound 5 times.

After about 7 seconds, the sensor indicator bars will cease flashing, however will stay lit until the affected sensor is cleaned. Furthermore, the vehicle symbol will continue to flash until the affected sensor is cleaned.

The above illustration shows the sensor on the left front of the vehicle malfunctioning.

If the failure warning does not go off even after the foreign matter is removed, the intuitive parking assist may be malfunctioning. Have it checked by your Lexus dealer.

When the sensor is malfunctioning



▶ 1 *Multi−information display* 2 *Screen*

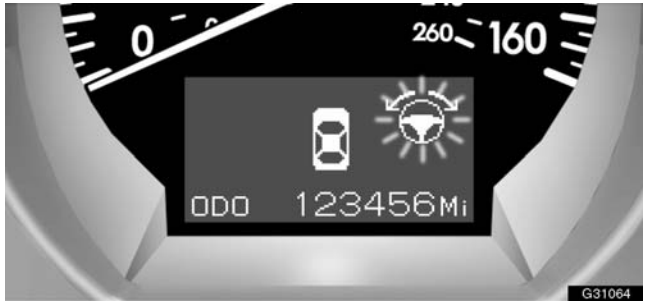
If the sensor cable is broken and the intuitive parking assist cannot detect the object properly, the above message appears. At this time, the indicator bars corresponding to the faulty sensor flash for about 7 seconds and 2 beeps sound 5 times.

The indicator bars continue lighting after flashing.

The above illustration shows the sensor on the right rear of the vehicle malfunctioning.

If this message appears, have the sensor checked by your Lexus dealer.

When the steering sensor is malfunctioning

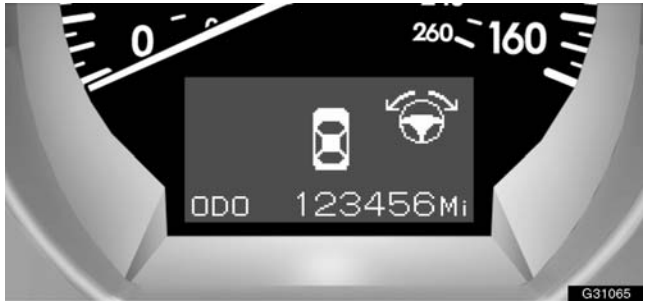


If the steering sensor cable is broken and signals cannot be received, the vehicle symbol comes on and the steering guide symbol and arrows flash.

If only the steering sensor is malfunctioning, the warning appears only on the multi–information display.

If this warning appears, have the sensor checked by your Lexus dealer as soon as possible.

When the neutral point of the steering sensor is unknown



If the memorized neutral point of the steering is erased by replacing the battery, the vehicle symbol, steering guide symbol and arrows come on.

If only the neutral point of the steering sensor is unknown, the warning appears only on the multi–information display.

If this warning appears, calibrate the neutral point of the steering using either of the following:

- Turn the steering wheel either way fully and then in the opposite direction fully and slowly, with the vehicle stopped.
- Drive on roads (with as few curves as possible and without backing up) for more than about 5 minutes.

If this warning goes out, the calibration of the steering neutral point is completed. If the warning still remains on, have the sensor checked by your Lexus dealer as soon as possible.

As the intuitive parking assist might be malfunctioning in the following cases, have it checked by your Lexus dealer.

- The indicator in the instrument cluster does not come on and a beep does not sound even when the intuitive parking assist main switch is turned on.
- The warning comes on despite no obstacle around the vehicle.

When the detection range of the sensors is shorter

In the following cases, the sensors will detect an obstacle about 50 cm (1.5 ft.) from either front corner of the vehicle and the steering guidance will be stopped. Accordingly, the tire orientation symbol on the screen does not appear. And only the warning according to the distance up to the obstacle is given.

a. Any one of the sensors is malfunctioning.

b. Any one of the steering sensors is malfunctioning.

c. The steering sensor signal cannot be received properly.

d. The correct vehicle information cannot be given due to extremely low battery voltage.

e. Proper steering detection (going straight) cannot be detected

In case of a., when the intuitive parking assist returns to normal, the steering guidance also comes back automatically.

In case of b. through e., the steering guidance also comes back automatically after the neutral point of the steering sensor calibration is completed.

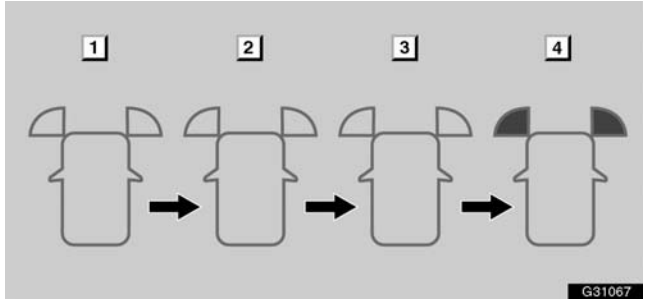
Rear view monitor display (Vehicles with rear view monitor system)

On vehicles equipped with rear view monitor system, a warning appears on the right top of the rear view monitor in the following conditions.

- When the selector lever is put in “R” and the rear view monitor is turned on.
- When the intuitive parking assist main switch is turned on and any sensor detects an obstacle.

Although “Display Off” is selected in the intuitive parking assist setting screen, the warning appears on the right top of the rear view monitor.

Dual sensors



▶ 1 ***About 50 cm (1.5 ft.) to about 100 cm (3.0 ft.)***
2 ***About 37.5 cm (1.1 ft.) to about 50 cm (1.5 ft.)***
3 ***About 25 cm (0.8 ft.) to about 37.5 cm (1.1 ft.)***
4 ***Less than about 25 cm (0.8 ft.)***

When the intuitive parking assist determines that the collision will be unavoidable:

The indicator will flash yellow depending on the distance to the obstacle. When the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.), the yellow indicator will turn red.

When the intuitive parking assist determines that the collision will be avoided by changing the steering:

The indicator will flash yellow depending on the distance to the vehicle. The steering guide symbol and arrow do not appear.

When the intuitive parking assist determines that the collision will be avoided with the present steering angle:

The indicator will come on in green.

However, if the sensors detect and determine an obstacle at an angle to the front of the vehicle, the indicator will not come on.

Beeps (except for avoidable collisions at the present steering angle):

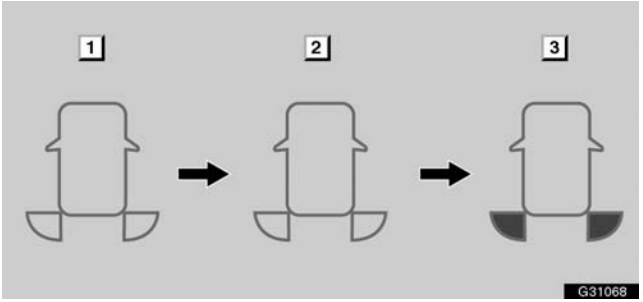
As distance to the obstacle gets closer, the interval of the intermittent sound gets shorter, and then finally to a continuous sound when the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.).

CAUTION

- **When an obstacle is detected within about 25 cm (0.8 ft.) from the vehicle, the dual sensors will change the determination to an unavoidable collision.**
- **With long obstacles such as walls, the decision of the sensor may change as the obstacle gets closer; from certain avoidance to avoidance if steering is changed; from certain avoidance to unavoidable collision; and there are also times when the decision will be changed from avoidance if steering is changed, to certain collision.**

When you move your vehicle, be sure to confirm a safe distance around your vehicle with your eyes and drive slowly, or an accident or injury may result.

Rear corner sensors



▶ 1 ***About 35 cm (1.1ft.) to about 50 cm (1.5 ft.)***
2 ***About 25 cm (0.8 ft.) to about 35 cm (1.1 ft.)***
3 ***Less than about 25 cm (0.8 ft.)***

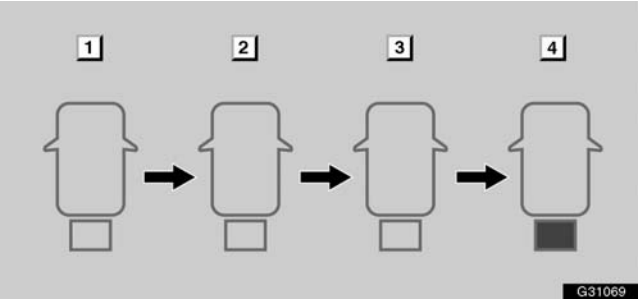
Display:

The indicator will flash yellow depending on the distance to the obstacle. When the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.), the yellow indicator will turn red.

Beeps :

As distance to the obstacle gets closer, the interval of the intermittent sound gets shorter, and then finally to a continuous sound when the distance between the vehicle and the obstacle is less than about 25 cm (0.8 ft.).

Back sensors



▶ 1 *About 60.0 cm (2.0 ft.) to about 150 cm (5.0 ft.)*
2 *About 45.0 cm (1.4 ft.) to about 60.0 cm (2.0 ft.)*
3 *About 35.0 cm (1.1 ft.) to about 45.0 cm (1.4 ft.)*
4 *Less than about 35 cm (1.1 ft.)*

Display:

The indicator will flash in yellow depending on the distance to the obstacle. When the distance between the vehicle and the obstacle is less than about 35 cm (1.1 ft.), the yellow indicator will turn red.

Beeps :

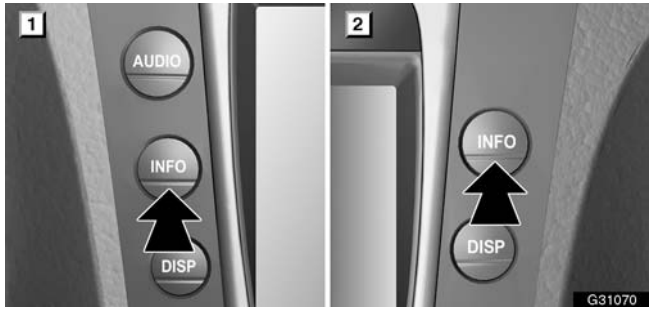
As distance to the obstacle gets closer, the interval of the intermittent sound gets shorter, and then finally to a continuous sound when the distance between the vehicle and the obstacle is less than about 35 cm (1.1 ft.).

⚠ CAUTION

When backing up, be sure to confirm a safe distance around your vehicle with your eyes to avoid an accident.

Setting the intuitive parking assist

The volume of the beeps and turning on or off of the display can be set.



▶ 1 *With Navigation system*
2 *Without Navigation system*

1. Push the "INFO" button to display the menu screen.

▶*With Navigation system*

▶*Without Navigation system*

2. Touch "LEXUS Park Assist".

3. Touch your desired item.

(A) Changing the volume of the beeps

Touch “Volume” to change the volume of the beeps.

The volume has 5 levels, increasing with higher value. Select your desired volume and touch “BACK” to return to the previous screen.

(B) Display setting

Touch “Display”. You have 3 settings.

Static: Warnings appear when obstacles are detected within the detection range.

Dynamic: Warnings appear only when a collision is unavoidable.

Display Off: Warnings are not given even if an obstacle is detected.

Vehicles with rear view monitor system—
Although “Display Off” is turned on, if the obstacle is detected during the rear view monitoring, the warning appears on the right top of the screen.

After setting the display, touch “Back” to return to the previous screen.

(C) Explanations of Parking Sonar Symbols

Touch “Explanation”.

After reading the explanation, touch “Back” to return to the previous screen.

For vehicles sold in U.S.A.

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

For vehicles sold in Canada.

This ISM device complies with Canadian ICES−001.

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

REAR VIEW MONITOR SYSTEM

The rear view monitor system assists the driver by displaying an image of the rear of the vehicle while backing up. The displayed image on the screen is a horizontally reversed mirror image of the inside rear view mirror.

To display the rear view image on the screen, place the selector lever in the “R” position when the engine switch is selected in “IG−ON” mode.

If you move the selector lever out of the “R” position, the screen returns to the previous screen. Operating another function of the navigation system will display another screen.

The rear view monitor system is a supplemental device intended to assist back up. When backing up, be sure to check behind and all around the vehicle visually.

Vehicles with intuitive parking assist—
When the intuitive parking assist is turned on and an obstacle is detected in front or rear of your vehicle, a warning appears on the right top of the rear view monitor. For details, see “Intuitive parking assist” on page 365.

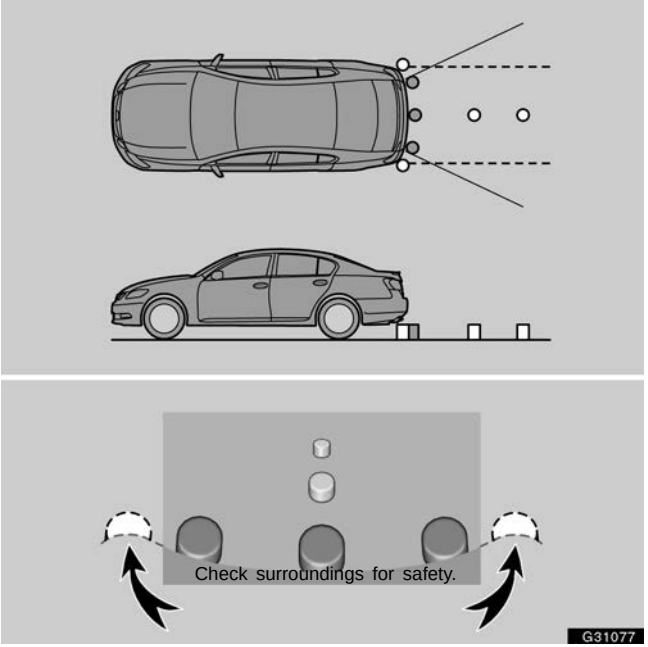
CAUTION

- Never depend on the rear view monitor system entirely when backing up. Always make sure your intended path is clear.

  Use caution just as you would when backing up any vehicle.
- Never back up while looking only at the screen. The image on the screen is different from actual conditions. Depicted distances between objects and flat surfaces will differ from actual distances. If you back up while looking only at the screen, you may hit a vehicle, a person or an object. When backing up, be sure to check behind and all around the vehicle visually and with mirrors before proceeding.
- Do not use the system when the trunk is not completely closed.
- If the back of the vehicle is hit, the position and mounting angle of the camera may change. Be sure to have the camera's position and mounting angle checked at your Lexus dealer.
- If the temperature changes rapidly, such as when hot water is poured on the vehicle in cold weather, the system may not operate normally.
- If the camera lens becomes dirty, it cannot transmit a clear image. If water droplets, snow, or mud adhere to the lens, rinse with water and wipe with a soft cloth. If the lens is extremely dirty, wash it with a mild cleanser and rinse.
- Use your own eyes to assure rearward clearance, as the displayed image may become faint or darker, and moving images will be distorted or not entirely visible when outside temperature is cold. When backing up, be sure to check behind and all around the vehicle visually and with mirror before proceeding.

AREA DISPLAYED ON SCREEN

Image is displayed approximately level on screen.



▶ ***Corners of bumper***

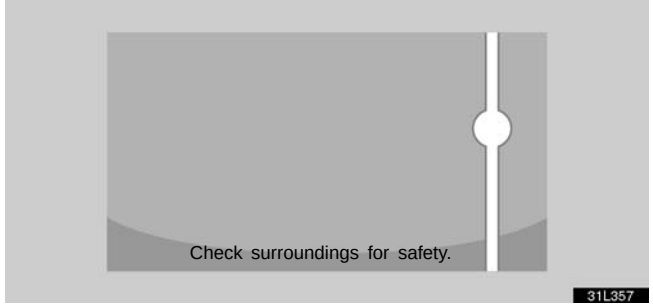
- **The area covered by the camera is limited. Objects which are close to either corner of the bumper or under the bumper cannot be seen on the screen.**
- **The area displayed on the screen may vary according to vehicle orientation or road conditions.**

REAR VIEW MONITOR SYSTEM CAMERA

The rear view monitor system camera is located on the trunk as shown in the illustration. The camera uses a special lens. The distance of the image that appears on the screen differs from the actual distance.

In the following cases, it may become difficult to see the images on the screen, even when the system is functioning.

- In the dark (for example, at night)
- When the temperature near the lens is extremely high or low
- When water droplets are adhering to the camera, or when humidity is high (for example, when it rains)
- When foreign matter (for example, snow or mud) adheres to the camera lens
- When the sun or the beam of headlights is shining directly into the camera lens



If a bright light (for example, sunlight reflected off the vehicle body) is picked up by the camera, the smear effect* peculiar to the camera may occur.

*: Smear effect — A phenomenon that occurs when a bright light (for example, sunlight reflected off the vehicle body) is picked up by the camera; when transmitted by the camera, the light source appears to have a vertical streak above and below it.

CRUISE CONTROL

The cruise control allows you to cruise the vehicle at a desired speed over 40 km/h (25 mph) with your foot off the accelerator pedal.

Your cruising speed can be maintained although a slight speed change may occur when driving up or down a gradient, within the limits of engine performance. On steeper hills, a great speed change will occur so it is better to drive without the cruise control.

When the cruise control is on, the driving pattern of the automatic transmission is fixed in the normal mode, regardless of the position of the selector switch.

CAUTION

- **To help maintain maximum control of your vehicle, do not use the cruise control when driving in heavy or varying traffic, or on slippery (rainy, icy or snow−covered) or winding roads.**
- **Avoid vehicle speed increases when driving downhill. If the vehicle speed is too fast in relation to the cruise control set speed, cancel the cruise control then downshift the transmission to use engine braking to slow down.**

Turning the system on

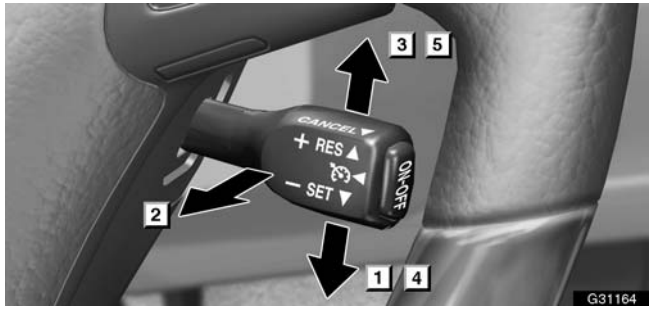
To operate the cruise control, push the “ON−OFF” button. This turns the system on. The indicator light in the instrument cluster shows that you can now set your desired cruising speed. Another push on the button will turn the system completely off.

When the engine switch is turned off, the “ON−OFF” button is also automatically turned off. To use the cruise control again, push the “ON−OFF” button again to turn it on.

CAUTION

To avoid accidental cruise control engagement, keep the “ON−OFF” button off when not using the cruise control.

Setting operation



▶*Each function is described below.*

1 Setting at a desired speed.

The transmission must be in the “D” position, or the shift range position must be “4” (fourth range), “5” (fifth range) or “6” (sixth range) in the “S” mode before you set the cruise control speed.

Bring the vehicle to the desired speed, press the control lever downward in the “– SET” direction and release it. This sets the vehicle at that speed. Now you may take your foot off the accelerator pedal. If you need acceleration – for example, when passing – depress the accelerator pedal enough for the vehicle to exceed the set speed. When you release the accelerator pedal, the vehicle will return to the speed set prior to the acceleration.

2 Cancelling the preset speed

You can cancel the preset speed by doing any of the following:

a. Pulling the control lever in the ”CANCEL” direction.

b. Depressing the brake pedal.

c. Pushing the “ON–OFF” button.

If the vehicle speed falls below about 40 km/h (25 mph), the preset speed will be automatically cancelled.

If the vehicle speed drops 16 km/h (10 mph) below the preset speed, the preset speed will also automatically be cancelled.

If the slip indicator light blinks and a warning tone sounds, the preset speed will be automatically cancelled.

If the preset speed automatically cancels out for other than the above reasons, do not operate the cruise control. Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer at the earliest opportunity.

3 Resetting to a faster speed

Press the control lever upward in the “+ RES” direction and hold it. Release the lever when the desired speed is attained. While the lever is held upward, the vehicle will gradually gain speed.

When the difference between the actual vehicle speed and the set speed is less than 5 km/h (3 mph), the set speed can be increased 1.6 km/h (1 mph) each time by pressing the control lever upward in the “+ RES” direction quickly within 0.6 seconds.

However, a quicker way to reset is to accelerate the vehicle and then press the control lever downward in the "– SET" direction.

4 Resetting to a slower speed

Press the control lever downward in the "– SET" direction and hold it. Release the lever when the desired speed is attained. While the lever is held downward, the vehicle speed will gradually decrease.

When the difference between the actual vehicle speed and the set speed is less than 5 km/h (3 mph), the set speed can be lowered 1.6 km/h (1 mph) each time by pressing the control lever downward in the "– SET" direction quickly within 0.6 seconds.

However, a quicker way to reset is to depress the brake pedal and then press the control lever downward in the "– SET" direction.

With the cruise control on, even if you downshift the transmission from the "D" position or "6" (sixth range) to the "5" (fifth range), or from the "D" position or "5" (fifth range) to the "4" (fourth range), engine braking will not be enabled because the cruise control is not cancelled. To decrease the vehicle speed, reset to a slower speed with the cruise control lever or depress the brake pedal. If you use the brake pedal, cruise control is cancelled.

5 Resuming the preset speed

If the preset speed is cancelled by pulling the control lever, by depressing the brake pedal or vehicle stability control activation, pushing the lever up in the "+ RES" direction will restore the speed set prior to cancellation. However, once the vehicle speed falls below about 40 km/h (25 mph), the preset speed will not be resumed.

Cruise control failure warning

If the "CRUISE" indicator light in the instrument cluster flashes when using the cruise control, push the "ON–OFF" button to turn the system off and then push it again to turn it on.

If any of the following conditions then occurs, there is some trouble in the cruise control system.

- The indicator light does not come on.
- The indicator light flashes again.
- The indicator light goes out after it comes on.

If this is the case, contact your Lexus dealer and have your Lexus inspected.

DYNAMIC RADAR CRUISE CONTROL

The vehicles with pre−collision system are equipped with dynamic radar cruise control.

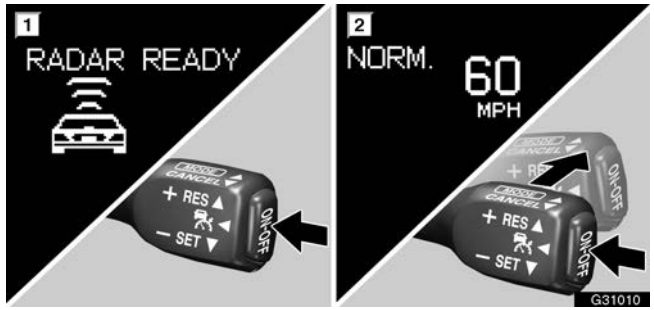
Dynamic radar cruise control allows you to drive at a selected cruising speed over about 45 km/h (28 mph) with your foot off the accelerator pedal, maintaining an appropriate vehicle−to−vehicle distance.

⚠ CAUTION

Do not rely excessively on dynamic radar cruise control in order to avoid serious injury or death, or to prevent accidents or to control the vehicle's speed in emergency situations. Do not use cruise control except in appropriate road and traffic conditions. Always drive carefully and attentively. Before using dynamic radar cruise control, read and understand the following instructions.

▶ 1 *Multi−information display*
2 *Master warning light*
3 *"CRUISE" indicator light*
4 *Distance switch*
(for changing vehicle−to−vehicle distance)
5 *Cruise control switch*

Changing the dynamic radar cruise control mode



▶ 1 *Vehicle−to−vehicle distance control mode*
2 *Conventional (fixed speed) cruise control mode*

The dynamic radar cruise control function has two cruise control modes.

- Vehicle−to−vehicle distance control mode for maintaining an appropriate distance between vehicles
- Conventional (fixed speed) cruise control mode for cruising at preset speeds

You can change the mode by using the control lever.

The two cruise control modes function differently. If you use dynamic radar cruise control, always confirm which mode is selected.

Vehicle−to−vehicle distance control mode

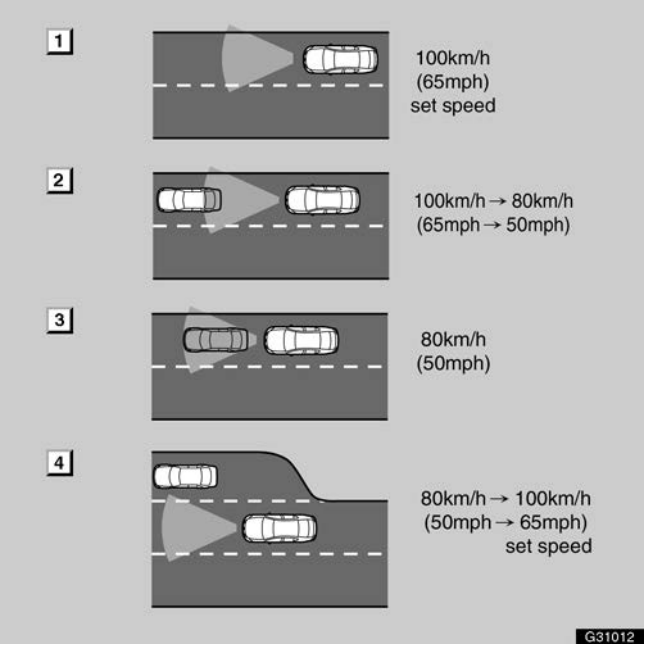
The millimeter wave radar sensor in this system primarily detects the reflected wave from the rear end of the vehicle ahead of you to determine the presence of the vehicle ahead as well as measuring the vehicle−to−vehicle distance. The detection range of the sensor is about 120 m (400 ft.) ahead.

When the dynamic radar cruise control is on, the driving pattern of the automatic transmission is fixed in the normal mode, regardless of the position of the selector switch.

⚠ CAUTION

The dynamic radar cruise control is not a collision−avoidance system and will not prevent accidents. The dynamic radar cruise control is a vehicle speed control device that is intended for use only on freeways or roads where the traffic is light or moderate. To avoid serious injury, you must use caution and be attentive to road and traffic conditions while using dynamic radar cruise control.

(a) Dynamic radar cruise control operations



The dynamic radar cruise control function operates automatically and depending on whether a vehicle is detected ahead may change the speed of your vehicle as follows:

If no vehicle is running ahead of you:

1 **Cruising at a fixed speed:** If there is no vehicle detected ahead, your cruising speed is maintained at the preset speed from about 45 km/h (28 mph) to about 135 km/h (85 mph). The preset speed is displayed in the multi–information display. For the vehicle speed setting, see “Setting operation ” on page 402.

If a vehicle is detected ahead of you:

2 **Deceleration cruising function:** If a slower moving vehicle is detected ahead of you, your vehicle cruising speed decreases within the range of about 40 km/h (25 mph) to about 135 km/h (85 mph). The multi–information display shows the preset speed, the detected vehicle ahead and selected vehicle–to–vehicle distance. If your vehicle gets closer to the vehicle ahead because of insufficient automatic deceleration, then the warning tone warns you to also manually apply brakes.

3 **Follow−up cruising function:** After deceleration, your vehicle cruising speed changes in proportion to the speed of the vehicle ahead to maintain an appropriate distance from your vehicle to the vehicle ahead. The vehicle–to–vehicle distance can be changed. For details, see “Changing vehicle–to–vehicle distance setting” on page 406.

4 **Acceleration cruising function:** If the vehicle ahead changes lanes, your vehicle cruising speed will be gradually increased up to the preset speed, and your vehicle resumes fixed–speed cruising.

CAUTION

Under certain conditions where the vehicle in front slows drastically, or is stopped, the dynamic radar cruise control will neither warn you nor decelerate. The driver must depress the brake pedal to slow down, ensuring collision avoidance or that sufficient vehicle−to−vehicle distance is maintained.

When vehicle−to−vehicle distance control mode is activated, you must still be attentive to road and traffic conditions. Should your vehicle speed decrease below about 40 km/h (25 mph), the dynamic radar cruise control will shut off, requiring you to apply the brakes to slow. When a vehicle ahead slows suddenly, stops or a vehicle cuts in front, the system may slow your vehicle abruptly, but the automatic braking will cease if the speed decreases below about 40 km/h (25 mph) requiring the driver's manual application of brakes.

CAUTION

Certain conditions make vehicle detection difficult or impossible.

- **As this system operates by detecting primarily the reflected wave from the rear end of the vehicle ahead, the distance cannot be accurately detected in the following cases, resulting in improper vehicle−to−vehicle distance.**
  - **The rear section of the vehicle ahead is extremely small such as an unloaded trailer.**
  - **The vehicle ahead or other vehicles around you are flinging up water or snow.**
  - **Heavy luggage which is loaded in your trunk or on top of your rear seats is raising up the nose of your vehicle.**
- **The millimeter wave radar sensor automatically detects dirt if it is sticking to the front of the sensor or cover of your vehicle, and if detected, a message appears on the multi−information display. However, if the sensor or cover is covered with a metallic vinyl bag, icicle, snowflakes, etc., dirt may not be detected, resulting in improper vehicle−to−vehicle distance. Continue driving with due care to the vehicle ahead. If dirt is detected, the dynamic radar cruise control function is automatically cancelled. Always keep the sensor and cover clean.**

Dynamic radar cruise control should not be used in the following conditions, to avoid death or serious injury.

- **In bad weather (such as rain, fog, snow, sandstorms, or when raindrops or snowflakes get in the millimeter wave radar sensor or the cover), the vehicle−to−vehicle distance will not be measured accurately.**

  If the wipers are operated at high speed (including the high speed operation with the wiper lever in the "AUTO" position), dynamic radar cruise control is automatically cancelled. (In the case of the low speed operation and intermittent wiper operation, it is not cancelled.) Dynamic radar cruise control is automatically cancelled when the measurement is extremely unstable due to bad weather.

- **On the roads in heavy traffic or at sharp bends:**

  As an appropriate speed cannot be maintained, death or serious injury could result.

- **On slippery road surfaces (icy or snow−covered road surfaces):**

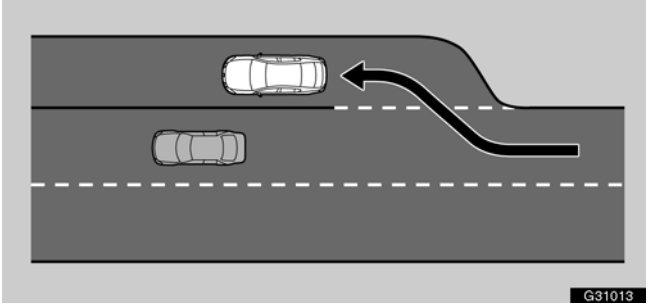
  The tires will race and you will be unable to control.

- **On steep downhill slopes:**

  If there is no vehicle detected ahead, the preset speed will be easily exceeded because of inefficient engine braking, resulting in death or serious injury. (In this case, automatic braking will not work.) If there is a vehicle detected ahead, the delay in deceleration timing could cause death or serious injury.

- **When the warning tone sounds frequently (because acceleration or deceleration was repeated or sufficient vehicle−to−vehicle distance was not maintained), an appropriate vehicle speed cannot be attained, resulting in death or serious injury.**

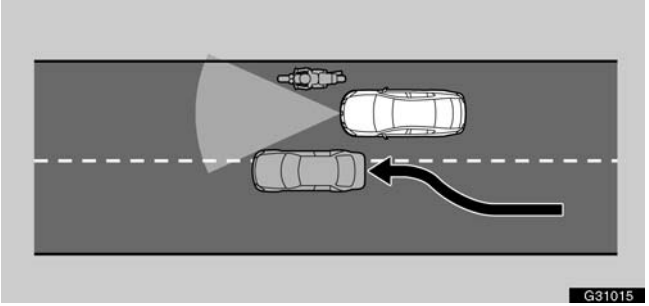
- **On roads with steep and short inclines and declines, failure to detect the vehicle ahead will shorten the distance between your vehicle and the vehicle ahead, resulting in death or serious injury.**



Dynamic radar cruise control should not be used in circumstances which are inappropriate for any cruise control such as entering freeway on–ramps or off–ramps.

CAUTION

The dynamic radar cruise control should not be used when exiting from, or when entering or merging onto a freeway. When you are following a slower moving vehicle and exiting, the sensor does not detect the vehicle and will accelerate to preset speed.



CAUTION

- **If other vehicles are driving outside of the millimeter wave radar detection range, a delay in the detection of the vehicle cutting in at short range or detection failure of the motorcycle running on the side of the same lane will occur. In this case, the dynamic radar cruise control system will not function properly.**
- **When a slower vehicle in front of you leaves the lane, the dynamic radar cruise control will no longer detect a vehicle ahead and will attempt to accelerate the vehicle to the faster preset speed.**

(b) Turning the system on

To operate the dynamic radar cruise control, push the “ON–OFF” button. This turns the system on. When the “CRUISE” indicator light in the instrument cluster comes on and “RADAR READY” appears on the multi–information display, you can now set your desired cruising speed and vehicle–to–vehicle distance. Pushing the “ON–OFF” button again will turn the system completely off and “CRUISE OFF” will appear on the multi–information display.

When the engine switch is turned off, the system is also automatically turned off. To use the dynamic radar cruise control again, push the “ON–OFF” button again to turn it on.

When the engine switch is turned off, all the preset data is cleared. When you use the dynamic radar cruise control again, you need to reset the data.

The multi–information display will return to the vehicle–to–vehicle distance screen about 6 seconds after the vehicle–to–vehicle distance screen has been changed to another screen.

CAUTION

To avoid accidentally engaging the cruise control, keep the “ON–OFF” button off when not using the dynamic radar cruise control.

(c) Setting operation

▶***Each function is described below.***

1 Setting the desired speed

The transmission must be in “D”, “6” (sixth range), “5” (fifth range) or “4”(fourth range) before you set the cruise control speed.

After bringing the vehicle to the desired speed, press the control lever downward in the “– SET” direction and release it. This sets the vehicle at that speed. At this time, the multi–information display indicates settings such as the preset vehicle speed, whether a vehicle is present ahead and selected vehicle–to–vehicle distance. If there is no vehicle detected ahead, the dynamic radar cruise control screen does not display the vehicle ahead. At this time, you may take your foot off the accelerator pedal. If you need to accelerate – for example, when passing – depress the accelerator pedal enough for the vehicle to exceed the preset speed. When you release the accelerator pedal, the vehicle will return to the control prior to acceleration.

You cannot set a desired speed if the master warning light comes on, the warning tone sounds and the multi–information display indicates a warning message such as “CRUISE NOT AVAILABLE”, “CLEAN RADAR SENSOR” or “CHECK CRUISE SYSTEM”. If any of the above messages appears on the display, see “Vehicle–to–vehicle distance control mode failure warning” on page 410.

If you turn off the “ON–OFF” button while the warning message is displayed, the warning message turns off and the multi–information display switches to another screen. If no warning message appears on the display, when you turn the “ON–OFF” button on again, the setting can be made.

You can change the dynamic radar cruise control screen to another screen even while the warning message is displayed.

2 Cancelling the preset speed

You can cancel the preset speed by doing any of the following:

a. Pulling the control lever, in the ”CANCEL” direction.

b. Depressing the brake pedal.

c. Pushing the “ON–OFF” button.

If cancelled by a. or b., the multi–information display shows “RADAR READY” and the dynamic radar cruise control enters the ready mode.

If cancelled by c., the “CRUISE” indicator light goes off in the instrument cluster and the multi–information display shows “CRUISE OFF”. In this case, the preset speed data is cleared, and you must set the speed from the beginning.

In the following case, the preset speed automatically cancels out. At this time, the multi–information display shows “RADAR READY” and the dynamic radar cruise control enters the ready mode.

The vehicle speed falls below about 40 km/h (25 mph). (40 km/h (25 mph) is designated as a cancel speed.)

CAUTION

In this case, the warning tone reminds you that the dynamic radar cruise control is cancelled and you must apply the brakes to slow the vehicle.

In the following cases, the warning messages appear and the preset speed automatically cancels out. When dynamic radar cruise control is restored, the warning messages turn off and dynamic radar cruise control enters “RADAR READY” mode.

a. The slip indicator light blinks and a warning tone sounds. (This occurs when the vehicle is about to skid.)

b. The driving pattern selector switch is set to snow mode.

c. The anti–lock brake system is activated by automatic braking. (The warning tone sounds.)

d. The sensor does not operate properly because a foreign matter sticks to the sensor.

e. The wipers are operated at high speed (including high speed operation with the wiper lever in the “AUTO” position.)

NOTICE

If the preset speed automatically cancels out for other than the above reasons, do not operate the dynamic radar cruise control. Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer at the earliest opportunity.

3 Resetting to a faster speed

Press the control lever upward in the ”+ RES” direction and hold it. The displayed speed will increase in increments of 5 mph (for the U.S.A.) or 5 km/h (for Canada). Release the lever when the desired speed is attained. The vehicle will gradually increase to the displayed speed.

Depressing the accelerator pedal and pressing the control lever downward in the “– SET” direction will not reset to a faster speed. At this time the set speed falls by 5 mph (for the U.S.A.) or 5 km/h (for Canada).

⚠ CAUTION

When the vehicle−to−vehicle distance control is on (on follow−up cruising), your cruising speed is regulated in proportion to the speed of the vehicle ahead, so increasing the preset vehicle speed using the control lever does not accelerate the vehicle. However, if the vehicle ahead leaves the lane, your cruising speed will increase up to the preset speed because the preset speed has been set higher using the control lever. Confirm the setting on the multi−information display.

4 Resetting to a slower speed

Press the control lever downward in the “– SET” direction and hold it. The displayed speed will decrease in increments of 5 mph (for the U.S.A.) or 5 km/h (for Canada). Release the lever when the desired speed is attained. The vehicle will gradually decrease to the displayed speed.

A quicker way to reset the preset speed is to depress the brake pedal and then press the control lever downward in the “– SET” direction.

If the control lever is released when the vehicle speed exceeds the upper limit of the preset speed traveling downhill while you are pressing the control lever downward, the system will memorize the upper limit of the preset speed as a preset speed.

Even if you downshift the transmission from “D” or “6” (sixth range) to “5” (fifth range), or from “D” or “5” (fifth range) to “4” (fourth range) in the vehicle−to−vehicle distance control mode, engine braking will not be enabled because this mode is not cancelled. To decrease the vehicle speed, reset to a slower speed with the cruise control lever or depress the brake pedal. If you use the brake pedal, cruise control is cancelled.

5 Resuming the preset speed

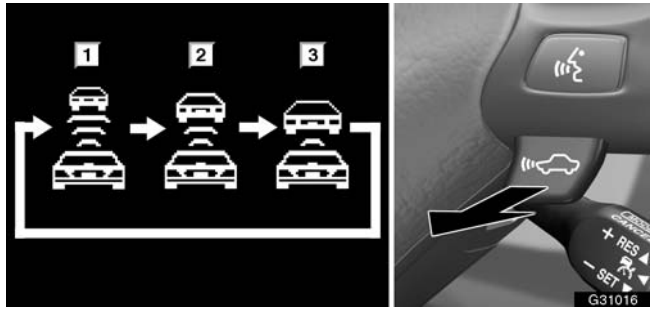
If the preset speed has been cancelled, when you push the lever up in the "+ RES" direction while "RADAR READY" shows up on the multi–information display and at a vehicle speed of about more than 40 km/h (25 mph), the speed set prior to cancellation will be restored.

During follow–up cruising, if there are no vehicles running ahead because they have changed lanes, your vehicle will accelerate gradually up to the preset speed.

CAUTION

- **Deceleration cruising function and approach warning do not operate when the vehicle ahead is at a stop or driving very slowly.**
- **While vehicle−to−vehicle distance control is on (on follow−up cruising), acceleration and deceleration are automatically performed in proportion to the speed of the vehicle ahead detected. However, if the vehicle ahead of you decelerates abruptly or if another vehicle cuts in ahead of you, your vehicle may collide with the vehicle ahead unless you manually depress the brake pedal to slow down your vehicle. If you need to accelerate because the vehicle ahead or you changes lanes, then depress the acceleration pedal.**
- **Depending on the road configuration (curved roads, left and right continuous curved roads, driving at the start or end of the curve, narrow driving lanes due to road construction) or your vehicle condition (steering wheel maneuvering, position in the lane or unstable driving because of an accident or breakdown), vehicles in other lanes or surrounding objects will be detected, resulting in a control failure or the activated approach warning. This may also result in a very close distance between vehicles due to a failure to detect the vehicle ahead. Maneuvering the steering wheel in response to a violent lateral wind will cause similar conditions.**

(d) Changing vehicle−to−vehicle distance



▶ 1 *Long* 2 *Middle* 3 *Short*

You can select one of the following vehicle−to−vehicle distances: “Long”, “Middle” or “Short”. Each time you pull the distance switch briefly toward you, the setting changes from “Long” to “Middle” to “Short” and then back to “Long”. You can confirm the setting on the multi−information display.

It should be noted that pulling the “DISP” switch will change to another screen.

Your vehicle speed changes in proportion to the speed of the vehicle ahead, maintaining the selected distance. However, if the vehicle speed is slower, the selected distance will be shorter than the designated distance.

When the vehicle−to−vehicle distance control mode is activated or the multi−information display indicates “RADAR READY”, the vehicle−to−vehicle distance setting can be changed.

The vehicle−to−vehicle distance is always set to “Long” when the engine switch is turned on.

⚠ CAUTION

- **Select the vehicle−to−vehicle distance considering traffic conditions. The approximate vehicle−to−vehicle distance based on time interval when driving at 80 km/h (50 mph) is shown below :**

  “Long” . . . . . about 50 m (about 164 ft.)

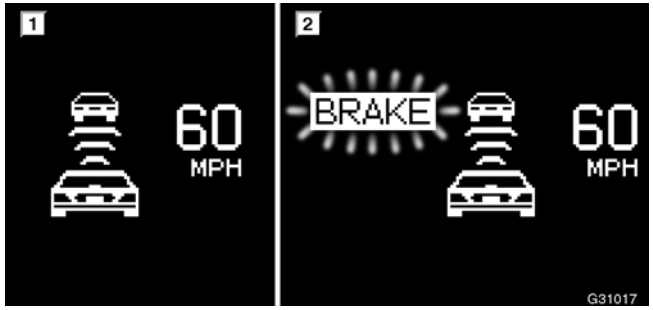
  “Middle” . . . . . about 40 m (about 132 ft.)

  “Short” . . . . . about 30 m (about 100 ft.)

  If the vehicle speed is slower than 80 km/h (50 mph), the distance will be shorter than the above.
- **During long downhill driving, the vehicle−to−vehicle distance will be shorter than the selected distance.**

(e) Braking control

Dynamic radar cruise control is not a collision avoidance system. If an approach warning is activated, depress the brake pedal to decelerate to ensure an appropriate vehicle−to−vehicle distance.



▶ 1 *Under the vehicle−to−vehicle distance control*
2 *Braking activated*

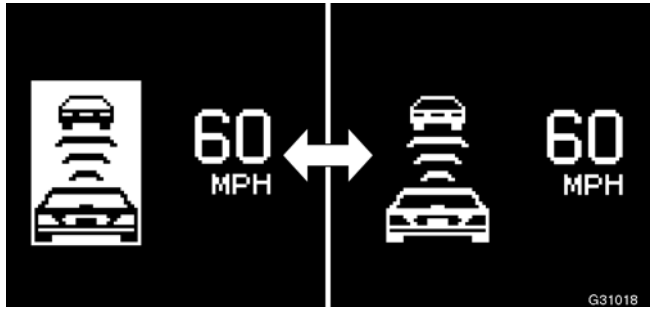
Braking control is operating only when the vehicle−to−vehicle distance control mode is selected and your vehicle speed exceeds about 40 km/h (25 mph).

If you are getting closer to the vehicle ahead at relatively higher speed than those of the vehicle ahead or if engine braking cannot be applied properly, braking control is automatically activated. At this time, “BRAKE” flashes on the multi−information display, indicating that the brakes are being used.

⚠ CAUTION

Braking control will not ensure that your vehicle will reduce speed appropriately. Do not rely on dynamic radar cruise control to prevent collision.

(f) Approach warning

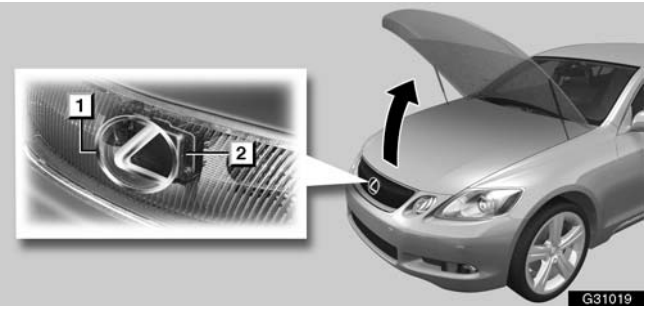


CAUTION

While you are cruising in the vehicle−to−vehicle distance control mode, if the vehicle ahead decelerates abruptly or if another vehicle cuts in ahead of you, inadequate braking will make your vehicle closer to the vehicle ahead of you and the multi−information display flashes and beeps. The driver must depress the brake pedal to slow down, ensuring collision avoidance or that sufficient vehicle−to−vehicle distance is maintained.

- **The approach warning may not turn on even if the vehicle drives closer to the vehicle ahead in the following conditions:**
  - **Your vehicle and the vehicle ahead are cruising at almost the same speed.**
  - **The vehicle ahead is cruising at a faster speed than yours. (The distance between the vehicles will become longer.)**
  - **Pay special attention to the very slow vehicle at the end of the line in heavy traffic or at the tollgate.**
  - **Immediately after the speed setting.**
  - **The accelerator pedal is depressed or immediately after the release of the accelerator pedal.**

(g) Millimeter wave radar sensor



▶ 1 *Millimeter wave grille cover*
2 *Millimeter wave radar sensor*

The millimeter wave radar sensor is used for vehicle−to−vehicle distance control cruising. When the millimeter wave radar sensor is disabled for some reason, the warning message appears on the multi−information display. For details, see "Vehicle−to−vehicle distance control mode failure warning" on page 410.

⚠ CAUTION

To ensure that the dynamic radar cruise control system will function properly while driving, observe the following:

- **Always keep the millimeter wave radar sensor and grille cover clean. When cleaning, use a soft cloth and be careful not to damage the sensor and grille cover.**
- **Avoid strong impacts around the millimeter wave radar sensor. An incorrect millimeter wave radar sensor alignment will result in system malfunction. A special device is required to adjust the millimeter wave radar sensor alignment. Be sure to have the sensor adjusted by your Lexus dealer.**
- **Do not disassemble the millimeter wave radar sensor.**
- **Do not affix a sticker (including a transparent sticker) or attach an accessory around the millimeter radar sensor or the grille cover.**
- **Do not modify or paint the grille cover. When replacing the grille cover, be sure to use a genuine grille cover.**

For vehicles sold in U.S.A.

FCC WARNING

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

FCC RF exposure information

This device complies with the FCC RF exposure requirements.

For vehicles sold in Canada

Operation is subject to the following two conditions;

(1) this device may not cause interference, and

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

(h) Vehicle−to−vehicle distance control mode failure warning

If there is trouble somewhere in the dynamic radar cruise control while the vehicle−to−vehicle distance control mode is on, the "CRUISE" indicator light in the instrument cluster flashes, the master warning light comes on and the warning tone sounds, and one or more of the following warning messages will appear on the multi−information display.

- "CLEAN RADAR SENSOR"
- "CRUISE NOT AVAILABLE"
- "CHECK CRUISE SYSTEM"

If any warning message shown above appears, the preset speed automatically cancels out.

CLEAN RADAR SENSOR

If the system cannot easily measure the vehicle−to−vehicle distance because of a dirty millimeter wave radar sensor or grille cover while the dynamic radar cruise control is on, the above message appears.

If this message appears, clean the sensor and grille cover with a soft cloth and try setting the preset speed again. If the dirt is removed without cleaning, the system will automatically enter the “RADAR READY” mode. If the system does not enter the “RADAR READY” mode even after cleaning or the message remains on the display, the system might be malfunctioning. Although it is no problem to continue driving, contact your Lexus dealer.

CRUISE NOT AVAILABLE

If the system cannot easily measure the vehicle−to−vehicle distance because of the following conditions while the dynamic radar cruise control is on, the above message appears.

- The driving pattern selector switch is set to the snow position.
- It is determined that it is difficult to make a measurement because of bad weather (such as extremely hot weather).
- The wipers are operated at high speed with the wiper lever in the “AUTO” position.

In the following cases, the dynamic radar cruise control switches to the “RADAR READY” mode:

- The driving pattern selector switch is changed to the normal or power position.
- The wipers are stopped or are switched to low speed or intermittent operation. (Including intermittent and stopped wipers in the “AUTO” position.)

In the above conditions, press the control lever upward in the “+ RES” direction and release it. The dynamic radar cruise control will be restored, however, even after the weather clears, if the setting operation cannot be performed or if the warning message still appears, the system might have malfunctioned. Although it is no problem to continue driving, contact your Lexus dealer.

CHECK CRUISE SYSTEM

If the system malfunction is detected when dynamic radar cruise control is in the "RADAR READY" mode or operating, the above message appears.

If this message appears, stop your vehicle in a safe place, turn the engine switch off, and then restart it to reset the system. If the setting still cannot be made or the same message appears again, the system might have malfunctioned. Although it is no problem to continue driving, contact your Lexus dealer.

NOTICE

While you are cruising with the dynamic radar cruise control on, if the master warning light comes on, the "CRUISE" indicator light flashes, "CHECK CRUISE SYSTEM" appears on the multi−information display and the warning tone sounds, turn the engine switch off and then on again. If the function is cancelled again after setting or if settings cannot be made, the dynamic radar cruise control system may be malfunctioning. Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer.

Conventional (fixed speed) cruise control mode

This mode allows you to cruise at a desired speed over about 45 km/h (28 mph) with your foot off the accelerator pedal.

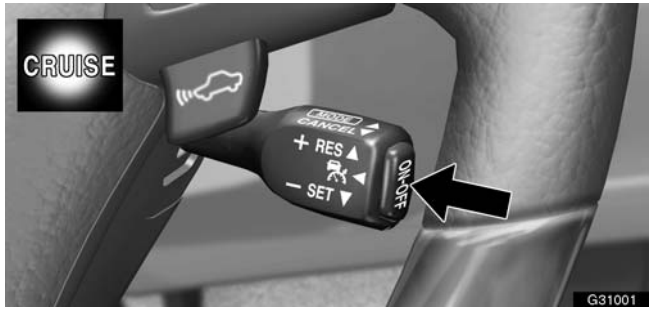
Cruising speed can be maintained, although a slight speed change may occur when driving up or down a gradient, within the limits of engine performance. On steeper hills, the speed will change more radically so it is better to drive without cruise control.

When cruise control is on, the driving pattern of the automatic transmission is fixed in the normal mode, regardless of the position of the selector switch.

CAUTION

- **In the conventional (fixed speed) cruise control mode, an approach warning does not activate even if you are too close to the vehicle ahead, as neither the presence of the vehicle ahead nor the vehicle−to−vehicle distance is detected. Pay special attention to the distance between your vehicle and the vehicle ahead. Always confirm the setting in the multi−information display.**
- **The conventional (fixed speed) cruise control mode of the dynamic radar cruise control should not be used in the following conditions, which could result in death or serious injury.**
  - **To help maintain maximum control of your vehicle, do not use fixed speed control mode when using dynamic radar cruise control while driving in heavy or varying traffic, or on slippery (rainy, icy or snow−covered) or winding roads.**
  - **Avoid vehicle speed increasing when driving downhill. If the vehicle speed is too fast in relation to the preset speed in the fixed speed control mode, cancel the fixed control mode and then downshift the transmission to use engine braking to slow down.**

(a) Turning the system on



To operate conventional cruise control mode, push the “ON−OFF” button. This turns the system on. The “CRUISE” indicator light in the instrument cluster comes on and “RADAR READY” appears on the multi−information display. Push the control lever in the “MODE” direction for longer than 1 second to change to conventional cruise control mode. The indicator on the multi−information display is as shown. You can now set your desired cruising speed. Pushing the “ON−OFF” button again will turn the system completely off and “CRUISE OFF” will appear on the multi−information display.

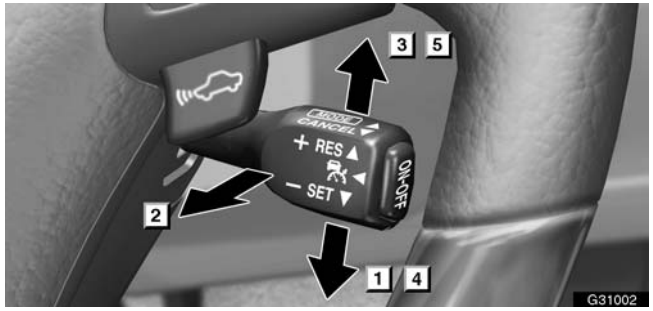
However, once the vehicle−to−vehicle distance control mode activates and is used, it cannot be changed to the conventional (fixed speed) cruise control mode using the above operation. To change the mode, push the “ON−OFF” button to turn the system off and then push it again to turn it on. Next push the lever in the “MODE” direction for longer than about 1 second.

When the engine switch is turned off, the system is also automatically turned off. To use the dynamic radar cruise control again, push the “ON−OFF” button again to turn it on.

⚠ CAUTION

To avoid accidentally engaging cruise control , keep the “ON−OFF” button off when not using dynamic radar cruise control.

(b) Setting operation



▶***Each function is described below.***

1 Setting the desired speed

The transmission must be in “D”, “6” (sixth range), “5” (fifth range) or “4” (fourth range) before you set the cruise control speed in the conventional cruise control mode of the dynamic radar cruise control.

After bringing the vehicle to the desired speed, press the control lever downward in the “– SET” direction and release it. This sets the vehicle at that speed and the multi−information display shows the preset speed. At this time, you may take your foot off the accelerator pedal. If you need to accelerate – for example, when passing – depress the accelerator pedal enough for the vehicle to exceed the preset speed. When you release the accelerator pedal, the vehicle will return to the speed set prior to acceleration.

You cannot set a desired speed if the master warning light comes on, the warning tone sounds and the multi–information display indicates a warning message such as “CHECK CRUISE SYSTEM”. If this messages appears on the display, see “Conventional cruise control mode failure warning” on page 417.

If you turn off the “ON–OFF” button while the warning message is displayed, the warning message turns off and the multi–information display switches to another screen. When you turn the “ON–OFF” button on again, the warning message comes back on the display. If no warning message appears on the display, the setting can be made.

You can change the dynamic radar cruise control screen to another screen even while the warning message is displayed.

2 Cancelling the preset speed

You can cancel the preset speed by doing any of the following:

a. Pulling the control lever in the ”CANCEL” direction.

b. Depressing the brake pedal.

c. Pushing the “ON–OFF” button.

If cancelled by a. or b., the multi–information displays shows nothing and the conventional cruise control enters the ready mode.

If cancelled by c., the “CRUISE” indicator light goes off in the instrument cluster and the multi–information display shows “CRUISE OFF”. In this case, the preset speed data is cleared, and you must set the speed from the beginning.

In the following cases, the preset speed automatically cancels out:

a. The vehicle speed falls below about 40km/h (25 mph).

b. If the vehicle speed drops 16 km/h (10 mph) below the preset speed, the preset speed will also automatically be cancelled.

c. The control lever is pressed downward in the “– SET” direction and held at less than about 45 km/h (28 mph). (45 km/h (28 mph) is designated as a lower preset speed limit .)

If the vehicle speed falls below about 40 km/h (25 mph), the preset speed data is cleared and you must set the speed from the beginning.

If cancelled by the above cases, the multi–information display shows nothing and the conventional cruise control enters the ready mode.

If the preset speed automatically cancels out for other than the above reasons, do not operate the cruise control. Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer at the earliest opportunity.

3 Resetting to a faster speed

Press the control lever upward in the “+ RES” direction and hold it. Release the lever when the desired speed is attained. While the lever is held upward, the vehicle will gradually gain speed.

When the difference between the actual vehicle speed and the set speed is less than 5 km/h (3 mph), the set speed can be increased 1.6 km/h (1 mph) each time by pressing the control lever upward in the “+ RES” direction quickly within 0.6 seconds.

A quicker way to reset the speed is to accelerate and then press the control lever downward in the “– SET” direction.

4 Resetting to a slower speed

Press the control lever downward in the “– SET” direction and hold it. Release the lever when the desired speed is attained. While the lever is held downward, the vehicle speed will gradually decrease.

When the difference between the actual vehicle speed and the set speed is less than 5 km/h (3 mph), the set speed can be lowered 1.6 km/h (1 mph) each time by pressing the control lever downward in the “– SET” direction quickly within 0.6 seconds.

A quicker way to reset the preset speed is to depress the brake pedal and then press the control lever downward in the “– SET” direction.

Even if you downshift the transmission from the “D” or “6” (sixth range) to “5” (fifth range), or from “D” or “5” (fifth range) to “4” (fourth range) in the conventional cruise control mode, engine braking will not be applied because this mode is not cancelled. To slow down, reset the cruise control to a slower speed with the cruise control lever or depress the brake pedal. If you use the brake pedal, cruise control is cancelled.

5 Resuming the preset speed

If the preset speed is cancelled by pulling the control lever, by depressing the brake pedal or vehicle stability control activation, pushing the lever up in the "+ RES" direction will restore the speed set prior to cancellation. However, once the vehicle speed falls below about 40 km/h (25 mph), the preset speed will not be resumed.

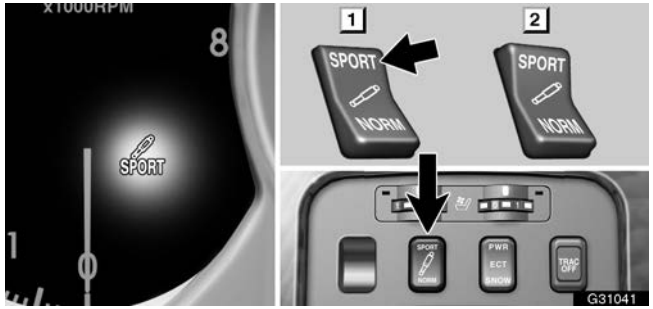
(c) Conventional cruise control mode failure warning

CHECK CRUISE
SYSTEM

If the system malfunction is detected when the conventional cruise control mode is in the ready mode or operating, the master warning light comes on, a warning tone sounds and the above message appears.

If this message appears, push the "ON–OFF" button to turn the system off and then push it again to turn it on. If the setting still cannot be made or the same message appears again, the system might have malfunctioned. Although it is no problem to continue driving, contact your Lexus dealer.

ADAPTIVE VARIABLE SUSPENSION SYSTEM (GS430 only)



▶ 1 *Sport position* 2 *Normal position*

The adaptive variable suspension system controls suspension and steering, and ensures optimum vehicle posture and steering capabilities depending on the driving condition.

Sport mode: Suitable for sporty type driving, such as on winding mountain roads and high speed driving.

Normal mode: Suitable for ordinary driving.

To turn on the sport mode, push the selector switch on the "SPORT" side. The indicator comes on in the instrument cluster.

To change to the normal mode, push the switch to the "NORM" side.

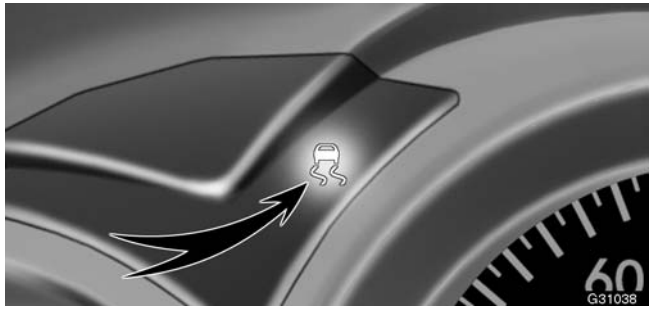
TRACTION CONTROL SYSTEM

The traction control system automatically helps prevent the spinning of rear wheels when the vehicle is started or accelerated on slippery road surfaces.

When the engine switch is selected in “IG–ON” mode, the system automatically turns on.

⚠ CAUTION

Under certain slippery road conditions, full traction of the vehicle and power against rear wheels cannot be maintained, even though the traction control system is in operation. Do not drive the vehicle under any speed or maneuvering conditions which may cause the vehicle to lose traction control. In situations where the road surface is covered with ice or snow, your vehicle should be fitted with snow tires or tire chains. Always drive at an appropriate and cautious speed for the present road conditions.



▶*Slip indicator light*

Leave the system on during the ordinary driving so that it can operate when needed.

You may hear a sound in the engine compartment for a few seconds just after the vehicle begins to move. This means that the traction control system is in the self–check mode, but does not indicate a malfunction.

When the traction control system is operating, the following conditions occur:

- The system controls the spinning of the rear wheels. At this time, the slip indicator light blinks.
- You may feel vibration or noise in your vehicle, caused by operation of the brakes. This indicates the system is functioning properly.

GS430—The slip indicator light comes on when the engine switch is selected in “IG–ON” mode. The light goes off when the engine is started.

GS300—The slip indicator light comes on for a few seconds when the engine switch is selected in “IG−ON” mode.

If the indicator light does not come on when the engine switch is selected in “IG−ON” mode, contact your Lexus dealer.

Traction control off mode (two−wheel drive models only)

If your wheels get stuck in a ditch when you are driving on a severe off road and sand, turn off the traction control system. This system that controls engine performance interferes with the process of freeing your wheels.

To turn off: Push “TRAC OFF” switch.

The slip indicator light will come on.

The vehicle stability control system is always activated even if the traction control system is turned off.

GS430 only—When the vehicle speed exceeds about 50 km/h (30 mph) even if the traction control system is turned off, the system turns on automatically.

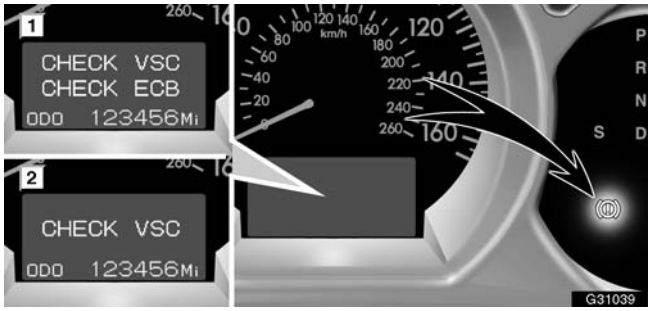
To turn on: Push “TRAC OFF” switch once again.

The slip indicator light will go off.

In the following cases, contact your Lexus dealer:

- The slip indicator light does not come on when the engine switch is selected in “IG−ON” mode.
- The slip indicator light remains on after the engine is started (GS430), or remains on after the engine switch is selected in “IG−ON” mode (GS300).
- The slip indicator light comes on in the normal driving mode while driving.

Traction control system failure warning



▶ 1 *GS430* 2 *GS300*

If the traction control system malfunctions, the slip indicator light (two−wheel drive models only) and brake system warning light (yellow) come on. At this time, the above message appears. (GS430 only—In some cases, the multi−information display shows either “CHECK VSC” or “CHECK ECB” only.)

If the message appears, the traction control system, vehicle stability control system and hill−start assist control system do not work. Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer as soon as possible.

VEHICLE STABILITY CONTROL SYSTEM

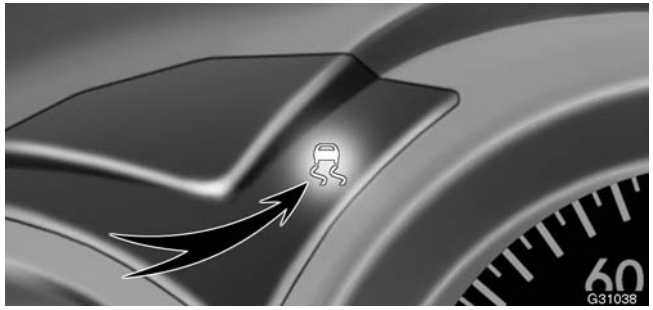
The vehicle stability control system helps provide comprehensive control of the systems such as anti−lock brake system, traction control, engine control, etc. This system automatically controls the brakes and engine to help prevent the vehicle from skidding when cornering on a slippery road surface or operating steering wheel abruptly.

This system activates when the vehicle speed is about more than 15 km/h (9 mph).

You may hear a sound in the engine compartment for a few seconds just after the vehicle begins to move. This means that the system is in the self−check mode, but does not indicate a malfunction.

CAUTION

- **Do not rely excessively on the vehicle stability control system. Even if the vehicle stability control system is operating, you must always drive carefully and attentively to avoid serious injury. Reckless driving will result in an accident. If the slip indicator light blinks, sounding an alarm, special care should be taken while driving.**
- **Only use tires of specified size. The size, manufacturer, brand and tread pattern for all 4 tires should be the same. If you use the tires other than specified, or different type or size, the vehicle stability control system may not function correctly. When replacing the tires or wheels, contact your Lexus dealer.**
- **In situations where the road surface is covered with ice or snow, your vehicle should be fitted with snow tires or tire chains.**



▶***Slip indicator light***

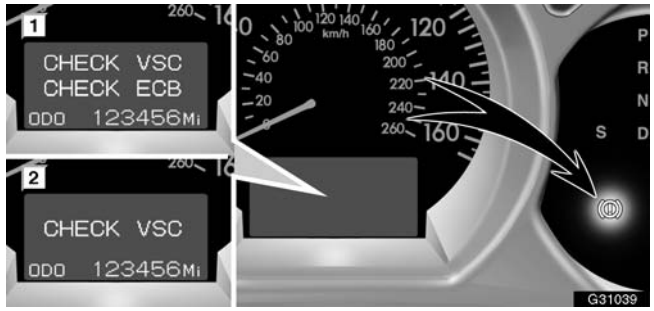
If the vehicle is going to skid during driving, the slip indicator light blinks and an alarm sounds intermittently. Special care should be taken while driving.

GS430—The slip indicator light comes on when the engine switch is selected in “IG–ON” mode. The light goes off when the engine is started.

GS300—The slip indicator light comes on for a few seconds when the engine switch is selected in “IG–ON” mode.

If the indicator light does not come on when the engine switch is selected in “IG–ON” mode, contact your Lexus dealer.

Vehicle stability control failure warning



▶ 1 *GS430* 2 *GS300*

If the vehicle stability control system malfunctions, the slip indicator light (two−wheel drive models only) and brake system warning light (yellow) come on. At this time, the above message appears. (GS430 only—In some cases, the multi−information display shows either "CHECK VSC" or "CHECK ECB" only.)

If the message appears, the vehicle stability control system, traction control system and hill−start assist control system do not work. Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer as soon as possible.

HILL−START ASSIST CONTROL SYSTEM

The hill−start assist control system assists you in starting to move up a steep or slippery hill. When you start to move up the hill slope, the system helps to prevent the vehicle from rolling backward in the interval while you move your foot from the brake pedal to the accelerator pedal.

⚠ CAUTION

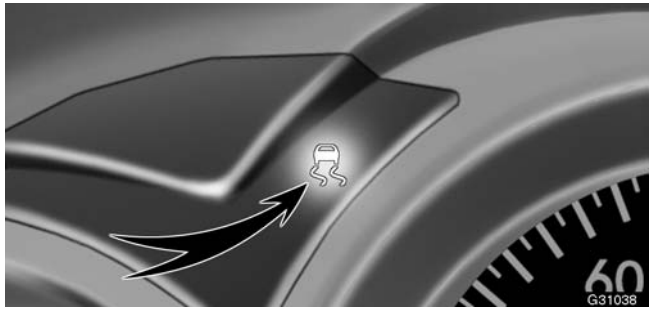
- **Do not rely excessively on the hill−start assist control system. The vehicle may not be able to start smoothly on road surfaces or off−road surfaces such as extremely steep slopes or icy roads, on which sliding can occur very easily.**
- **Do not use the hill−start assist control system to stop the vehicle. This system is not designed for stopping the vehicle on an uphill slope.**

The hill−start assist control system will operate for 5 seconds maximally when all of the following conditions apply.

- **When the selector lever is in “D” or “S” position**
- **When the brake pedal is not depressed**

The system is designed to operate when the vehicle is starting on an uphill slope; therefore, if the selector lever is in “P” or “N”, it will not operate. It will not operate either if the vehicle starts to move in reverse on a slope with the selector lever in “R”.

When the hill−start assist control system is operating, you may hear a sound. This indicates the hill−start assist control is operating normally and does not indicate a malfunction.



▶***Slip indicator light***

When the hill−start assist control system is operating, the slip indicator light flashes. At the same time, the stop lights and high mounted stoplight are lit.

GS430—The slip indicator light comes on when the engine switch is selected in “IG−ON” mode. The light goes off when the engine is started.

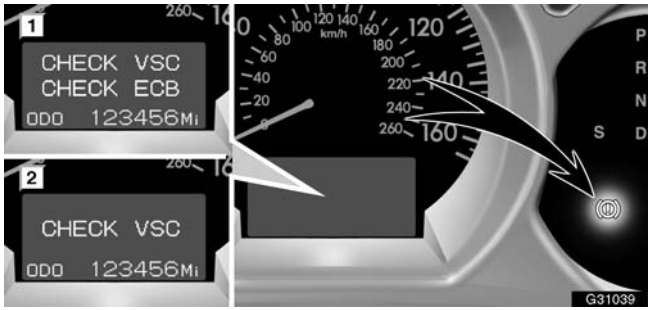
GS300—The slip indicator light comes on for a few seconds when the engine switch is selected in “IG−ON” mode.

If the indicator light does not come on when the engine switch is selected in “IG−ON” mode, contact your Lexus dealer.

Keep the following in mind when driving:

- The hill−start assist control system operates for 5 seconds maximally. If both the brake and accelerator pedals remain undepressed for longer than 5 seconds, the buzzer will sound at more frequent intervals and the system will gradually stop operating.
- The hill−start assist control system is not designed for stopping the vehicle on an uphill slope. When stopping the vehicle, be sure to depress the brake pedal.

Hill−start assist control system failure warning



▶ 1 *GS430* 2 *GS300*

If the hill−start assist control system malfunctions, the slip indicator light (two−wheel drive models only) and brake system warning light (yellow) come on. At this time, the above message appears. (GS430 only—In some cases, the multi−information display shows either "CHECK VSC" or "CHECK ECB" only.)

If the message appears, the hill−start assist control system, vehicle stability control system and traction control system do not work. Although it is no problem to continue driving, have your vehicle checked by your Lexus dealer as soon as possible.

VARIABLE GEAR RATIO STEERING SYSTEM (GS430 only)

The variable gear ratio steering system adjusts the wheel turning angle depending on the vehicle speed and how much you turn the steering wheel.

The vehicle wheel turning angle will be changed with a smaller degree of wheel maneuvering when you are driving at very low speed such as when putting your vehicle into a garage.

When you start or stop the engine, you may hear a small noise and the steering wheel may move slightly. This is caused when the system starts or stops, and does not indicate a malfunction.

In the following cases, to prevent the system from overheating, the system could be temporarily deactivated with the change in the center position of the steering wheel. This is not a malfunction. After the cause of the problem is eliminated, the system will return to normal automatically after a few minutes.

- If you continue maneuvering the steering wheel when the vehicle is stopped or running at very low speed
- If you continue driving holding the steering wheel to the extreme right or left
- If you maneuver the steering wheel immediately after starting the engine at less than about −30°C (−22°F)

While the system is not functioning, a larger degree of wheel maneuvering is needed during driving at low speed. If the center position of the steering wheel is changed frequently, have your vehicle inspected at your Lexus dealer.

CAUTION

Take due care especially when driving at low speed as the vehicle changes direction in greater proportion to the steering wheel maneuvering.

NOTICE

Do not disconnect the battery with the steering wheel turned, or the center position of the steering wheel could be slightly and temporarily changed. However, after driving for a short while, the system will return to normal and the center position of the steering wheel will be in the appropriate position.

If you disconnect and reconnect the battery terminal, the system is reset temporarily. However, it is no problem to drive. Drive for a short while, the system will be set automatically and return to normal.

Variable gear ratio steering system failure warning

If there is any malfunction in the system, the above message appears and the master warning light comes on.

If the warning message and light come on while driving, the system is not working. Although conventional steering operates when maneuvered, a larger degree of wheel maneuvering (than at the time when the system is functioning properly) is needed when driving at low speed. At this time, the center position of the steering wheel could be changed. Although it is no problem to continue driving, have your vehicle repaired at your Lexus dealer.

VEHICLE DYNAMICS INTEGRATED MANAGEMENT (GS430 only)

Vehicle Dynamics Integrated Management (VDIM) helps manage control for vehicle stability control system, anti−lock brake system, brake assist system, traction control system, engine output control, hill−start assist control system and also manages variable gear ratio steering system and electric power steering system.

In order to control sudden steering wheel operation and the sideslip on slippery road surfaces, this system provides excellent vehicle stability by automatically controlling the brake, engine output and front wheel angle.

The state of the tires will affect the performance of the vehicle dynamics integrated management system. Be sure to check the following:

- Are tires of specified size installed?
- Are tires of identical type installed?
- Do the tires have stipulated tire pressure?
- Are the tires worn?

A problem with the tires or modified suspension systems will have an adverse effect on the system and may cause a malfunction, so be careful.

When the slip indicator light comes on, and the message “CHECK ECB” appears on the multi−information display, the vehicle dynamics integrated management does not operate. Have your vehicle checked by your Lexus dealer as soon as possible.

In addition, when the master warning light comes on, and the message “CHECK VGRS” or “CHECK P/S” appears on the multi−information display, the system will not be temporarily functioning. Although it is no problem in driving as usual, have your vehicle checked by your Lexus dealer as soon as possible.

⚠ CAUTION

Do not overestimate the vehicle dynamics integrated management. Even when this management is functional, there is a limit to vehicle stability, and irresponsible driving may lead to an accident. When driving, you should always pay attention to your speed and keep a safe distance between your vehicle and the vehicle in front.

BRAKE SYSTEM

This brake system has 2 independent hydraulic circuits. If either circuit should fail, the other will still work. However, the pedal will be harder to press, and your stopping distance will increase. Also, the brake system warning light may come on.

CAUTION

Do not drive your vehicle with only a single brake system. Have your brakes fixed immediately.

Brake booster

The brake booster uses brake fluid pressurized by the pump (GS430) or engine vacuum (GS300) to power–assist the brakes. If the brake booster fails during driving, the brake system warning light (red) comes on. In this case, the brakes may not work properly. If they do not work well, depress the brake pedal firmly. If the brake system warning light (red) comes on, immediately stop your vehicle and contact your Lexus dealer.

GS430 only—Either of the following conditions may occur, but does not indicate a malfunction:

- The brake system warning light (red) may stay on for about 60 seconds after the engine is started. It is normal if the light turns off after a while.
- Depressing the brake pedal repeatedly may turn on the brake system warning light (red). It is normal if the light goes out after a few seconds.

GS430:

You may hear a small sound in the engine compartment after the engine is started or the brake pedal is depressed repeatedly. This is a pump pulsating sound of the brake system, and it is not a malfunction.

GS300:

If the engine should stop while you are driving, you can bring the vehicle to a stop with normal pedal pressure. There is enough reserved vacuum for one or two stops—but no more!

CAUTION

- **Do not pump the brake pedal if the engine stalls. Each push on the pedal uses up your brake fluid pressure reserve.**
- **Even if the power assist is completely lost, the brakes will still work. But you will have to push the pedal hard, much harder than normal. And your braking distance will increase.**

Anti−lock brake system

The anti−lock brake system is designed to automatically help prevent lock−up of the wheels during a sudden braking or braking on slippery road surfaces. This assists in providing directional stability and steering performance of the vehicle under these circumstances.

Effective way to press the ABS brake pedal: When the anti−lock brake system function is in action, you may feel the brake pedal pulsating and hear a noise. In this situation, to let the anti−lock brake system work for you, just hold the brake pedal down more firmly. Do not pump the brake in a panic stop. This will result in reduced braking performance.

The anti−lock brake system becomes operative after the vehicle has accelerated to a speed in excess of approximately 10 km/h (6 mph). It stops operating when the vehicle decelerates to a speed below approximately 5 km/h (3 mph).

Depressing the brake pedal on slippery road surfaces such as on a manhole cover, a steel plate at a construction site, joints in a bridge, etc. on a rainy day tends to activate the anti−lock brake system.

You may hear a click or motor sound in the engine compartment for a few seconds when the engine is started or just after the vehicle begins to move. This means that the anti−lock brake system is in the self−check mode, and does not indicate a malfunction.

When the anti−lock brake system is activated, the following conditions may occur. They do not indicate a malfunction of the system:

- You may hear the anti−lock brake system operating and feel the brake pedal pulsating and the vibrations of the vehicle body and steering wheel. You may also hear the motor sound in the engine compartment even after the vehicle is stopped.
- At the end of the anti−lock brake system activation, the brake pedal may move a little forward.

⚠ CAUTION

Do not overestimate the anti−lock brake system: Although the anti−lock brake system assists in providing vehicle control, it is still important to drive with all due care and maintain a moderate speed and safe distance from the vehicle in front of you, because there are limits to the vehicle stability and effectiveness of steering wheel operation even with the anti−lock brake system on.

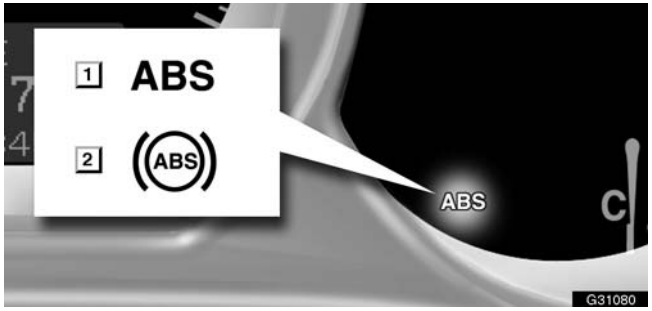
If tire grip performance exceeds its capability, or if hydroplaning occurs during high speed driving in the rain, the anti−lock brake system does not provide vehicle control.

Anti−lock brake system is not designed to shorten the stopping distance: Always drive at a moderate speed and maintain a safe distance from the vehicle in front of you. Compared with vehicles without an anti−lock brake system, your vehicle may require a longer stopping distance in the following cases:

- **Driving on rough, gravel or snow−covered roads.**
- **Driving with tire chains installed.**
- **Driving over the steps such as the joints on the road.**
- **Driving on roads where the road surface is pitted or has other differences in surface height.**

Install all 4 tires of specified size at appropriate pressure: The anti−lock brake system detects vehicle speeds using the speed sensors for respective wheels' turning speeds. The use of tires other than specified may fail to detect the accurate turning speed resulting in a longer stopping distance.

“ABS” warning light



▶ 1 *U.S.A.* 2 *Canada*

GS430—The light comes on when the engine switch is selected in “IG–ON” mode. If the anti–lock brake system and the brake assist system work properly, the light turns off in a few seconds after the engine is started.

GS300—The light comes on for a few seconds when the engine switch is selected in “IG–ON” mode. It indicates the anti–lock brake system and the brake assist system work properly.

If either system malfunctions, the light comes on again.

When the “ABS” warning light is on, the anti–lock brake system and the brake assist system do not operate, but the brake system still operates conventionally.

If either of the following conditions occur, this indicates a malfunction somewhere in the components monitored by the warning light system. Contact your Lexus dealer as soon as possible to service the vehicle.

- The light does not come on when engine switch is selected in “IG–ON” mode.
- The light remains on after the engine is started (GS430), or remains on after the engine switch is selected in “IG–ON” mode (GS300).
- The light comes on while you are driving.

A warning light turning on briefly during operation does not indicate a problem.

⚠ CAUTION

If the “ABS” warning light remains on together with the brake system warning light (red), immediately stop your vehicle at a safe place and contact your Lexus dealer.

In this case, not only the anti–lock brake system will fail but also the vehicle will become extremely unstable during braking.

GS430 only—Either of the following conditions may occur, but does not indicate a malfunction:

- The light may stay on for about 60 seconds after the engine is started. It is normal if it turns off after a while.
- Depressing the brake pedal repeatedly may turn on the light. It is normal if it turns off after a few seconds.

Drum−in−disc type parking brake system

Your vehicle has a drum−in−disc type parking brake system. This type of brake system needs bedding−down of the brake shoes periodically or whenever the parking brake shoes and/or drums are replaced.

Have your Lexus dealer perform the bedding−down.

Brake assist system

When you slam the brakes on, the brake assist system judges as an emergency stop and provides more powerful braking for a driver who cannot hold down the brake pedal firmly.

When you slam the brakes on, more powerful braking will be applied. At this time, you may hear a sound in the engine compartment and feel the vibrations of the brake pedal. This does not indicate a malfunction.

The brake assist system becomes operative after the vehicle has accelerated to a speed in excess of approximately 10 km/h (6 mph). It stops operating when the vehicle decelerates to a speed below approximately 5 km/h (3 mph).

The brake assist system may not work for about 60 seconds after the engine is started.

For an explanation of this system's warning light, see "ABS" warning light on page 78 or 430.

BRAKE PAD WEAR LIMIT INDICATORS

The brake pad wear limit indicators on your disc brakes give a warning noise when the brake pads are worn to the extent that replacement is required.

If you hear a squealing or scraping noise while driving, have the brake pads checked and replaced by your Lexus dealer as soon as possible. Expensive rotor damage can result if the pads are not replaced when needed.

GS430 front brake only—

The high brake performance is achieved by proper wear of brake pads and discs. As a result, the brake discs may wear earlier than the ones on the conventional brake system.

When brake pads are replaced, brake disc thickness is required to be measured.

It is dangerous to continue driving when brake pads and discs have exceeded the wear limit.

ELECTRIC POWER STEERING SYSTEM

The electric power steering system, using an electric motor, assists the turning of the steering wheel.

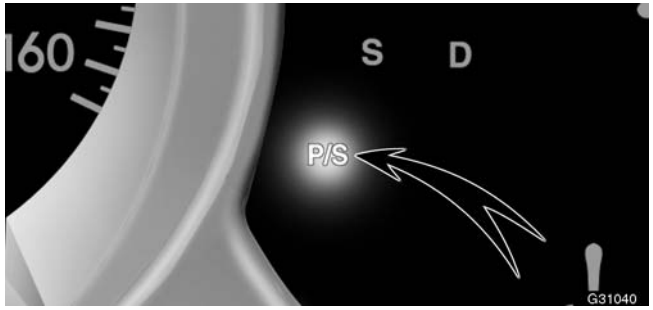
In the following cases, you may feel the steering becomes heavy. However, the electric power steering system warning light does not come on. (Because it is not a malfunction.)

When maneuvering or turning frequently over a long time, the power steering effect will be reduced to prevent the system from overheating. Avoid turning the steering wheel, or stop the vehicle and select the engine switch in “ACC” or “OFF” mode. The system will become cool in about 10 minutes.

NOTICE

Frequent maneuvering and turning over a long time may cause damage to the system in which the mechanism prevents overheating of the electric power steering system.

When the battery is discharged, check the battery’s condition. If necessary, recharge or replace the battery. For details, see “Checking battery condition” on page 571.



▶***Electric power steering system warning light***

The light comes on when the engine switch is selected in “IG–ON” mode. If the electric power steering system works properly, the light turns off after a few seconds. If the system has malfunctions, the light comes on again.

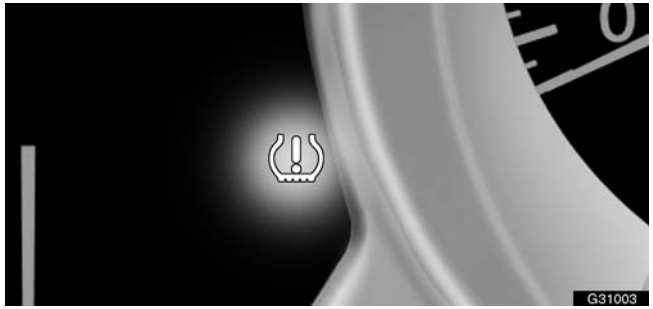
If the following conditions occur, this indicates a malfunction somewhere in the components monitored by the warning light system. Contact your Lexus dealer as soon as possible to service the vehicle.

- The light does not come on when the engine switch is selected in “IG–ON” mode or remains on.
- The light stays on while you are driving.

CAUTION

If the electric power steering system warning light comes on, take your vehicle to your Lexus dealer as soon as possible. In this case, more effort is required for the steering wheel to turn than usual. Drive your vehicle while firmly gripping the steering wheel.

TIRE PRESSURE WARNING SYSTEM



▶***Low tire pressure warning light***

The light warns you that the tire inflation pressure is low.

The low tire pressure warning light comes on when the engine switch is selected in “IG−ON” mode and goes off after a few seconds. This means the low tire pressure warning light is operating properly. If the tire inflation pressure becomes low, the light comes on again. At this time, the master warning light comes on and the message “LOW TIRE” appears on the multi−information display.

If the low tire pressure warning light does not go off or comes on during driving, it indicates that tire inflation pressure is low. Make sure there is no flat tire. If the light comes on again even after tire inflation pressure adjustment, you may have a flat tire. If there is not adequate air pressure in the tires, the light will not go off.

The light may turn on due to natural causes such as natural air leaks or tire inflation pressure changes caused by temperature. In this case, adjusting the tire inflation pressure will turn off the light.

The tire pressure warning system is not a substitute for checking tire inflation pressure.

For details about adjusting the tire inflation pressure, see “Checking tire inflation pressure” on page 539.

If the low tire pressure warning light comes on, the action you must take is different depending on the type of tires used.

Vehicles with run−flat tires:

Stop your vehicle at a safe place as soon as possible and check that the tire inflation pressure is as specified on the tire and loading information label. If the low tire pressure warning light comes on even after tire inflation pressure adjustment, it is probable that you have a flat tire. If you cannot verify the tire inflation pressure soon, go to the nearest Lexus dealer or authorized tire dealer at the moderate speed and do not ever exceed 90 km/h (55 mph) and have all your vehicle’s tires checked and adjusted. And whether there is a flat tire or not should be also checked at this time. If any tire must be replaced, see “If you have a flat tire” on page 468.

If your vehicle is equipped with spare tire, the spare is not equipped with the tire pressure sensor. So, the low tire pressure warning light remains on even if the spare tire is mounted.

The light goes off a few minutes after air is put into the deflated tire.

CAUTION

If the low tire pressure warning light comes on, take your vehicle to the nearest Lexus dealer or authorized tire dealer or gas station as soon as possible, observing the following instructions:

- **Decelerate as soon as possible to the most appropriate speed that conditions permit. Do not drive over 90 km/h (55 mph).**
- **Avoid abrupt steering wheel maneuvering and braking. If the vehicle tires deteriorate, you could lose control of the steering wheel or the brakes, causing death or serious injury.**
- **The warning system may not activate immediately if bursts or sudden air leakage should occur.**

When the tyre pressure warning system warning light is lit, one or more of your tyres is significantly under−inflated. You should stop and check your tyres as soon as possible, and inflate them to the proper pressure as indicated on the vehicle's tyre information placard. Driving on a significantly under−inflated tire causes the tyre to overheat and can lead to tyre failure. Under−inflation also reduces fuel efficiency and tyre tread life, and may affect the vehicle's handling and stopping ability. Each tyre, including the spare, should be checked monthly when cold and set to the recommended inflation pressure as specified in the vehicle placard and owner's manual.

NOTICE

- ***Do not use liquid sealants for a flat tire as tire pressure sensors will be damaged.***
- ***Take due care not to go over a curb stone and be careful of the holes in the road because deflated tire pressure affects tire cushion performance. The wheels, tires, body, suspension and other components could be damaged.***
- ***Your ground clearance is reduced if the run−flat tire goes flat so avoid driving over obstacles and drive slowly on rough, unpaved roads and speed bumps. Also, do not attempt to go through an automatic car wash as the vehicle may get caught, resulting in damage.***
- ***When the tires must be replaced, have them replaced by the nearest Lexus dealer or authorized tire dealer. The tire pressure sensor will be affected by the installation or removal of tires.***
- ***When the tires must be replaced, replace the grommets for tire pressure sensors as well.***

Vehicles with standard tires:

Stop your vehicle at a safe place as soon as possible and check that the tire inflation pressure is as specified on the tire and loading information label. If the low tire pressure warning light comes on even after tire inflation pressure adjustment, it is probable that you have a flat tire. If the tire goes flat, change to the spare tire. (See page 469.)

The spare tire is not equipped with the tire pressure sensor. So, the low tire pressure warning light remains on even if the spare tire is mounted.

The light goes off a few minutes after air is put into the deflated tire.

⚠ CAUTION

If the low tire pressure warning light comes on, observe the following instructions:

- **Decelerate as soon as possible to the most appropriate speed that conditions permit.**
- **Avoid abrupt steering wheel maneuvering and braking. If the vehicle tires deteriorate, you could lose control of the steering wheel or the brakes, causing death or serious injury.**
- **The warning system may not activate immediately if bursts or sudden air leakage should occur.**

When the tyre pressure warning system warning light is lit, one or more of your tyres is significantly under−inflated. You should stop and check your tyres as soon as possible, and inflate them to the proper pressure as indicated on the vehicle's tyre information placard. Driving on a significantly under−inflated tire causes the tyre to overheat and can lead to tyre failure. Under−inflation also reduces fuel efficiency and tyre tread life, and may affect the vehicle's handling and stopping ability. Each tyre, including the spare, should be checked monthly when cold and set to the recommended inflation pressure as specified in the vehicle placard and owner's manual.

NOTICE

- ***Do not use liquid sealants for a flat tire as tire pressure sensors will be damaged.***
- ***When the tires must be repaired or replaced, have them repaired or replaced by the nearest Lexus dealer or authorized tire dealer. The tire pressure sensors will be affected by the installation or removal of tires.***
- ***When the tires must be replaced, replace the grommets for tire pressure sensors as well.***

System malfunction

If the low tire pressure warning light blinks and the above message appears on the multi−information display, it indicates a system malfunction. Contact your Lexus dealer.

The system will be disabled in the conditions below:

- Electric devices or facilities using similar radio wave frequencies are nearby.
- If a radio set at similar frequencies is in use.
- Much snowflakes or ice gets on the vehicle, in particular, around the wheels or wheel housings.
- Non−genuine Lexus wheels are used.
- Snow tires or tire chains are used.
- The sensor battery is expired.
- The tires not equipped with tire pressure sensor are used.

- Although the tires are equipped with tire pressure sensors, the selector switch (see page 442) is set to other tire setting.

NOTICE

- ***The use of non−genuine wheels will cause the tire pressure sensors to transmit the electronic code in different manner, resulting in the failure of the system.***
- ***The use of tires other than originally installed with genuine wheels may also cause the malfunction of the system.***

For vehicles sold in U.S.A.

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

NOTICE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

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

For vehicles sold in Canada

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Replacing tires and wheels

As you might have difficulty in locating a flat or deflated tire, a tire pressure warning system should be installed on the tires of this vehicle.

When replacing the wheels, be sure to install tire pressure sensors on the wheels.

There are 3 ways to set up the tire pressure sensors:

a. Remove the sensor from the old wheel and install it to the new wheel.

b. Keep the same wheel with tire pressure sensor and replace the tire alone.

c. Use a new wheel and sensor.

You have to register an ID code for a new sensor. Up to 2 sets of codes can be registered. As one ID for the originally installed sensor is registered at "MAIN" of the selector switch, use the "2nd" position to register an ID for the new sensor.

You do not need to re–register the ID code for any other replacements. For the use of the originally installed tires, put the selector switch at "MAIN" and for the use of tires set purchased later, put the switch at "2nd". For the sensor selector switch, see page 442.

NOTICE

- ***Have the tires, wheels or sensors replaced and ID codes registered by Lexus dealer. If you need sensors, purchase from Lexus dealer.***
- ***The sensor nuts should always be tightened to a torque of 4 N·m (0.4 kgf·m, 2.9 ft·lbf).***
- ***The use of non−genuine wheels will cause the tire pressure sensors to transmit the electronic code in different manner, resulting in the failure of the system.***

Tire pressure warning system reset switch

The tire pressure warning system needs to be initialized in the following conditions:

- **After replacing or rotating tires or wheels**
- **After replacing the tire pressure sensor**

When initializing the system, the present tire condition is stored as a standard.

To initialize the system, perform the following:

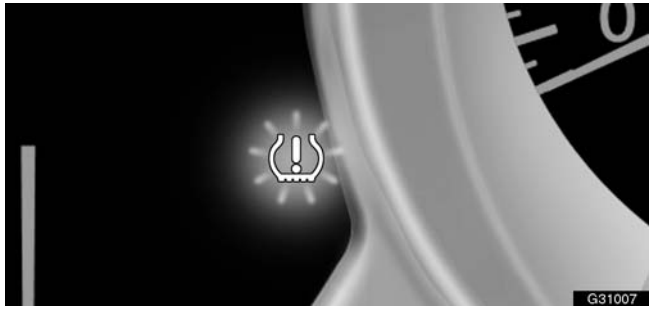
1. Park the vehicle at a safe place and apply the parking brake. Stop the engine.

2. Adjust the pressure of all the installed tires to the specified level. (See “Tires and wheels” on pages 534 and 537.)

3. Start the engine.

4. Push and hold the reset switch until the low tire pressure warning light blinks three times, and the message “PRESSURE INITIAL” appears on the multi–information display.

Do not turn the engine off for about 20 minutes until initialization is complete.



When initializing the system, make sure the low tire pressure warning light blinks three times and the message “PRESSURE INITIAL” appears on the multi–information display. If the warning light does not blink three times and the message does not appear on the multi–information display, initialization failed and the tire pressure warning system will not function properly. In this case, initialize the system again.

Do not push the reset switch without adjusting the tire inflation pressure to the specified level. Otherwise, the low tire pressure warning light may not come on even if the tire inflation pressure is low, or it may come on when the tire inflation pressure is actually normal.

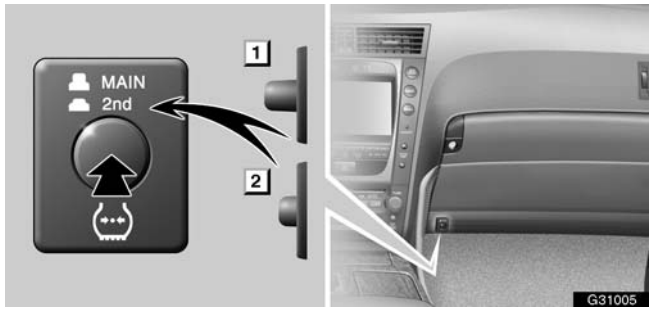
If you push the reset switch while the vehicle is moving, initialization is not performed.

If the low tire pressure warning light does not blink and the message does not appear on the multi–information display when you push and hold the reset switch, have the tire pressure warning system checked at your Lexus dealer.

NOTICE

- ***Do not turn the engine switch off during initialization, or the system may not function properly due to incomplete initialization.***
- ***Check which tires are being used before initialization of the system, and also check the selector switch position. (See the following "Selector switch".)***

Selector switch



▶ 1 *Main position* 2 *2nd position*

The selector switch is located on the underside of the glove box.

The ID code is given in the tire pressure sensor. To activate the tire pressure warning system, it is necessary to register the ID code of the sensor on the selector switch in the vehicle.

2 sets of ID codes can be registered. The code of the tires originally installed on the vehicle is registered on the switch at "MAIN". Have a new tires set with new tire pressure sensors registered at "2nd" by Lexus dealer.

ID codes should be registered by Lexus dealer. Once registered, change the setting position each time you purchase tires and wheels. Re–registration is not required.

When purchasing new tires, consult your Lexus dealer.

CAUTION

When the tires whose ID code is registered at “MAIN” are used, the system does not work properly with the selector switch set at “2nd”. If the tires whose ID code is registered at “2nd” are stored nearby, the system will detect their tire inflation pressure (and vice versa).

Liquid sealants for flat tires

NOTICE

Do not use liquid sealants for flat tires as the tire pressure sensors will be damaged.

PRE−COLLISION SYSTEM

(Vehicles with dynamic radar cruise control)

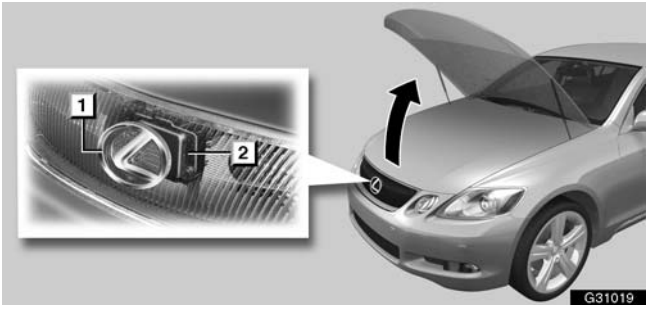
When the pre−collision system detects what it perceives to be an unavoidable collision, the front seat belts are quickly drawn back by the retractors (pre−collision seat belts) and more powerful braking is applied according to the amount of pedal depression to help reduce injury to the occupants and damage to the vehicle body. In addition, the adaptive variable suspension works to help regulate the vehicle not to pitch forward so much.

The pre−collision system will operate when the engine switch is selected in “IG−ON” mode.

Pre−collision sensor

The millimeter wave radar sensor detects vehicles or objects near or on the road your vehicle is traveling and determines the possibility of a collision based on the object position, vehicle speeds and the course you are traveling.

The pre−collision sensor will operate when the vehicle speed is about 5 km/h (3 mph) or over.



▶ 1 ***Millimeter wave grille cover***
2 ***Millimeter wave radar sensor***

The millimeter wave radar sensor is installed in the front grille of the hood.

The millimeter wave radar sensor cannot detect plastic objects such as pylons, and may not detect people, animals, bicycles, motor cycles, trees, snowbanks, etc. as objects with which your vehicle may collide.

⚠ CAUTION

To ensure that pre−collision system will function properly while driving, observe the following. Failure to follow these instructions could reduce the effectiveness of the pre−collision system in case of vehicle accident:

- **Always keep the millimeter wave radar sensor and grille cover clean. When cleaning, use a soft cloth and be careful not to damage the sensor and grille cover.**
- **Avoid strong impacts around the millimeter wave radar sensor. An incorrect millimeter wave radar sensor alignment will result in system malfunction. A special device is required to adjust the millimeter wave radar sensor alignment. Be sure to have the sensor adjusted by your Lexus dealer.**
- **Do not disassemble the millimeter wave radar sensor.**
- **Do not affix a sticker (including a transparent sticker) or attach an accessory around the millimeter radar sensor or the grille cover.**
- **Do not modify or paint the grille cover. When replacing the grille cover, be sure to use a genuine grille cover.**

Pre−collision seat belts (Front seat belts only)

When the pre−collision sensor detects an object or vehicle with which your vehicle might collide and determines that a collision may be unavoidable, the seat belts are quickly drawn back by the retractors to enhance the effects of the seat belt pretensioners. The pre−collision seat belts also work as well when hard braking.

The pre−collision seat belts will operate in the following conditions:

- When the approaching speed in regard to the object or the vehicle exceeds about 30 km/h (18 mph).
- When the front seat occupants wear the seat belts.

In the following conditions, the seat belts are quickly drawn back by the retractors regardless of the possibility of the collision:

- When the vehicle speed is about 14 km/h (9 mph) or over.
- When the vehicle is spinning or cannot take a turn properly.

Pre−collision brake assist system

When the pre−collision sensor detects an object or vehicle with which your vehicle might collide, and determines that a collision may be unavoidable, depressing the brake pedal provides more powerful braking according to the amount of pedal depression.

The pre−collision brake assist system will operate in the following conditions:

- When the vehicle speed is about 30 km/h (18 mph) or over.
- When the brake pedal is depressed.
- When the approaching speed in regard to the object or the vehicle exceeds about 30 km/h (18 mph).

If the brake pedal is kept depressed before the sensor's determination of unavoidable collision, the pre−collision brake assist system will operate soon after the sensor's determination.

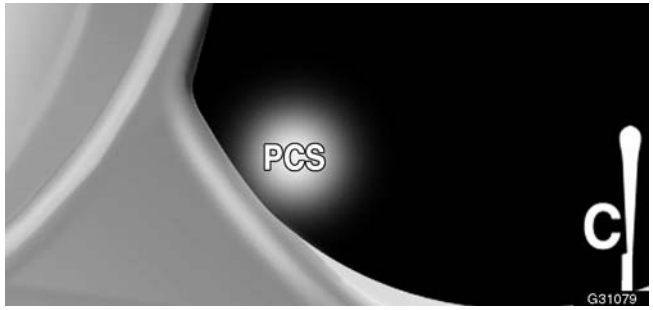
Adaptive variable suspension control (GS430 only)

When the pre−collision sensor detects an object or vehicle with which your vehicle may collide, and determines that a collision may be unavoidable, the adaptive variable suspension adjusts the damping effect on the shock absorbers and regulates the vehicle not to pitch forward so much.

The adaptive variable suspension will operate in the following conditions:

- When the vehicle speed is about 5 km/h (3 mph) or over.
- When the approaching speed in regard to the object or the vehicle exceeds about 30 km/h (18 mph).

Pre−collision system failure warning



▶***Pre−collision system warning light***

The light warns that there is a problem somewhere in the pre−collision system.

The light comes on when the engine switch is selected in “IG−ON” mode. If the system works properly, the light goes off after a few seconds.

If the light does not come on when the engine switch is selected in “IG−ON” mode, have your vehicle checked by your Lexus dealer.

If the system has a problem, the pre−collision system warning light comes on or blinks. At this time, the master warning light comes on, a warning tone sounds, and either of the following messages appears on the multi−information display.

- PCS DISABLED NOW
- CHECK PCS

PCS
DISABLED
NOW

The pre−collision system warning light blinks, and the above message appears in the following conditions:

- **The millimeter wave radar sensor or the grille cover is dirty.**

  Clean the grille or sensor with a soft cloth to remove the dirt.

- **The pre−collision seat belts are activated repeatedly for a short time.**

  The system turns off temporarily for overheating protection.

The above conditions do not indicate a malfunction. If the problem is removed, the warning lights and message go out and the system returns to normal.

CHECK PCS

If the pre−collision system warning light remains on, and the above message appears, the pre−collision system may not operate. Contact your Lexus dealer as soon as possible to service the vehicle.

Precaution for pre−collision system

It should be noted that the pre−collision sensor may detect the following as the objects with which your vehicle might collide, and the pre−collision system may operate, even though there is no possibility of collision.

- When traveling through a curve, there is an object on the edge of the road.
- When traveling through a curve, another vehicle is passing from the opposite direction.
- When traveling across a narrow iron bridge.
- When there is a metallic object on the road.
- When there is a steel plate on the road at a construction site.
- When there is a bump on the road.
- When waiting to turn to the left in an intersection, and another vehicle is passing from the opposite direction.
- If your vehicle approaches another vehicle ahead very quickly.

CAUTION

- **Do not rely solely on the pre−collision system to avoid accidents. Your safe and attentive driving practices are still the best way to avoid accidents and you are always responsible for the operation of the vehicle and the safety of your passengers. When driving, always pay attention to the surrounding conditions and the course you are driving.**
- **The pre−collision sensor's collision detection performance is limited. The sensor is able to detect a forward object within 10 degrees on either left or right side. If it is out of the range, or if there is no or weak millimeter wave reflection, the sensor could not detect the object and the system does not work properly.**
- **Even if the pre−collision system is operative in an unavoidable collision, unless the seat belts are worn and the brake pedal is depressed, the pre−collision seat belts and pre−collision brake assist system will not work.**

NOTICE

Even if there is no object with which your vehicle may collide, the pre−collision system may be activated as follows:

- ***The pre−collision seat belts work to quickly draw back the front seat belts by the retractors (pre−collision seat belts).***
- ***The pre−collision brake assist system works to apply more powerful braking than normal braking.***

SECTION 3 – 2

STARTING AND DRIVING

Driving tips

Break–in period 450
Operation in foreign countries 450
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Trailer towing 454
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Cargo and luggage 457

BREAK−IN PERIOD

Drive gently and avoid high speeds.

You need not follow a break−in schedule with your new Lexus. But following a few simple tips for the first 1600 km (1000 miles) can add to the future economy and long life of your vehicle:

- Avoid full throttle acceleration when starting and driving.
- Avoid racing the engine.
- Try to avoid hard stops during the first 300 km (200 miles).
- Do not drive for a long time at any single speed, either fast or slow.

OPERATION IN FOREIGN COUNTRIES

If you plan to drive your Lexus in another country ...

First, comply with the vehicle registration laws.

Second, confirm the availability of the correct fuel (unleaded and minimum octane rating).

TIPS FOR DRIVING IN VARIOUS CONDITIONS

- Always slow down in gusty crosswinds. This will allow you much better control.
- Drive slowly onto curbs and, if possible, at a right angle. Avoid driving onto high, sharp−edged objects and other road hazards. Failure to do so can lead to severe tire damage such as a tire burst.
  Drive slowly when passing over bumps or travelling on a bumpy road. Otherwise, the impact could cause severe damage to the tires and/or wheels.
- When parking on a hill, turn the front wheels until they touch the curb so that the vehicle will not roll. Apply the parking brake, and place the transmission in ”P”. If necessary, block the wheels.
- Washing your vehicle or driving through deep water may get the brakes wet. To see whether they are wet, check that there is no traffic near you and then press the pedal lightly. If you do not feel a normal braking force, the brakes are probably wet. To dry them, drive the vehicle cautiously while lightly pressing the brake pedal with the parking brake applied. If they still do not work safely, pull to the side of the road and call a Lexus dealer for assistance.

CAUTION

- **Before driving off, make sure the parking brake is fully released and that the parking brake reminder light is off.**
- **Do not leave your vehicle unattended while the engine is running.**
- **Do not rest your foot on the brake pedal while driving. It can cause dangerous overheating, needless wear, and poor fuel economy.**
- **To drive down a long or steep hill, reduce your speed and downshift. Remember, if you ride the brakes excessively, they may overheat and not work properly. See page 359.**
- **Be careful when accelerating, upshifting, downshifting or braking on a slippery surface. The abrupt change in engine speed, such as sudden acceleration or engine braking, could cause the vehicle to skid or spin.**
- **Even if the legal speed limit permits it, do not drive over 140 km/h (85 mph) unless your vehicle has high−speed capability tires. Driving over 140 km/h (85 mph) may result in tire failure, loss of control and possible injury. Be sure to consult a tire dealer to determine whether the tires on your vehicle are high−speed capability tires or not before driving at such speeds.**

- **Do not continue normal driving when the brakes are wet. If they are wet, your vehicle will require a longer stopping distance, and it may pull to one side when the brakes are applied. Also, the parking brake will not hold the vehicle securely.**

WINTER DRIVING TIPS

Make sure your coolant is properly protected against freezing.

Only use ”Toyota Super Long Life Coolant” or similar high quality ethylene glycol based non–silicate, non–amine, non–nitrite, and non–borate coolant with long–life hybrid organic acid technology. (Coolant with long–life hybrid organic acid technology is a combination of low phosphates and organic acids.)

See “Checking the engine coolant level” on page 527 for details of coolant type selection.

For the U.S.A.—“Toyota Super Long Life Coolant” is a mixture of 50% coolant and 50% deionized water. This coolant provides protection down to about –35°C (–31°F).

For Canada—“Toyota Super Long Life Coolant” is a mixture of 55% coolant and 45% deionized water. This coolant provides protection down to about –42°C (–44°F).

NOTICE

Do not use plain water alone.

Check the condition of the battery and cables.

Cold temperatures reduce the capacity of any battery, so it must be in top shape to provide enough power for winter starting. Page 571 tells you how to visually inspect the battery. Your Lexus dealer and most service stations will be pleased to check the battery charge level.

Make sure the engine oil viscosity is suitable for the cold weather.

See page 525 for recommended viscosity. Leaving a heavy summer oil in your vehicle during winter months may cause harder starting. If you are not sure about which oil to use, call your Lexus dealer – they will be pleased to help.

Check the electronic ignition system for loose connections or obvious damage.

Keep the door locks from freezing.

Squirt lock de–icer or glycerine into the locks to keep them from freezing.

Use a washer fluid containing an antifreeze solution.

This product is available at your Lexus dealer and most auto parts stores. Follow the manufacturer’s directions for how much to mix with water.

NOTICE

Do not use engine antifreeze or any other substitute because it may damage your vehicle’s paint.

Do not use your parking brake when there is a possibility it could freeze.

When parking, put the transmission into ”P” and block the front wheels. Do not use the parking brake, or snow or water accumulated in and around the parking brake mechanism may freeze the parking brake, making it hard to release.

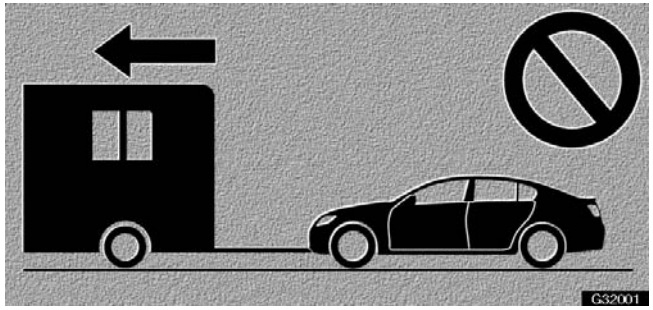
Keep ice and snow from accumulating under the fenders.

Ice and snow built up under your fenders can make steering difficult. During bad winter driving, stop and check under the fenders occasionally.

Depending on where you are driving, we recommend you carry some emergency equipment.

Some of the things you might put in the vehicle are tire chains, window scraper, bag of sand or salt, flares, small shovel, jumper cables, etc.

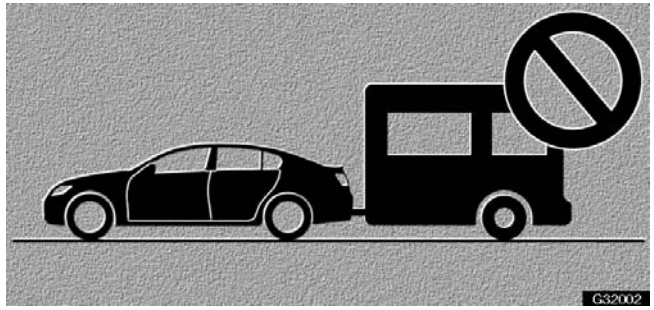
DINGHY TOWING



Your vehicle is not designed to be dinghy towed (with four wheels on the ground) behind a motorhome.

NOTICE
Do not tow your vehicle with four wheels on the ground. This may cause serious damage to your vehicle.

TRAILER TOWING



Lexus does not recommend towing a trailer with your vehicle. It is not designed for trailer towing.

HOW TO SAVE FUEL AND MAKE YOUR VEHICLE LAST LONGER

Improving fuel economy is easy – just take it easy. It will help make your vehicle last longer, too. Here are some specific tips on how to save money on both fuel and repairs:

- **Keep your tires inflated at the correct pressure.** Check the inflation pressure every two weeks, or at least once a month. Underinflation causes tire wear and wastes fuel.
- **Do not carry unneeded weight in your vehicle.** Excess weight puts a heavier load on the engine, causing greater fuel consumption.
- **Avoid lengthy warm−up idling.** Once the engine is running smoothly, begin driving – but gently. Remember, however, that on cold winter days this may take a little longer.
- **Always keep the automatic transmission selector lever in the "D" position when engine braking is not required.** Driving with the overdrive off will reduce the fuel economy. (For details, see "Automatic transmission" on page 353.)
- **Accelerate slowly and smoothly.** Avoid jackrabbit starts.
- **Avoid long engine idling.** If you have a long wait and you are not in traffic, it is better to turn off the engine and start again later.
- **Avoid engine over−revving.** Use a gear position suitable for the road on which you are traveling.

- **Avoid continuous speeding up and slowing down.** Stop–and–go driving wastes fuel.
- **Avoid unnecessary stopping and braking.** Maintain a steady pace. Try to time the traffic signals so you only need to stop as little as possible or take advantage of through streets to avoid traffic lights. Keep a proper distance from other vehicles to avoid sudden braking. This will also reduce wear on your brakes.
- **Avoid heavy traffic or traffic jams whenever possible.**
- **Do not rest your foot on the brake pedal.** This causes premature wear, overheating and poor fuel economy.
- **Maintain a moderate speed on highways.** The faster you drive, the greater the fuel consumption. By reducing your speed, you will cut down on fuel consumption.
- **Keep the front wheels in proper alignment.** Avoid hitting the curb and slow down on rough roads. Improper alignment not only causes faster tire wear but also puts an extra load on the engine, which, in turn, wastes fuel.
- **Keep the bottom of your vehicle free from mud, etc.** This not only lessens weight but also helps prevent corrosion.
- **Keep your vehicle tuned–up and in top shape.** A dirty air cleaner, improper valve clearance, dirty plugs, dirty oil and grease, brakes not adjusted, etc. all lower engine performance and contribute to poor fuel economy. For longer life of all parts and lower operating costs, keep all maintenance work on schedule, and if you often drive under severe conditions, see that your vehicle receives more frequent maintenance (For scheduled maintenance information, please refer to the “Owner’s Manual Supplement / Scheduled Maintenance”.)

⚠ CAUTION

Never turn off the engine to coast down hills. Your power steering and brake booster will not function without the engine running. Also, the emission control system operates properly only when the engine is running.

VEHICLE LOAD LIMITS

Vehicle load limits include total load capacity, seating capacity, towing capacity and cargo capacity. Follow the load limits shown below. Total load capacity and seating capacity are also described on the tire and loading information label. For location of the tire and loading information label, see “Checking tire inflation pressure” on page 539.

Total load capacity: 370 kg (815 lb.)

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

Seating capacity: Total 5 (Front 2, Rear 3)

Seating capacity means the maximum number of occupants whose estimated average weight is 68 kg (150 lb.) per person. Depending on the weight of each person, the seating capacity given may exceed the total load capacity.

NOTICE

Even if the number of occupants are within the seating capacity, do not exceed the total load capacity.

Towing capacity

Lexus does not recommend towing a trailer with your vehicle. Your vehicle is not designed for trailer towing.

Cargo capacity

Cargo capacity may increase or decrease depending on the size (weight) and the number of occupants. For details, see “Capacity and distribution” that follows.

CAUTION

Do not apply the load more than each load limit. That may cause not only damage to the tires, but also deterioration to the steering ability and braking ability, which may cause an accident.

CARGO AND LUGGAGE

Stowage precautions

When stowing cargo and luggage in the vehicle, observe the following:

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

⚠ CAUTION

- **Do not place anything on the package tray behind the rear seatback. Such items may be thrown about and possibly injure people in the vehicle during sudden braking or an accident.**
- **Do not drive with objects left on top of the instrument panel. They may interfere with the driver's field of view. Or they may move during sharp vehicle acceleration or turning, and impair the driver's control of the vehicle. In an accident they may injure the vehicle occupants.**

NOTICE

Do not load the vehicle beyond the vehicle capacity weight specified on the tire and loading information label.

Capacity and distribution

Cargo capacity depends on the total weight of the occupants.

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

Steps for determining correct load limit

1. Locate the statement “The combined weight of occupants and cargo should never exceed XXX pounds” on your vehicle’s placard.

2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.

3. Subtract the combined weight of the driver and passengers from XXX kilograms or XXX pounds.

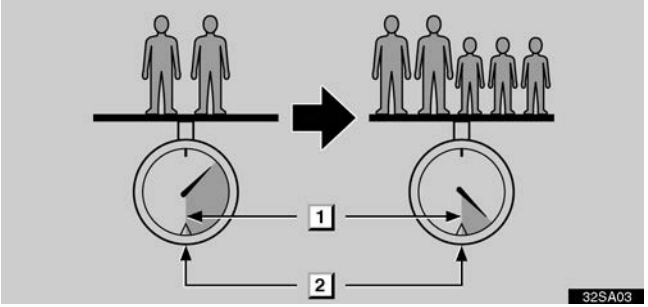
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the “XXX” amount equals 1400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. 1400 – 750 (5 x 150) = 650 lbs.

5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

Lexus does not recommend towing a trailer with your vehicle. Your vehicle is not designed for trailer towing.

Example on your vehicle



▶ 1 *Cargo capacity* 2 *Total load capacity*

In case that 2 people with the combined weight of 166 kg (366 lb.) are riding in your vehicle with the total load capacity of 370 kg (815 lb.), the available amount of cargo and luggage load capacity will be as follows:

370 kg – 166 kg = 204 kg.
(815 lb. – 366 lb. = 449 lb.)

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

204 kg – 176 kg = 28 kg.
(449 lb. – 388 lb. = 61 lb.)

As shown in the above example, if the number of occupants increases, the cargo and luggage load equaling the combined weight of occupants who got on later must be reduced. In other words, if the increase in the number of occupants causes the excess of the total load capacity (combined weight of occupants plus cargo and luggage load), you have to reduce the cargo and luggage on your vehicle.

For details about total load capacity, see “Vehicle load limits” on page 456.

⚠ CAUTION

Even if the total load of occupant’s weight and the cargo load is less than the total load capacity, do not apply the load unevenly. That may cause not only damage to the tire but also deterioration to the steering ability due to unbalance of the vehicle, causing an accident.

SECTION 4

IN CASE OF AN EMERGENCY

In case of an emergency

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If your vehicle will not start 462
If you cannot increase engine speed 466
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If you cannot shift automatic transmission selector lever 489
If you lose your keys or lock yourself out 490

IF YOUR ENGINE STALLS WHILE DRIVING

If your engine stalls while driving . . .

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
2. Turn on your emergency flashers.
3. Turn the engine switch off, and try starting the engine again.

If the engine will not start, see ”If your vehicle will not start”.

CAUTION

If the engine is not running, the power assist for the brakes and steering will not work, so steering and braking will be much harder than usual.

IF YOUR VEHICLE WILL NOT START

(a) Simple checks

Before making these checks, make sure you have followed the correct starting procedure instructions in ”Operating the engine switch” on page 342 and that you have sufficient fuel. Since your vehicle is equipped with the engine immobilizer, also check whether the other keys will start the engine. If they work, your electronic key may be broken. Have the key checked at your Lexus dealer. If none of your keys work, there may be a malfunction in the engine immobilizer. Call your Lexus dealer. See ”Keys” on page 8.

If the engine is not turning over or is turning over too slowly −

1. Check that the battery terminals are tight and clean.
2. If the battery terminals are O.K., switch on the interior light.
3. If the light is out, dim or goes out when the starter is cranked, the battery is discharged. You may try jump starting. See ”(c) Jump starting” for further instruction.

If the light is O.K., but the engine still will not start, it needs adjustment or repair. Call a Lexus dealer, Roadside Assistance or Customer Service Assistance. (See ”Foreword”.)

NOTICE

Do not pull− or push−start the vehicle. It may damage the vehicle or cause a collision when the engine starts. Also the three−way catalytic converter may overheat and become a fire hazard.

If the engine turns over at its normal speed but will not start −

1. The engine may be flooded because of repeated cranking. See ”(b) Starting a flooded engine” for further instructions.

2. If the engine still will not start, it needs adjustment or repair. Call a Lexus dealer, Roadside Assistance or Customer Service Assistance. (See ”Foreword”.)

(b) Starting a flooded engine

If the engine will not start, your engine may be flooded because of repeated cranking.

If this happens, push the engine switch while the brake pedal is depressed with your left foot and the accelerator pedal is depressed with your right foot. Then the cranking hold function stops automatically, and you can try starting the engine with your foot off the accelerator pedal.

If the engine does not start, wait a few minutes and try again.

If the engine still will not start, it needs adjustment or repair. Call a Lexus dealer, Roadside Assistance or Customer Service Assistance. (See ”Foreword”.)

(c) Jump starting

To avoid serious personal injury and damage to your vehicle which might result from battery explosion, acid burns, electrical burns, or damaged electronic components, these instructions must be followed precisely.

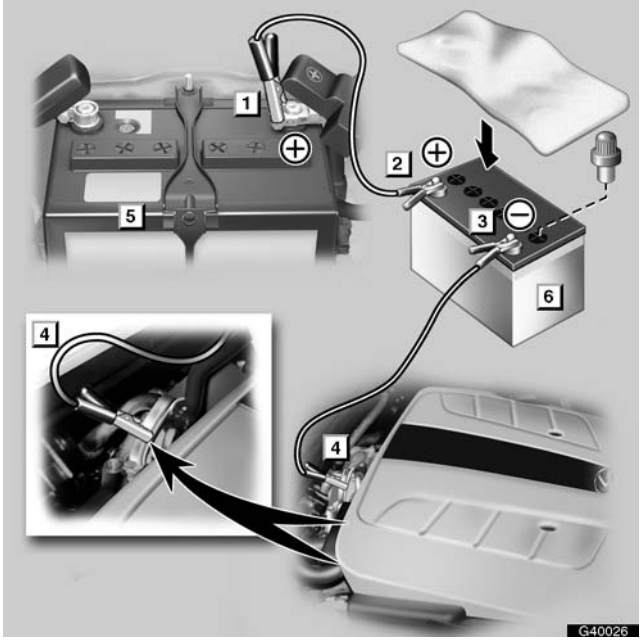
If you are unsure about how to follow this procedure, we strongly recommend that you seek help from your Lexus dealer, Roadside Assistance or Customer Service Assistance. (See ”Foreword”.)

⚠ CAUTION

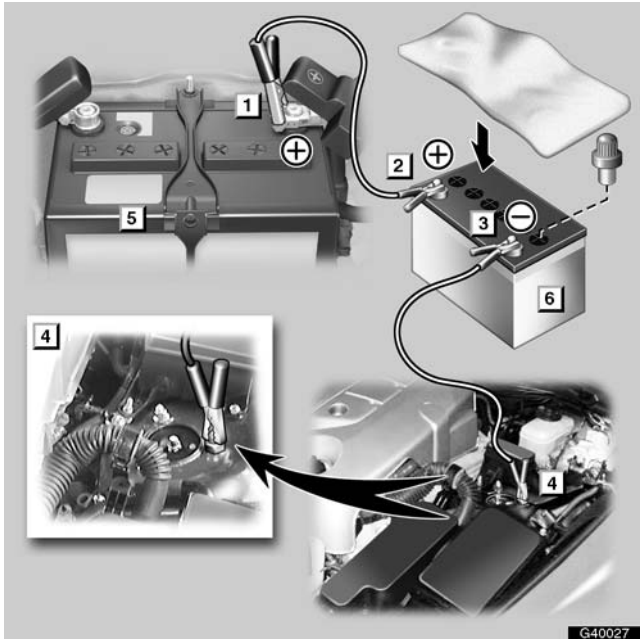
- **Batteries contain sulfuric acid which is poisonous and corrosive. Wear protective safety glasses when jump starting, and avoid spilling acid on your skin, clothing, or vehicle.**
- **If you should accidentally get acid on yourself or in your eyes, remove any contaminated clothing and flush the affected area with water immediately. Then get immediate medical attention. If possible, continue to apply water with a sponge or cloth while en route to the medical office.**
- **The gas normally produced by a battery will explode if a flame or spark is brought near. Use only standardized jumper cables and do not smoke or light a match while jump starting.**

NOTICE

The battery used for boosting must be 12 V. Do not jump start unless you are sure that the booster battery is correct.



▶*GS430* 5 *Discharged battery* 6 *Booster battery*



▶***GS300*** 5 ***Discharged battery*** 6 ***Booster battery***

GS300 only—Before carrying out the following procedure, remove the engine compartment cover. (See page 504.)

JUMP STARTING PROCEDURE

1. If the booster battery is installed in another vehicle, make sure the vehicles are not touching. Turn off all unnecessary lights and accessories.

When boosting, use the battery of matching or higher quality. Any other battery may be difficult to jump start with.

If jump starting is difficult, charge the battery for several minutes.

2. If required, remove all the vent plugs from the booster battery. Lay a cloth over the open vents on the booster battery. (This helps reduce the explosion hazard, personal injuries and burns.)

If the booster battery is an extended maintenance interval battery, it is not necessary to remove the vent plugs.

3. If the engine in the vehicle with the booster battery is not running, start it and let it run for about 5 minutes. During jump starting, run the engine at about 2000 rpm with the accelerator pedal lightly depressed.

4. Locate positive (+) and negative (–) terminals of each battery. Connect the jumper cables in the exact order (1 2 3 4) shown in the illustration.

1 Connect a positive (red) jumper cable clamp to the positive (+) terminal of the discharged battery.

2 Connect the clamp at the other end of the positive (red) cable to the positive (+) terminal of the booster battery.

3 Connect a negative (black) cable clamp to the negative (–) terminal of the booster battery.

4 Connect the clamp at the other end of the negative (black) cable to a solid, stationary, unpainted metallic point (such as shown in the illustration) away from the battery. Do not connect it to or near any part that moves when the engine is cranked.

CAUTION

When making the connections, to avoid serious injury, do not lean over the battery or accidentally let the jumper cables or clamps touch anything except the correct battery terminals or the ground.

5. Charge the discharged battery with the jumper cables connected for approximately 5 minutes. At this time, run the engine in the vehicle with the booster battery at about 2000 rpm with the accelerator pedal lightly depressed.

6. Start your engine in the normal way. After starting, run it at about 2000 rpm for several minutes with the accelerator pedal lightly depressed.

7. Carefully disconnect the cables in the exact reverse order: the negative cable and then the positive cable.

8. Carefully dispose of the battery cover cloths which may now contain sulfuric acid.

9. If removed, replace all the battery vent plugs.

If the cause of your battery discharging is not apparent (for example, lights left on), you should have it checked at your Lexus dealer.

If the first start attempt is not successful...

Check that the clamp on the jumper cables are tight. Recharge the discharged battery with the jumper cables connected for several minutes and restart your engine in the normal way.

If another attempt is not successful, the battery may be depleted. Have it checked at your Lexus dealer.

IF YOU CANNOT INCREASE ENGINE SPEED

If engine speed does not increase when the accelerator pedal is depressed, there may be a problem somewhere in the electronic throttle control system. Move the vehicle to a safe place by means of creeping and call a Lexus dealer for assistance:

1. Depress the brake pedal and shift to the “D” position.

2. Gradually release the brake pedal, and the vehicle starts to move by creeping. After arriving at a safe place, stop the vehicle and call a Lexus dealer for assistance.

CAUTION

- **The above method of moving the vehicle is for emergency. Use it only for moving minimum distances to a safe place.**
- **Be especially careful to prevent erroneous pedal operation.**

IF YOUR VEHICLE OVERHEATS

If your engine coolant temperature gauge indicates overheating, if you experience a loss of power, or if you hear a loud knocking or pinging noise, the engine has probably overheated.

When the engine overheats

Pull safely off the road, stop the vehicle and turn on your emergency flashers. Put the transmission in ”P” and apply the parking brake.

A: If steam is coming from your engine:

Turn off the engine. Leave the hood closed until there is no sign of steam or coolant. Your engine could have been seriously damaged already. Call your Lexus dealer for assistance.

CAUTION

To help avoid personal injury, keep the hood closed until there is no steam. Escaping steam or coolant is sign of very high pressure.

B: If no steam is coming from your engine:

Leave the engine running and turn off the air conditioning. Check the following.

- Is the cooling fan operating?
- Is the coolant in the acceptable range?
- Is the engine drive belt O.K.?

CAUTION

- **When the engine is running, keep hands and clothing away from the moving fan and engine drive belt.**
- **Do not attempt to remove the radiator cap when the engine and radiator are hot. Serious injury could result from scalding hot fluid and steam blown out under pressure.**

If the cooling fan is not operating or the coolant is not in the acceptable range, turn off the engine and call your Lexus dealer.

If both conditions are O.K., after the engine coolant temperature has cooled to normal, continue driving your vehicle.

If the engine coolant temperature does not cool down, or your vehicle overheats again, have it checked as soon as possible by your Lexus dealer.

IF YOU HAVE A FLAT TIRE (Vehicles with run−flat tires)

You may continue driving a vehicle with run−flat tires even if any tire goes flat. It may be able to run for a maximum of 160 km (100 miles) at a speed below 90 km/h (55 mph) after the low tire pressure warning light comes on. When you drive your vehicle after the low tire pressure warning light comes on, the tire must be replaced. Do not use the repaired tire.

Observe the following precautions and take your vehicle to the nearest Lexus dealer or authorized tire dealer.

⚠ CAUTION

If the low tire pressure warning light comes on, take your vehicle to the nearest Lexus dealer or authorized tire dealer as soon as possible, observing the following instructions:

- **Decelerate as soon as possible to the most appropriate speed that conditions permit. Do not drive for longer than 160 km (100 miles) or over 90 km/h (55 mph).**
- **Avoid abrupt steering wheel maneuvering and braking. If the vehicle tires deteriorate, you could lose control of the steering wheel or the brakes, causing death or serious injury.**
- **The warning system may not activate immediately if bursts or sudden air leakage should occur.**

NOTICE

- ***Do not use liquid sealants for a flat tire as tire pressure sensors will be damaged.***
- ***Take due care not to go over a curb stone and be careful of the holes in the road because deflated tire pressure affects tire cushion performance. The wheels, tires, body, suspension and other components could be damaged.***
- ***Your ground clearance is reduced if the run−flat tire goes flat so avoid driving over obstacles and drive slowly on rough, unpaved roads and speed bumps. Also, do not attempt to go through an automatic car wash as the vehicle may get caught, resulting in damage.***
- ***When the tires must be replaced, have them replaced by the nearest Lexus dealer or authorized tire dealer. The tire pressure sensors will be affected by the installation or removal of tires.***
- ***When the tires must be replaced, replace the grommets for tire pressure sensors as well.***

IF YOU HAVE A FLAT TIRE (Vehicles with standard tires)

⚠ CAUTION

If the low tire pressure warning light comes on, observe the following instructions:

- **Decelerate as soon as possible to the most appropriate speed that conditions permit.**
- **Avoid abrupt steering wheel maneuvering and braking. If the vehicle tires deteriorate, you could lose control of the steering wheel or the brakes, causing death or serious injury.**
- **The warning system may not activate immediately if bursts or sudden air leakage should occur.**

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place – well away from the traffic. Avoid stopping on the center divider of a highway. Park on a level spot with firm ground.

2. Stop the engine and turn on your emergency flashers.

3. Firmly set the parking brake and put the transmission in ”P”.

4. Have everyone get out of the vehicle on the side away from traffic.

5. Read the following instructions thoroughly.

⚠ CAUTION

When jacking, be sure to observe the following to reduce the possibility of personal injury:

- **Follow jacking instructions.**
- **Do not put any part of your body under a vehicle supported by a jack. Otherwise, personal injury may occur.**
- **Do not start or run the engine while your vehicle is supported by the jack.**
- **Stop the vehicle on a level firm ground, firmly set the parking brake and put the transmission in ”P”. Block the wheel diagonally opposite to the one being changed if necessary.**
- **Make sure to set the jack properly in the jack point. Raising the vehicle with jack improperly positioned will damage the vehicle or may allow the vehicle to fall off the jack and cause personal injury.**
- **Never get under the vehicle when the vehicle is supported by the jack alone.**
- **Use the jack only for lifting your vehicle during wheel changing.**
- **Do not raise the vehicle with someone in the vehicle.**
- **When raising the vehicle, do not put an object on or under the jack.**
- **Raise the vehicle only high enough to remove and change the tire.**

NOTICE

- ***Do not use liquid sealants for a flat tire as tire pressure sensors will be damaged.***
- ***Do not continue driving with a deflated tire. Driving even a short distance can damage a tire beyond repair.***
- ***When the tires must be repaired or replaced, have them repaired or replaced by the nearest Lexus dealer or authorized tire dealer. The tire pressure sensors will be affected by the installation or removal of tires.***
- ***When the tires must be replaced, replace the grommets for tire pressure sensors as well.***

Compact spare tire

The compact spare tire is designed for temporary emergency use only.

The compact spare tire is identified by the distinctive wording “TEMPORARY USE ONLY” molded into the side wall of the tire.

To keep the compact spare tire noticeable, do not hide the wheel by a wheel cover or such.

The compact spare tire saves space in your luggage compartment, and its lighter weight helps to improve fuel economy and permits easier installation in case of a flat tire.

The compact spare tire is not equipped with the tire pressure sensor. If tire inflation pressure becomes low, the tire pressure warning system will not be activated. Also, if you replace the compact spare tire after the low tire pressure warning light comes on, the light remains on.

The compact spare tire can be used many times, if necessary. It has tread life of up to 4800 km (3000 miles) depending on road conditions and your driving habits. When tread wear indicators appear on the tire, replace the tire. (See “Checking and replacing tires” on page 554.)

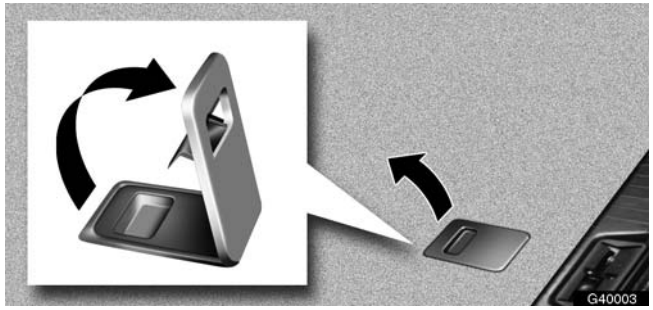
CAUTION

- **The compact spare tire was designed especially for your Lexus. Do not use it on any other vehicle.**
- **Do not use more than one compact spare tire at the same time.**
- **The pressure for the compact spare tire must be 420 kPa (4.3 kgf/cm^2, 4.2 bar, 60 psi).**
- **Do not exceed 80 km/h (50 mph) when driving with the compact spare tire.**
- **Replace the compact spare tire with the standard tire as soon as possible.**
- **Avoid sudden acceleration, sudden deceleration and sharp turns with the compact spare tire.**

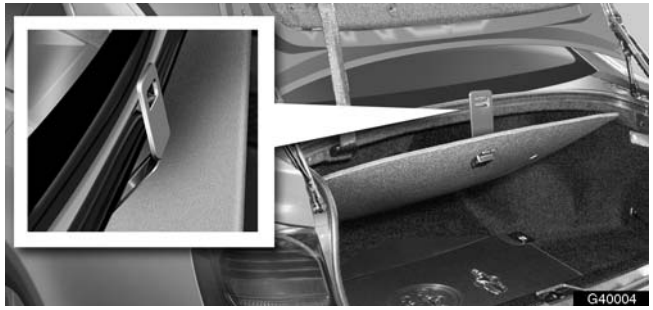
NOTICE

Your ground clearance is reduced when the compact spare tire is installed so avoid driving over obstacles and drive slowly on rough, unpaved roads and speed bumps. Also, do not attempt to go through an automatic car wash as the vehicle may get caught, resulting in damage.

Access to spare tire



1. Pull up the deck board.

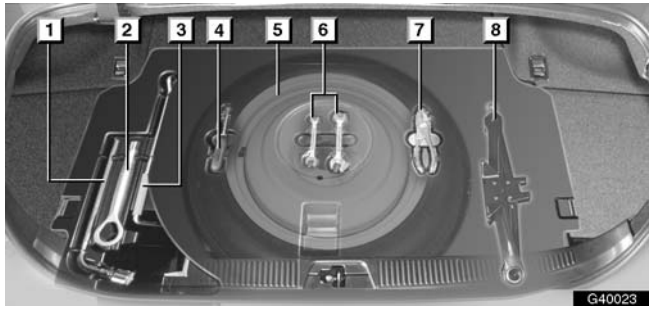


2. Lift up the back side of the board and secure the board by hooking the lever at the top of the trunk lid opening as shown.

Make sure the board is secured and does not fall down.

When closing the board, replace the hook also in its original position as shown.

NOTICE
If you close the trunk lid with the board hooked, the hook may be damaged.



▶ 1 ***Wrench***
2 ***Towing eyelet (for emergency towing)***
3 ***Jack handle***
4 ***Screwdriver***
5 ***Spare tire***
6 ***Wrenches***
7 ***Pliers***
8 ***Jack***

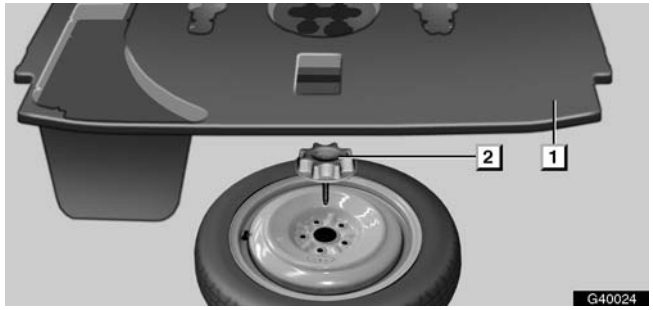
3. Get the jack, wrench and spare tire.

To prepare yourself for an emergency, you should familiarize yourself with the use of the jack and each tool, and their storage locations.

▶ 1 ***Joint***

2 When removing the jack, turn the joint by hand in the ”contract” direction until the jack is free.

3 When storing, turn the joint by hand in the ”expand” direction until the jack is firmly secured to prevent it from flying forward during a collision or sudden braking.



To remove the spare tire:

1 Remove the luggage tray.

2 Loosen the bolt and remove it.

When storing the spare tire, place it with the outer side of the wheel facing up. Then bolt the tire in place and install the luggage tool box to prevent the tire from flying forward during a collision or sudden braking.

4. Block the wheel diagonally opposite the flat tire to keep the vehicle from rolling when it is jacked up.

When blocking the wheel, place a wheel block in front of one of the front wheels or behind one of the rear wheels.

5. Loosen all the wheel nuts.

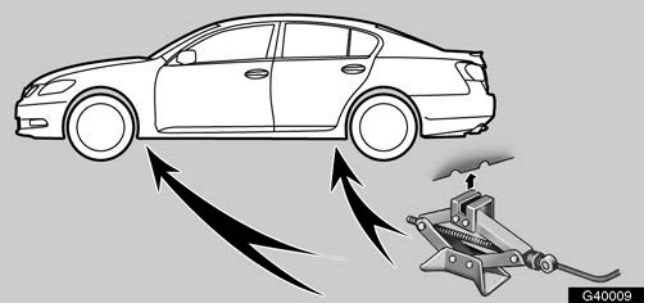
Always loosen the wheel nuts before raising the vehicle.

Turn the wheel nuts counterclockwise to loosen them. To get maximum leverage, fit the wrench to the nut so that the handle is on the right side, as shown above. Grab the wrench near the end of the handle and pull up on the handle. Be careful that the wrench does not slip off the nut.

Do not remove the nuts yet – just unscrew them about one–half turn.

⚠ CAUTION

Never use oil or grease on the bolts or nuts. The nuts may loosen and the wheels may fall off, which could cause a serious accident.



6. Position the jack at the jack points as shown.

Make sure the jack is positioned on a level and solid surface.

7. After making sure no one is in the vehicle, raise it high enough so that the spare tire can be installed.

Allow for the fact that you need more ground clearance when putting on the spare tire than when removing the flat tire.

To raise the vehicle, insert the jack handle into the jack (it is a loose fit) and turn it clockwise. As the jack touches the vehicle and begins to lift, double–check that it is properly positioned.

⚠ CAUTION

Never get under the vehicle when the vehicle is supported by the jack alone.

8. Remove the wheel nuts and remove the flat tire.

Lift the flat tire straight off and put it aside.

Before putting on the wheel, remove any corrosion on the mounting surfaces with a wire brush or such. Installation of wheels without good metal–to–metal contact at the mounting surface can cause wheel nuts to loosen and eventually cause a wheel to come off while driving.

9. Reinstall all the wheel nuts finger tight.

Align the holes in the wheel with the bolts. Then lift up the wheel and get at least the top bolt started through its hole. Wiggle the tire and press it back over the other bolts.

Reinstall the wheel nuts and tighten them as much as you can by hand. Press the tire back and see if you can tighten them more.

⚠ CAUTION

Never use oil or grease on the bolts or nuts. Doing so may lead to overtightening the nuts and damaging the bolts. The nuts may loosen and the wheels may fall off, which could cause a serious accident. If there is oil or grease on any bolt or nut, clean it.

10. Lower the vehicle completely and tighten the wheel nuts.

Turn the jack handle counterclockwise to lower the vehicle.

Use only the wheel nut wrench to tighten the nuts. Do not use other tools or any additional leverage other than your hands, such as a hammer, pipe or your foot. Make sure the wrench is securely engaged over the nut.

Tighten each nut a little at a time in the order shown. Repeat the process until all the nuts are tight.

CAUTION

- **When lowering the vehicle, make sure all portions of your body and all other persons around will not be injured as the vehicle is lowered to the ground.**
- **Have the wheel nuts tightened with torque wrench to 103 N·m (10.5 kgf·m, 76 ft·lbf.), as soon as possible after changing wheels. Otherwise, the nuts may loosen and the wheels may fall off, which could cause a serious accident.**
- **Do not attach a heavily damaged plastic wheel ornament. It may fly off the wheel and cause accidents while the vehicle is moving.**

11. After changing the wheel, check the air pressure of the replaced tire. Stow all the tools, jack and flat tire securely.

If the inflation pressure of the replaced tire is low, drive slowly to the nearest service station and fill to the correct pressure.

Do not forget to reinstall the tire valve cap as dirt and moisture could get into the valve core and possibly cause air leakage. If the cap is missing, put a new one on as soon as possible.

This is the same procedure for changing or rotating your tires.

CAUTION

Before driving, make sure all the tools, jack and flat tire are securely in place in their storage location to reduce the possibility of personal injury during a collision or sudden braking.

IF YOUR VEHICLE BECOMES STUCK

If your vehicle becomes stuck in snow, mud, sand, etc. then you may attempt to rock the vehicle free by moving it forward and backward.

Two−wheel drive models—Turn off the traction control system to become unstuck to allow the tires to spin enough to remove the vehicle from the obstruction. (For details, see “Traction control system” on page 418.)

CAUTION

Do not attempt to rock the vehicle free by moving it forward and backward if people or objects are anywhere near the vehicle. During the rocking operation the vehicle may suddenly move forward or backward as it becomes unstuck, causing injury or damage to nearby people or objects.

NOTICE

If you rock your vehicle, observe the following precautions to prevent damage to the transmission and other parts.

- ***Do not depress the accelerator pedal while shifting the selector lever or before the transmission is completely shifted to forward or reverse gear.***
- ***Do not race the engine and avoid spinning the wheels.***
- ***If your vehicle remains stuck after rocking the vehicle several times, consider other ways such as towing.***

IF YOUR VEHICLE NEEDS TO BE TOWED

If towing is necessary, we recommend you to have it done by your Lexus dealer or a commercial tow truck service. In consultation with them, have your vehicle towed using either (a) or (b).

(a) Towing with a wheel lift type truck

(b) Using a flat bed truck

(c) Never tow with a sling type truck

Only when you cannot receive a towing service from a Lexus dealer or commercial tow truck service, tow your vehicle carefully in accordance with the instructions given in ”(d) Emergency towing” on page 486.

Proper equipment will help ensure that your vehicle is not damaged while being towed. Commercial operators are generally aware of the state/provincial and local laws pertaining to towing.

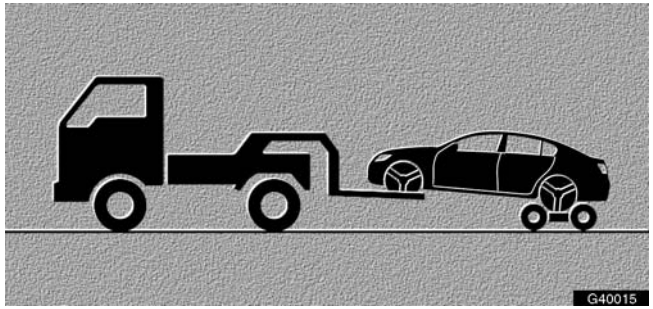
Your vehicle can be damaged if it is towed incorrectly. Although most operators know the correct procedure, it is possible to make a mistake. To avoid damage to your vehicle, make sure the following precautions are observed. If necessary, show this page to the tow truck driver.

TOWING PRECAUTIONS:

Use a safety chain system for all towing, and abide by the state/provincial and local laws. The wheels and axle on the ground must be in good condition. If they are damaged, use a towing dolly.

(a) Towing with a wheel lift type truck

- **From front**

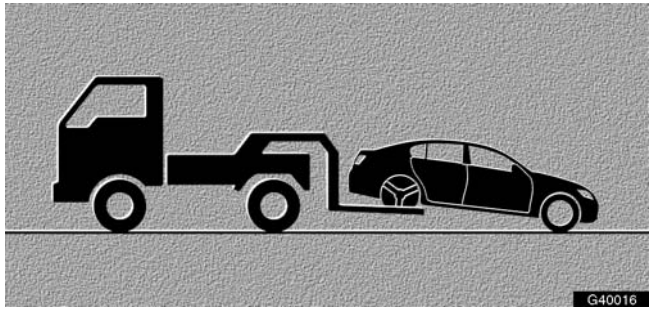


Use a towing dolly under the rear wheels.

NOTICE

Never tow a vehicle with an automatic transmission from the front with rear wheels on the ground, as this may cause serious damage to the transmission.

- **From rear**

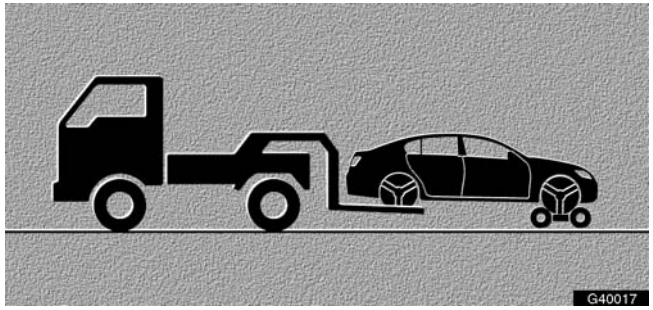


▶Two−wheel drive models

Select the engine switch in “ACC” mode.

NOTICE

- ***Do not tow in “OFF” mode, as the steering lock mechanism is not strong enough to hold the front wheels straight.***
- ***When lifting wheels, take care to ensure adequate ground clearance for towing at the opposite end of the raised vehicle. Otherwise, the bumper and/or underbody of the towed vehicle will be damaged during towing.***



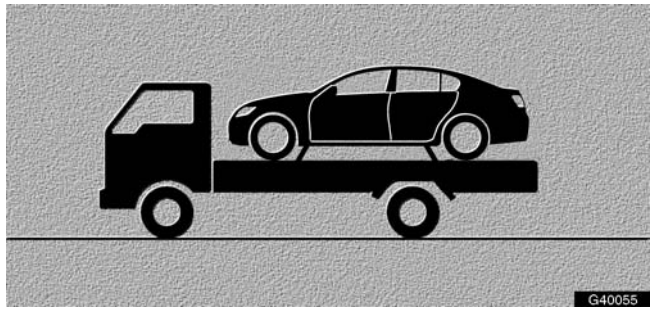
▶Four−wheel drive models

Use a towing dolly under the front wheels.

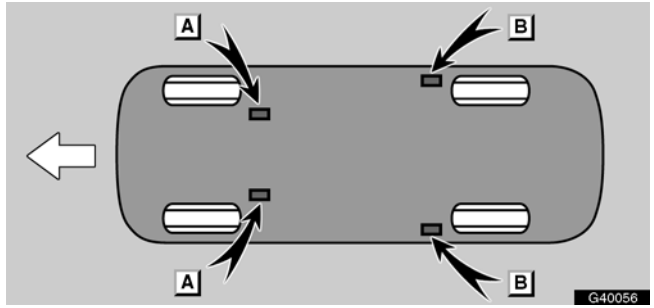
NOTICE

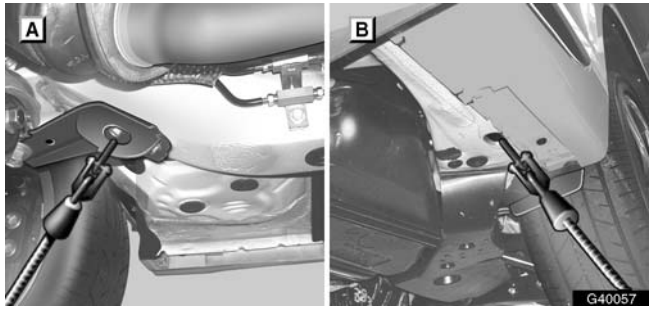
Never tow a vehicle with an automatic transmission from the rear with front wheels on the ground, as this may cause serious damage to the transmission.

(b) Using a flat bed truck



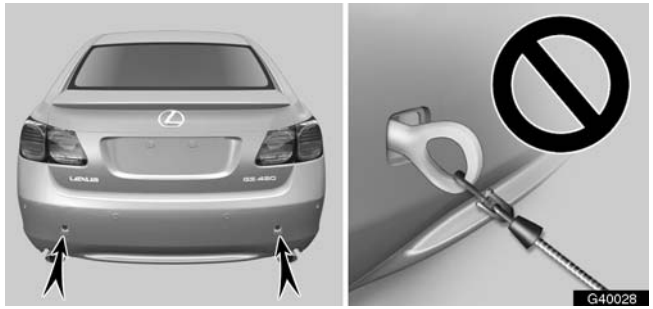
- **Tie down points**





▶ A *Front* B *Rear*

If your Lexus is transported by a flat bed, it should be tied down at locations A and B as shown above.

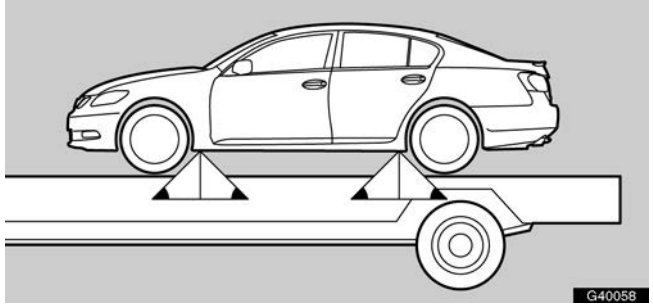


▶*Rear emergency towing eyelets*

NOTICE

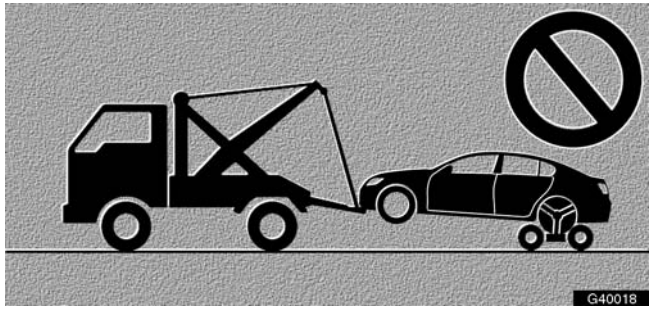
Do not use the rear emergency towing eyelets.

- **Tie down angle**



If you use chains or wires to tie down your vehicle, the angles shaded black must be at 45°.

(c) Towing with a sling type truck



NOTICE

Do not tow with a sling type truck, either from the front or rear. This may cause body damage.

(d) Emergency towing

If towing is necessary, we recommend you to have it done by your Lexus dealer or a commercial tow truck service.

If towing service is not available in an emergency, your vehicle may be temporarily towed by a cable or chain secured to the emergency towing eyelet. Use extreme caution when towing the vehicle.

To install the front towing eyelet, see “Installing towing eyelet” on page 488.

NOTICE

- ***Only use specified towing eyelet; otherwise your vehicle may be damaged.***
- ***Never tow a vehicle from the rear with four wheels on the ground. This may cause serious damage to the transmission.***

A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard–surfaced roads for a short distance and at low speeds. Also, the wheels, axles, drive train, steering and brakes must all be in good condition.

CAUTION

Use extreme caution when towing the vehicle. Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing eyelet and towing cable or chain. The eyelet and towing cable or chain may break and cause serious injury or damage.

NOTICE

Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing eyelet provided.

Before towing, release the parking brake and put the transmission in ”N”. The engine switch must be selected in “ACC” or “IG–ON” mode.

CAUTION

If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.

Emergency towing eyelet precautions:

- Before emergency towing, check that the eyelet is not broken or damaged and that the installation bolts are not loose.
- Fasten the towing cable or chain securely to the eyelet.
- Do not jerk the eyelet. Apply steady and even force.
- To avoid damaging the eyelet, do not pull from the side or at a vertical angle. Always pull straight ahead.

CAUTION

If the emergency towing eyelet is used to get out when your vehicle becomes stuck in the mud, sand or other condition from which the vehicle cannot be driven out under its own power, make sure to observe the precautions mentioned below. Otherwise, excessive stress will be put on the eyelet and the towing cable or chain may break, causing serious injury or damage.

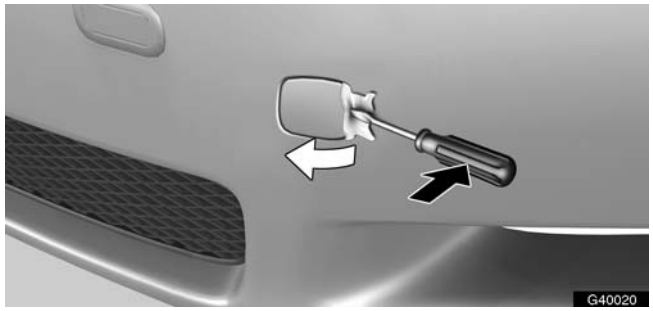
- **If the towing vehicle can hardly move, do not forcibly continue the towing. Contact your Lexus dealer or a commercial tow truck service for assistance.**
- **Tow the vehicle as straight ahead as possible.**
- **Keep away from the vehicle during towing.**

Tips for towing a stuck vehicle:

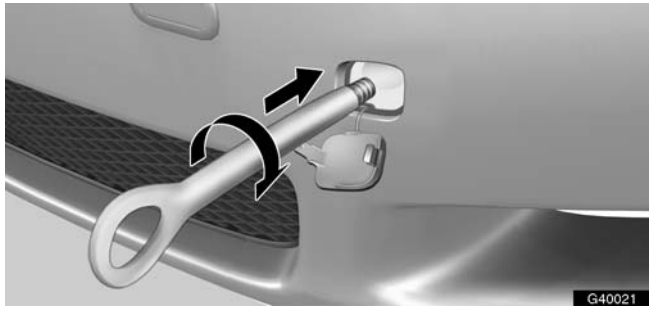
The following methods are effective to use when your vehicle is stuck in the mud, sand or other condition from which the vehicle cannot be driven out under its own power. Use extreme caution when towing the vehicle. In addition, keep away from the vehicles and towing cable or chain when towing.

- Remove the sand and soil in the front and the back of the tires.
- Place stones or wood under the tires.

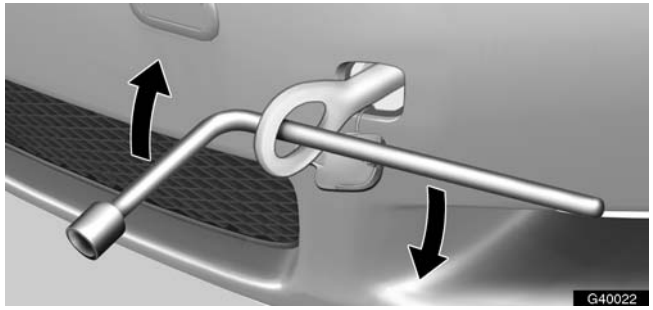
(e) Installing towing eyelet



1. Remove the front towing eyelet cover on the front bumper by using a flathead screwdriver. To protect the bodywork, place a piece of rag over the cover.



2. Use the towing eyelet in the trunk. Secure it to the hole on the bumper by turning clockwise. (For the eyelet location, see page 474.)



3. Tighten the towing eyelet securely by a wheel nut wrench.

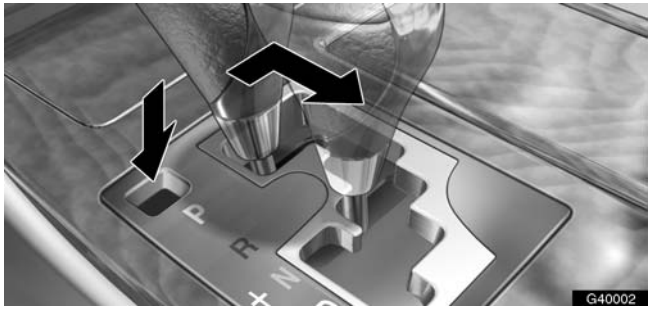
⚠ CAUTION

When installing the eyelet on the vehicle, be sure to tighten the eyelet securely. If the eyelet is loose, it may come off when being towed and result in death or serious injury.

IF YOU CANNOT SHIFT AUTOMATIC TRANSMISSION SELECTOR LEVER

If you cannot shift the selector lever, use the shift lock override button as follows:

1. Turn the engine switch off. Make sure the parking brake is applied. Pry up the cover with a flathead screwdriver or equivalent.



2 Insert your finger, the screwdriver or equivalent into the hole to push down the shift lock override button. You can shift the selector lever while pushing the button.

For your safety, keep the brake pedal depressed.

Be sure to have the system checked by your Lexus dealer as soon as possible.

IF YOU LOSE YOUR KEYS OR LOCK YOURSELF OUT

You can purchase a new key at your Lexus dealer if you can give them the key number and electronic key.

Even if you lose only one key, contact your Lexus dealer to make a new key. If you lose all your electronic keys, you cannot make new keys; the whole engine immobilizer must be replaced.

See the suggestion given in “Keys” on page 8.

You can use the smart access system with push–button start with the new key. Contact your Lexus dealer for detailed information.

If your keys are locked in the vehicle and you cannot get a duplicate, many Lexus dealers can still open the door for you, using their special tools. If you must break a window to get in, we suggest breaking the smallest side window because it is the least expensive to replace. Be extremely cautious to avoid cuts from the glass.

SECTION 5

MAINTENANCE

Maintenance

Maintenance requirements 492
General maintenance 493
Does your vehicle need repairing? 496
Emissions inspection and maintenance (I/M) programs 497

For scheduled maintenance information, please refer to the "Owner's Manual Supplement / Scheduled Maintenance".

MAINTENANCE REQUIREMENTS

Your Lexus vehicle has been designed for fewer maintenance requirements with longer service intervals to save both your time and money. However, each regular maintenance as well as day−to−day care is more important than ever before to ensure smooth, trouble−free, safe, and economical driving.

It is the owner's responsibility to make sure the specified maintenance, including general maintenance services, is performed. Note that both the new vehicle and emission control system warranties specify that proper maintenance and care must be performed. See "Owner's Guide", "Owner's Manual Supplement" or "Warranty Booklet" for complete warranty information.

General maintenance

General maintenance items are those day−to−day care practices that are important to your vehicle for proper operation. It is the owner's responsibility to ensure that the general maintenance items are performed regularly.

These checks or inspections can be done either by yourself or your Lexus dealer.

Scheduled maintenance

The scheduled maintenance items listed in the "Owner's Manual Supplement / Scheduled Maintenance" are those required to be serviced at regular intervals.

For details of your maintenance schedule, read the "Owner's Manual Supplement / Scheduled Maintenance".

It is recommended that only genuine Lexus parts be used for maintenance or for the repair of the emission control system.

The owner may elect to use non−Lexus supplied parts for replacement purposes without invalidating the emission control system warranty. However, use of replacement parts which are not of equivalent quality may impair the effectiveness of the emission control systems.

You may also elect to have maintenance, replacement, or repair of the emission control devices and system performed by any automotive repair establishment or individual without invalidating this warranty. See "Owner's Guide", "Owner's Manual Supplement" or "Warranty Booklet" for complete warranty information.

Where to go for service?

Lexus technicians are well−trained specialists and are kept up to date with the latest service information through technical bulletins, service tips, and in−dealership training programs. They are well informed about the operation of all the systems on your vehicle.

You can be confident that your Lexus dealer's service department performs the best job to meet the maintenance requirements of your vehicle.

Your copy of the repair order is proof that all required maintenance has been performed for warranty coverage. If any problems should arise with your vehicle while under warranty, your Lexus dealer will promptly take care of it. Again, be sure to keep a copy of the repair order for any service performed on your Lexus.

What about do−it−yourself maintenance?

Many of the maintenance items are easy to do yourself, if you have a little mechanical ability and a few basic automotive tools. Simple instructions for how to perform them are presented in Section 6.

If you are a skilled do−it−yourself mechanic, the Lexus service manuals are recommended. Please be aware that do−it−yourself maintenance can affect your warranty coverage. See "Owner's Guide", "Owner's Manual Supplement" or "Warranty Booklet" for the details.

GENERAL MAINTENANCE

Listed below are the general maintenance items that should be performed at the intervals specified. It is recommended that any problem you notice be brought to the attention of your Lexus dealer or qualified service shop for their advice.

⚠ CAUTION

Make these checks only with adequate ventilation if you run the engine.

Engine compartment

Items listed below should be checked from time to time, e.g. each time when refueling.

Washer fluid

Make sure there is sufficient fluid in the tank. See page 579 for additional information.

Engine coolant level

Make sure the coolant level is between the Upper and Lower lines on the see−through reservoir when the engine is cold. See page 527 for additional information.

Radiator, condenser and hoses

Check that the front of the radiator and condenser are clean and not blocked with leaves, dirt, or insects. See page 529 for additional information.

Battery

Your Lexus has a maintenance free battery. You do not have to add distilled water. For longer life of the battery, however, see page 571 for additional information.

Brake fluid level

Make sure the brake fluid level is correct. See page 538 for additional information.

Engine oil level

Check the level on the dipstick with the engine turned off and the vehicle parked on a level spot. See page 522 for additional information.

Exhaust system

If you notice any change in the sound of the exhaust or smell exhaust fumes, have the cause located and corrected immediately. (See “Engine exhaust caution” on page 341.)

Vehicle interior

Items listed below should be checked regularly, e.g. while performing periodic services, cleaning the vehicle, etc.

Lights

Make sure the headlight, stop lights, tail lights, turn signal lights, and other lights are working. Check headlight aim.

Service reminder indicators and warning buzzers

Check that all service reminder indicators and warning buzzers function properly.

Steering wheel

Check that it has the specified free play. Be alert for changes in steering condition, such as hard steering, excessive free play or strange noise.

Seats

Check that all front seat controls such as seat adjusters, seatback recliner, etc. operate smoothly. Check that the head restraints move up and down smoothly and that the locks hold securely in any latched position.

Seat belts

Check that the seat belt system such as buckles, retractors and anchors operate properly and smoothly. Make sure the belt webbing is not cut, frayed, worn or damaged.

Accelerator pedal

Check the pedal for smooth operation and uneven pedal effort or catching.

Brake pedal

Check the pedal for smooth operation and the proper clearance and free play. Check the brake booster function.

Brakes

In a safe place, check that the brakes do not pull to one side when applied.

Parking brake

Check that the pedal has the proper travel and that, on a safe incline, your vehicle is held securely with only the parking brake applied.

Automatic transmission ”Park” mechanism

On a safe incline, check that your vehicle is held securely with the selector lever in ”P” position and all brakes released.

Vehicle exterior

Items listed below should be performed from time to time, unless otherwise specified.

Wheel nuts

When checking the tires, make sure to check the nuts for looseness. Tighten them if necessary.

Fluid leaks

Check underneath for leaking fuel, oil, water or other fluid after the vehicle has been parked for a while. If you smell fuel fumes or notice any leak, have the cause found and corrected immediately.

Doors and engine hood

Check that all doors, including trunk lid, operate smoothly and all latches lock securely. Make sure the engine hood secondary latch secures the hood when the primary latch is released.

Tire inflation pressure

Check the tire inflation pressure with a gauge every two weeks, or at least once a month and adjust as shown on the tire and loading information label. See page 539 for additional information.

Tire surface

Check the tires carefully for cuts, damage or excessive wear. See page 554 for additional information.

Tire rotation

Rotate the tires according to the maintenance schedule. (For scheduled maintenance information, please refer to the “Owner’s Manual Supplement / Scheduled Maintenance”.) See page 554 for additional information.

DOES YOUR VEHICLE NEED REPAIRING?

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 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 driving straight on a level road
- Strange noises related to suspension movement
- Loss of brake effectiveness, spongy feeling brake pedal, pedal almost touches floors, vehicle pulls to one side when braking
- Engine coolant temperature continually higher than normal

If you notice any of these clues, take your vehicle to your Lexus dealer as soon as possible. It probably needs adjustment or repair.

⚠ CAUTION

Do not continue driving with the vehicle unchecked. It could result in serious vehicle damage and possibly personal injury.

EMISSION INSPECTION AND MAINTENANCE (I/M) PROGRAMS

Some states have vehicle emission inspection programs which include OBD (On–Board Diagnostics) checks.

The OBD system monitors the operation of the emission control system. When the OBD system determines that a problem exists somewhere in the emission control system, the malfunction indicator lamp comes on. In this case, your vehicle may not pass the I/M test and need to be repaired. Contact your Lexus dealer to service the vehicle.

Even if the malfunction indicator lamp does not come on, your vehicle may not pass the I/M test as readiness codes have not been set in the OBD system.

Readiness codes are automatically set during ordinary driving. However, when the battery is disconnected or run down, the codes are erased. Also, depending on your driving habits, the codes may not be completely set.

Also, if the malfunction indicator lamp had come on recently due to temporary malfunction such as a loose fuel tank cap, your vehicle may not pass the I/M test.

The malfunction indicator lamp will go off after taking several driving trips, but the error code in the OBD system will not be cleared unless about 40 trips or more are taken.

If your vehicle does not pass the I/M test and the malfunction indicator lamp does not come on, contact your Lexus dealer to prepare the vehicle for re–testing.

SECTION 6 – 1

SERVICE PROCEDURES AND SPECIFICATIONS

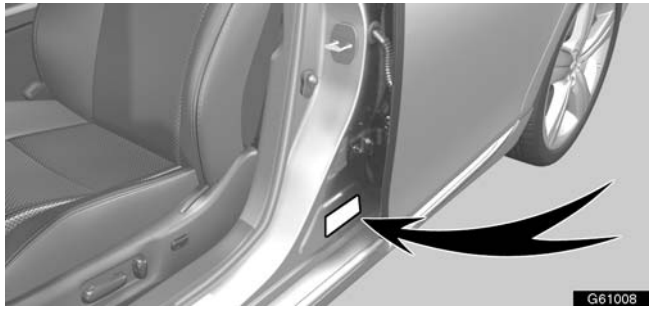
Introduction

Vehicle identification 500
Theft prevention labels 501
Engine compartment overview (GS430) 502
Engine compartment overview (GS300) 503
Do–it–yourself service precautions 505
Positioning the jack 507
Parts and tools 508

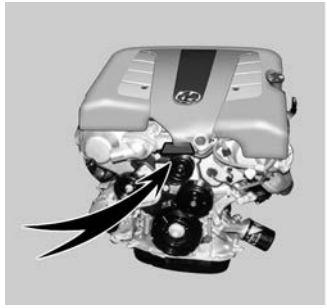
VEHICLE IDENTIFICATION

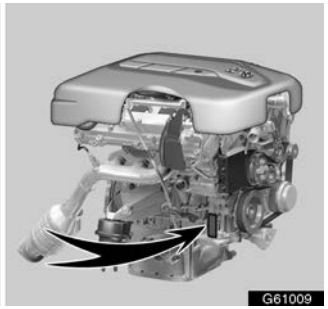
The vehicle identification number (VIN) is the legal identifier for your vehicle. This number is on the left top of the instrument panel and can be seen through the windshield from outside.

This is the primary identification number for your Lexus. It is used in registering the ownership of your vehicle.



The vehicle identification number (VIN) is also on the Certification Label.

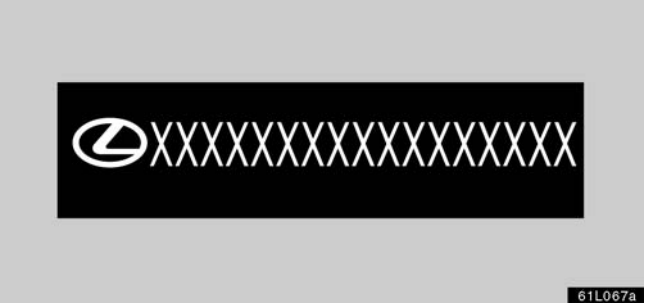




▶*GS430* ▶*GS300*

The engine number is stamped on the engine block as shown.

THEFT PREVENTION LABELS (U.S.A.ONLY)

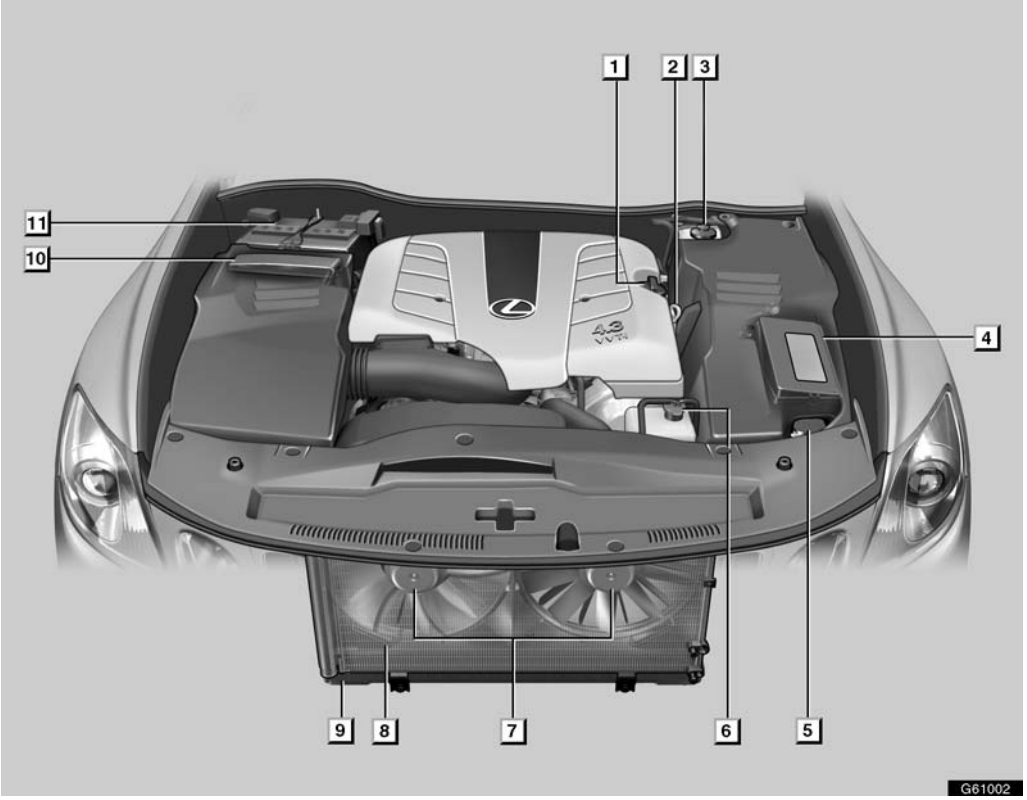


Your new vehicle carries theft prevention labels which are approximately 47 mm (1.85 in.) by 12 mm (0.47 in.).

The purpose of these labels is to reduce the incidence of vehicle thefts by facilitating the tracing and recovery of parts from stolen vehicles. The label is designed so that once it is applied to a surface, any attempt to remove it will result in destroying the integrity of the label. Transferring these labels intact from one part to another will be impossible.

NOTICE
You should not attempt to remove the theft prevention labels as it may violate certain state or federal laws.

ENGINE COMPARTMENT OVERVIEW (GS430)



1 *Engine oil filler cap*

2 *Engine oil level dipstick*

3 *Brake fluid reservoir*

4 *Fuse box*

5 *Washer fluid tank*

6 *Engine coolant reservoir*

7 *Electric cooling fans*

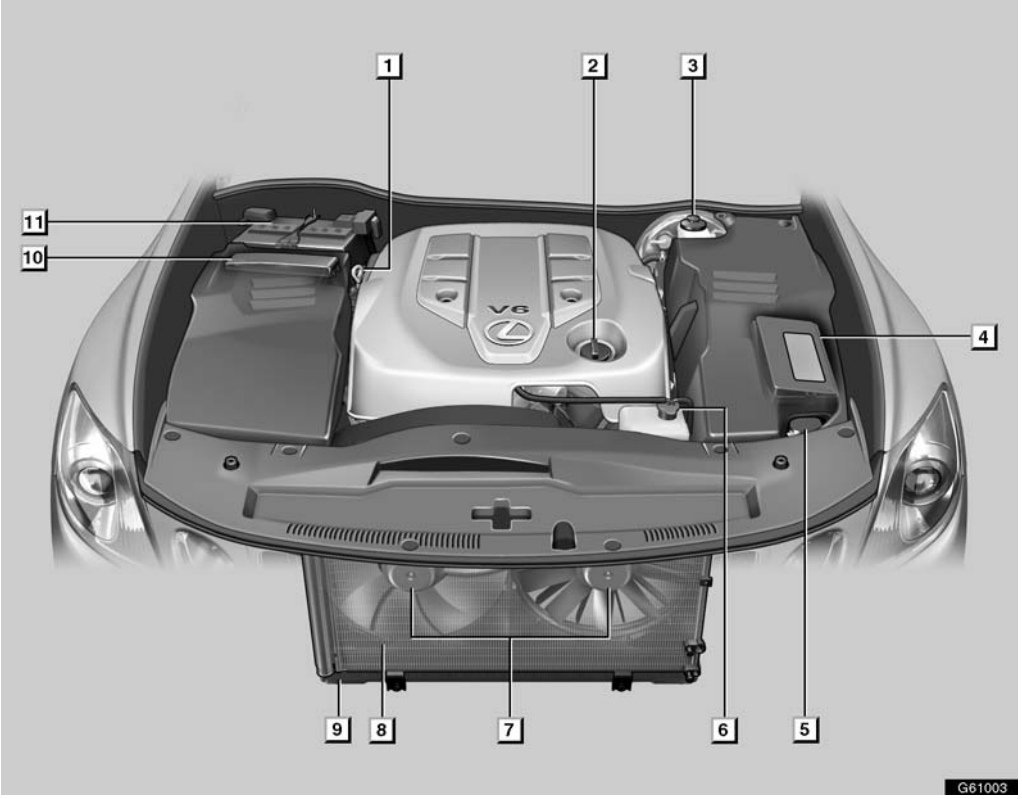
8 *Condenser*

9 *Radiator*

10 *Fuse box*

11 *Battery*

ENGINE COMPARTMENT OVERVIEW (GS300)



1 *Engine oil level dipstick*

2 *Engine oil filler cap*

3 *Brake fluid reservoir*

4 *Fuse box*

5 *Washer fluid tank*

6 *Engine coolant reservoir*

7 *Electric cooling fans*

8 *Condenser*

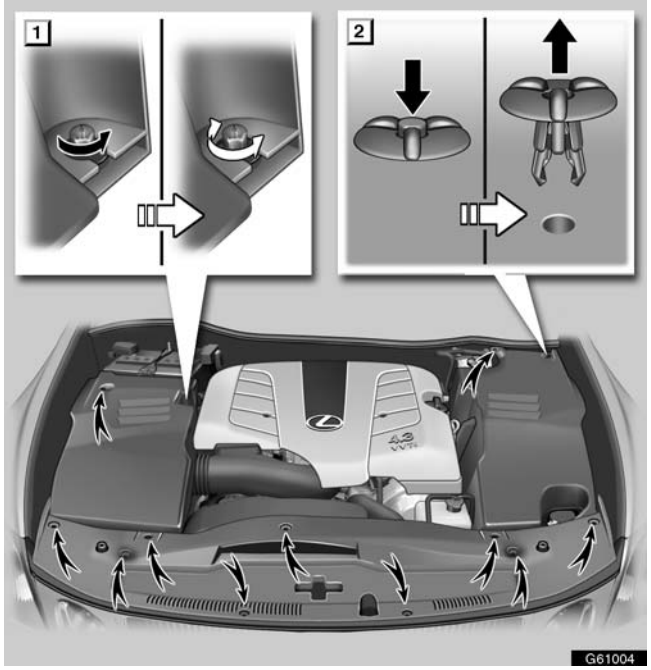
9 *Radiator*

10 *Fuse box*

11 *Battery*

Removing the engine compartment cover

Before checking and replacing the blade type fuses, etc. in the engine compartment, remove the engine compartment cover as follows:



⚠ CAUTION

Be sure to turn off the engine before removing the engine compartment cover. Failure to do so may result in burns from heated components or serious injury through becoming caught in moving parts.

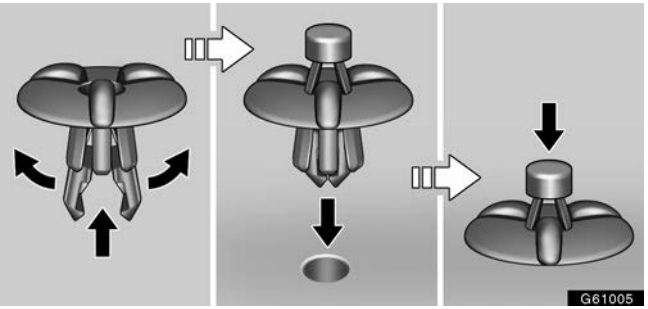
You must remove the front cover before removing the side covers. The location of the plastic clips is the same for all engine models.

1. Turn the plastic screw until it turns freely. Although it is turned freely, it cannot be removed from the engine compartment cover.
2. Push the core of the clips and remove the clips.

Remove the cover. Be careful not to lose the removed plastic clips.

After checking the items, install the engine compartment covers and insert the plastic clips in their original positions.

1 When inserting the plastic screw, push it in.



2 When inserting the clips, do as shown above.

NOTICE

After install the engine compartment cover, make sure the cover is securely in its original position.

DO−IT−YOURSELF SERVICE PRECAUTIONS

If you perform maintenance yourself, be sure to follow the correct procedure given in this Section.

You should be aware that improper or incomplete servicing may result in operating problems.

Performing do−it−yourself maintenance during the warranty period may affect your warranty coverage. Read the separate Lexus Warranty statement for details and suggestions.

This Section gives instructions only for those items that are relatively easy for an owner to perform. As explained in Section 5, there are still a number of items that must be performed by a qualified technician with special tools.

For information on tools and parts for do−it−yourself maintenance, see ”Parts and tools” on page 508.

Utmost care should be taken when working on your vehicle to prevent accidental injury. Here are a few precautions that you should be especially careful to observe:

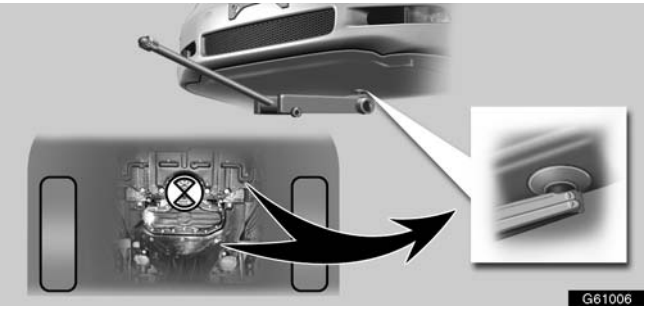
CAUTION

- **When the engine is running, keep hands, clothing, and tools away from the moving fan and engine drive belt. (Removing rings, watches, and ties is advisable.)**
- **Right after driving, the engine compartment − the engine, radiator and exhaust manifold, etc. − will be hot. So be careful not to touch them. Oil and other fluids may also be hot.**
- **Do not leave anything that may burn easily, such as paper or rags, in the engine compartment.**
- **Do not smoke, cause sparks or allow open flames around fuel or the battery. Their fumes are flammable.**
- **Do not get under your vehicle with just the body jack supporting it. Always use automotive jack stands or other solid supports.**
- **Be sure the engine switch is off if you work near the electric cooling fan or radiator grille. With the engine switch on, the electric cooling fan may automatically start to run if the air conditioning is on and/or if the coolant temperature is high.**
- **Use eye protection whenever you work on or under your vehicle where you may be exposed to flying or falling material, fluid spray, etc.**
- **Be extremely cautious when working on the battery. It contains poisonous and corrosive sulfuric acid.**

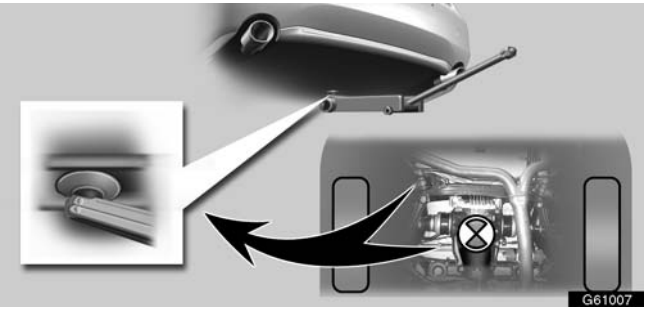
NOTICE

- ***Remember that battery and ignition cables carry high currents or voltages. Be careful of accidentally causing a short circuit.***
- ***Add only "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non−silicate, non−amine, non−nitrite, and non−borate coolant with long−life hybrid organic acid technology to fill the radiator. "Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water (for the U.S.A.) or 55% coolant and 45% deionized water (for Canada).***
- ***If you spill some of the coolant, be sure to wash it off with water to prevent it from damaging the parts or paint.***
- ***Before closing the engine hood, check to see that you have not forgotten any tools, rags, etc.***
- ***Do not drive with the air cleaner removed, or excessive engine wear could result. Also backfiring could cause a fire in the engine compartment.***
- ***Be careful not to scratch the glass surface with the wiper frame.***

POSITIONING THE JACK



▶*Front*



▶*Rear*

When jacking up your vehicle with the jack, position the jack correctly as shown in the illustrations.

⚠ CAUTION

When jacking, be sure to observe the following to reduce the possibility of personal injury:

- **Follow jacking instructions.**
- **Do not put any part of your body under the vehicle supported by the jack. Personal injury may occur.**
- **Do not start or run the engine while your vehicle is supported by the jack.**
- **Stop the vehicle on a level firm ground, firmly set the parking brake and put the transmission in "P" position.**
- **Make sure to set the jack properly in the jack point. Raising the vehicle with jack improperly positioned will damage the vehicle or may allow the vehicle to fall off the jack and cause personal injury.**
- **Never get under the vehicle when the vehicle is supported by the jack alone; use vehicle support stands.**
- **Do not raise the vehicle with someone in the vehicle.**
- **When raising the vehicle, do not place any objects on top of or underneath the jack.**

NOTICE

Make sure to place the jack correctly, or your vehicle may be damaged.

PARTS AND TOOLS

Here is a list of parts and tools you will need to perform do–it–yourself maintenance. Remember all Lexus parts are designed in metric sizes, so your tools must be metric.

Checking the engine oil level

Parts (if level is low):

- “Toyota Genuine Motor Oil” or equivalent
  Oil grade: API grade SL “Energy–Conserving” or ILSAC multigrade engine oil. For recommended oil viscosity, see page 525.

Tools:

- Rag or paper towel
- Funnel (only for adding oil)

Checking the engine coolant level

Parts (if level is low):

- ”Toyota Super Long Life Coolant” or similar high quality ethylene glycol based non–silicate, non–amine, non–nitrite, and non–borate coolant with long–life hybrid organic acid technology.
  “Toyota Super Long Life Coolant” is a mixture of 50% coolant and 50% deionized water (for the U.S.A.) or 55% of coolant and 45% deionized water (for Canada).

Tools:

- Funnel (only for adding coolant)

Checking brake fluid

Parts (if level is low):

- FMVSS No. 116 DOT 3 or SAE J1703 brake fluid

Tools:

- Funnel (only for adding fluid)

Checking battery condition

Tools:

- Warm water
- Baking soda
- Grease
- Conventional wrench (for terminal clamp bolts)

Checking and replacing the blade type fuses

Parts (if replacement is necessary):

- Fuse with same amperage rating as original

Checking the cartridge type fuses

Parts (if replacement is necessary):

- Genuine Lexus fuse or equivalent with same amperage rating as original

Adding washer fluid

Parts:

- Water
- Washer fluid containing antifreeze (for winter use)

Tools:

- Funnel

SECTION 6 – 2

SERVICE PROCEDURES AND SPECIFICATIONS

Engine

Specifications (GS430) 512
Specifications (GS300) 515
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Fuel pump shut off system 520
Facts about engine oil consumption 520
Used engine oil 522
Checking the engine oil level 522
Checking the engine coolant level 527
Checking the radiator and condenser 529
Spark plugs 529

SPECIFICATIONS (GS430)

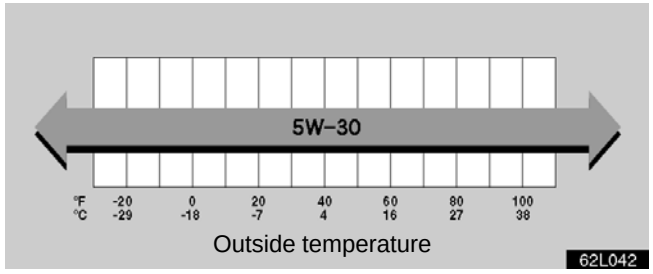
– GENERAL

Model	3UZ–FE
Type	8 cylinder V type, 4 cycle, gasoline
Bore and stroke	91.0 X 82.5 mm (3.58 X 3.25 in.)
Displacement	4293 cm^3 (262.0 cu.in.)
Valve clearance (engine cold) Intake Exhaust	 0.15 – 0.25 mm (0.006 – 0.010 in.) 0.25 – 0.35 mm (0.010 – 0.014 in.)
Drive belt tension	Automatic adjustment

– FUEL

Fuel type	Unleaded gasoline only
Octane rating	91 (Research octane number 96) or higher

– LUBRICATION SYSTEM

Oil capacity Drain and refill with filter without filter	 5.1 L (5.4 qt., 4.5 Imp.qt.) 4.5 L (4.8 qt., 4.0 Imp.qt.)
Oil grade	API grade SL “Energy−Conserving” or ILSAC multigrade engine oil
Recommended oil viscosity	5W−30 

NOTE:
“Toyota Genuine Motor Oil” is used in your Lexus vehicle. Use Lexus approved “Toyota Genuine Motor Oil” or equivalent to satisfy the above grade and viscosity. Please contact your Lexus dealer for further details.

– COOLING SYSTEM

Capacity	10.1 L (10.7 qt., 8.9 lmp.qt.)
Coolant type	”Toyota Super Long Life Coolant” or similar high quality ethylene glycol based non–silicate, non–amine, non–nitrite, and non–borate coolant with long–life hybrid organic acid technology (Coolant with long–life hybrid organic acid technology is a combination of low phosphates and organic acids.) Do not use plain water alone.

NOTE:
“Toyota Super Long Life Coolant” is used in your Lexus vehicle at factory fill. In order to avoid technical problems, only use ”Toyota Super Long Life Coolant” or similar high quality ethylene glycol based non–silicate, non–amine, non–nitrite, and non–borate coolant with long–life hybrid organic acid technology. (Coolant with long–life hybrid organic acid technology is a combination of low phosphates and organic acids.) Do not use plain water alone. Please contact your Lexus dealer for further details.

– IGNITION SYSTEM

Spark plug	– Make	DENSO	SK20R11
		NGK	IFR6A11
	– Gap		1.1 mm (0.043 in.)

– ELECTRICAL SYSTEM

Battery	– Open voltage at 20°C (68°F):	12.7V Fully charged 12.3V Half charged 11.9V Discharged [Voltage that is checked 20 minutes after the engine switch is off with all the lights turned off]
	– Charging rates	5A max.

SPECIFICATIONS (GS300)

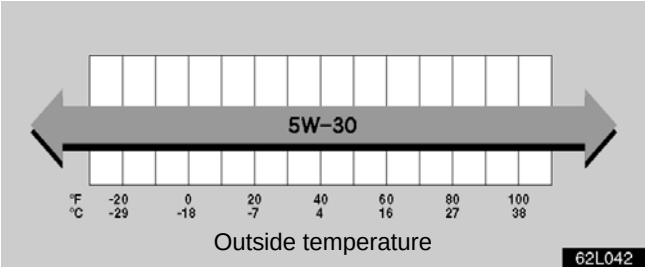
– GENERAL

Model	3GR–FSE
Type	6 cylinder V type, 4 cycle, gasoline
Bore and stroke	87.5 X 83.0 mm (3.44 X 3.26 in.)
Displacement	2995 cm^3 (182.75 cu.in.)
Valve clearance (engine cold) Intake Exhaust	 Automatic adjustment Automatic adjustment
Drive belt tension	Automatic adjustment

– FUEL

Fuel type	Unleaded gasoline only
Octane rating	91 (Research octane number 96) or higher

– LUBRICATION SYSTEM

Oil capacity Drain and refill Two–wheel drive models with filter without filter Four–wheel drive models with filter without filter	 6.3 L (6.6 qt., 5.5 Imp.qt.) 5.9 L (6.2 qt., 5.1 Imp.qt.) 6.4 L (6.7 qt., 5.6 Imp.qt.) 6.0 L (6.3 qt., 5.2 Imp.qt.)
Oil grade	API grade SL “Energy–Conserving” or ILSAC multigrade engine oil
Recommended oil viscosity	5W–30 

NOTE:
“Toyota Genuine Motor Oil” is used in your Lexus vehicle. Use Lexus approved “Toyota Genuine Motor Oil” or equivalent to satisfy the above grade and viscosity. Please contact your Lexus dealer for further details.

– COOLING SYSTEM

Capacity	9.1 L (9.6 qt., 8.0 lmp.qt.)
Coolant type	”Toyota Super Long Life Coolant” or similar high quality ethylene glycol based non–silicate, non–amine, non–nitrite, and non–borate coolant with long–life hybrid organic acid technology (Coolant with long–life hybrid organic acid technology is a combination of low phosphates and organic acids.) Do not use plain water alone.

NOTE:
“Toyota Super Long Life Coolant” is used in your Lexus vehicle at factory fill. In order to avoid technical problems, only use ”Toyota Super Long Life Coolant” or similar high quality ethylene glycol based non–silicate, non–amine, non–nitrite, and non–borate coolant with long–life hybrid organic acid technology. (Coolant with long–life hybrid organic acid technology is a combination of low phosphates and organic acids.) Do not use plain water alone. Please contact your Lexus dealer for further details.

– IGNITION SYSTEM

Spark plug	– Make	DENSO	FK20HBR11
		NGK	ILFR6D11T
	– Gap		1.1 mm (0.043 in.)

– ELECTRICAL SYSTEM

Battery	– Open voltage at 20°C (68°F):	12.7V Fully charged 12.3V Half charged 11.9V Discharged [Voltage that is checked 20 minutes after the engine switch is off with all the lights turned off]
	– Charging rates	5A max.

FUEL

Fuel type

Your vehicle must use only unleaded gasoline.

To help prevent gas station mixups, your Lexus has a smaller fuel tank opening. The special nozzle on pumps with unleaded fuel will fit it, but the larger standard nozzle on pumps with leaded gas will not.

At a minimum, the gasoline you use should meet the specifications of ASTM D4814 in the U.S.A. and CGSB 3.5−M93 in Canada.

NOTICE

Do not use leaded gasoline. Use of leaded gasoline will cause the three−way catalytic converter to lose its effectiveness and the emission control system to function improperly. Also, this can increase maintenance costs.

Octane rating

Select premium unleaded gasoline with an Octane Rating of 91 (Research Octane Number 96) or higher for optimum engine performance. However, if such premium type cannot be obtained, you may temporarily use unleaded gasoline with an Octane Rating as low as 87 (Research Octane Number 91).

Use of unleaded fuel with an octane number or rating lower than stated above will cause persistent heavy knocking. If severe, this will lead to engine damage.

If your engine knocks ...

If you detect heavy knocking even when using the recommended fuel, or if you hear steady knocking while holding a steady speed on level roads, consult your Lexus dealer.

However, occasionally, you may notice light knocking for a short time while accelerating or driving up hills. This is normal and there is no need for concern.

Gasoline containing detergent additives

Lexus recommends the use of gasoline that contains detergent additives to avoid build−up of engine deposits.

However, all gasoline sold in the U.S. contains detergent additives to keep clean and/or clean intake systems.

Quality gasoline

Automotive manufacturers in the U.S., Europe and Japan have developed a specification for quality fuel named World−Wide Fuel Charter (WWFC) that is expected to be applied world wide. The WWFC consists of four categories that depend on required emission levels. In the U.S., category 3 has been adopted. The WWFC improves air quality by providing for better emissions in vehicle fleets, and customer satisfaction through better vehicle performance.

Cleaner burning gasoline

Cleaner burning gasoline, including reformulated gasoline that contains oxygenates such as ethanol or MTBE is available in many areas.

Lexus recommends the use of cleaner burning gasoline and appropriately blended reformulated gasoline. These types of gasoline provide excellent vehicle performance, reduce vehicle emissions, and improve air quality.

Oxygenates in gasoline

Lexus allows the use of oxygenate blended gasoline where the oxygenate content is up to 10% ethanol or 15% MTBE. If you use gasohol in your Lexus, be sure that it has an octane rating no lower than 87.

Lexus does not recommend the use of gasoline containing methanol.

Gasoline containing MMT

Some gasoline contain an octane enhancing additive called MMT (Methylcyclopentadienyl Manganese Tricarbonyl).

Lexus does not recommend the use of gasoline that contains MMT. If fuel containing MMT is used, your emission control system may be adversely affected. The Malfunction Indicator Lamp on the instrument cluster may come on. If this happens, contact your Lexus dealer for service.

Gasoline quality

In a very few cases, you may experience driveability problems caused by the particular gasoline that you are using. If you continue to have unacceptable driveability, try changing gasoline brands. If this does not rectify your problem, then consult your Lexus dealer.

NOTICE

- ***Do not use gasohol other than stated above. It will cause fuel system damage or vehicle performance problems.***
- ***If drivability problems are encountered (poor hot starting, vaporizing, engine knock, etc.), discontinue its use.***
- ***Take care not to spill gasohol during refueling. Gasohol may cause paint damage.***

Fuel tank capacity

71 L (18.7 gal., 15.6 Imp.gal.)

FUEL PUMP SHUT OFF SYSTEM

The fuel pump shut off system stops supplying fuel to the engine to minimize the risk of fuel leakage when the engine stalls or an airbag inflates upon collision. To restart the engine after the fuel pump shut off system activates, turn the engine switch off once and start it.

CAUTION

Inspect the ground under the vehicle before restarting the engine. If you find that liquid has leaked onto the ground, it is the fuel system that has been damaged and it is in need of repair. In this case, do not restart the engine.

FACTS ABOUT ENGINE OIL CONSUMPTION

Functions of engine oil

Engine oil has the primary function of lubricating and cooling the inside of the engine, and plays a major role in maintaining the engine in proper working order.

Engine oil consumption

It is normal that an engine should consume some engine oil during normal engine operation. The causes of oil consumption in a normal engine are as follows.

- Oil is used to lubricate pistons, piston rings and cylinders. A thin film of oil is left on the cylinder wall when a piston moves downwards in the cylinder. High negative pressure generated when the vehicle is decelerating sucks some of this oil into the combustion chamber. This oil as well as some part of the oil film left on the cylinder wall is burned by the high temperature combustion gases during the combustion process.
- Oil is also used to lubricate the stems of the intake valves. Some of this oil is sucked into the combustion chamber together with the intake air and is burned along with the fuel. High temperature exhaust gases also burn the oil used to lubricate the exhaust valve stems.

The amount of engine oil consumed depends on the viscosity of the oil, the quality of the oil and the way the vehicle is driven.

More oil is consumed under driving conditions such as high speeds and frequent acceleration and deceleration.

A new engine consumes more oil, since its pistons, piston rings and cylinder walls have not become conditioned.

Oil consumption: Max. 1.0 L per 1000 km (1.1 qt./600 miles, 0.9 Imp·qt./600 miles).

When judging the amount of oil consumption, keep in mind that the oil may have become diluted, making it difficult to judge the true level accurately.

For example, if a vehicle is used for repeated short trips and consumes a normal amount of oil, the dipstick may not show any drop in the oil level at all, even after 1000 km (600 miles) or more. This is because the oil is gradually becoming diluted with fuel or moisture, making it appear that the oil level has not changed.

The diluting ingredients evaporate out when the vehicle is then driven at high speeds, as on an expressway, making it appear that oil is excessively consumed after driving at high speeds.

Importance of engine oil level check

One of the most important points in proper vehicle maintenance is to keep the engine oil at the optimum level so that oil function will not be impaired. Therefore, it is essential that the oil level be checked regularly. Lexus recommends that the oil level be checked every time you refuel the vehicle.

NOTICE

Failure to check the oil level regularly could lead to serious engine trouble due to insufficient oil.

For detailed information on oil level check, see ”Checking the engine oil level” on page 522.

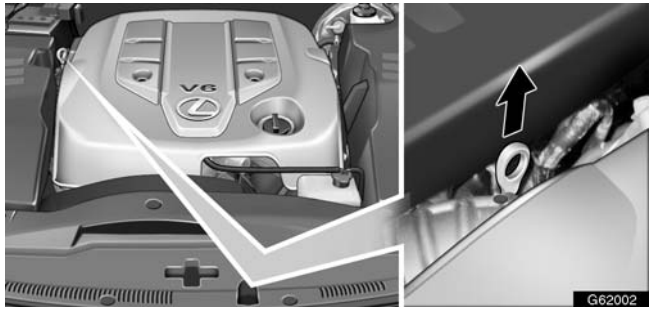
USED ENGINE OIL

CAUTION

- **Used engine oil contains potentially harmful contaminants which may cause skin disorders such as inflammation or skin cancer, so care should be taken to avoid prolonged and repeated contact with it. To remove used engine oil from your skin, wash thoroughly with soap and water.**
- **Do not leave used oil within the reach of children.**
- **Dispose of used oil and used oil filters only in a safe and acceptable manner. Do not dispose of used oil and used oil filters in household trash, in sewers or onto the ground. Call your Lexus dealer or a service station for information concerning recycling or disposal.**

CHECKING THE ENGINE OIL LEVEL

▶*GS430*



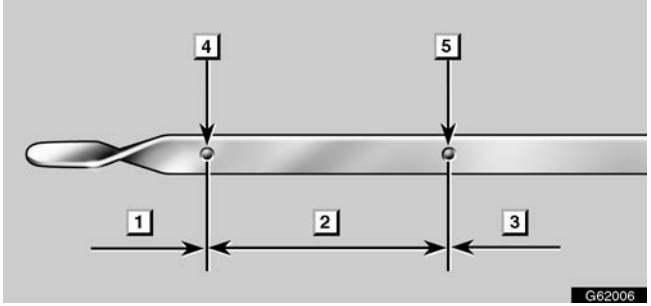
▶*GS300*

With the engine at operating temperature and turned off, check the oil level on the dipstick.

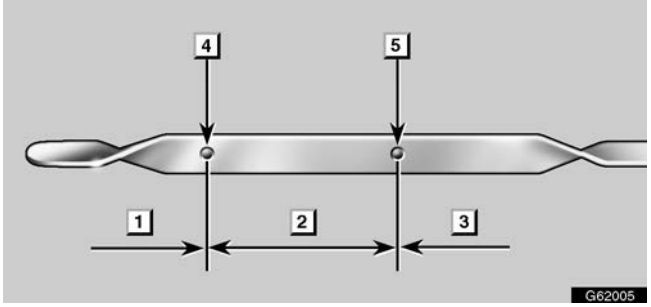
1. To get a correct reading, the vehicle should be on level ground. After turning off the engine, wait a few minutes for the oil to drain back into the bottom of the engine.

2. Pull the dipstick out, hold a rag under the end and wipe it clean.

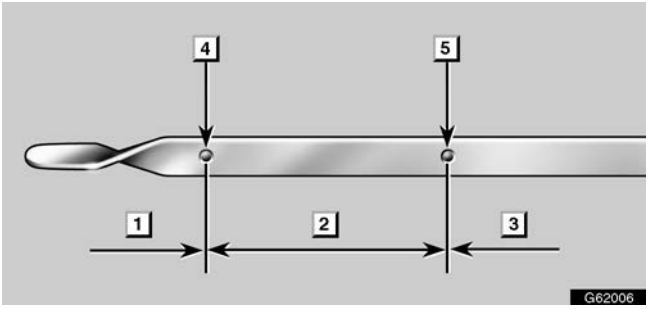
3. Reinsert the dipstick and push it in as far as it will go, or the reading will not be correct.



▶***GS430***
1 ***Add oil*** 2 ***O.K.*** 3 ***Too full***



▶***GS300 (two−wheel drive models)***
1 ***Add oil*** 2 ***O.K.*** 3 ***Too full***



▶*GS300 (four−wheel drive models)*
1 *Add oil* 2 *O.K.* 3 *Too full*

4. Pull the dipstick out and look at the oil level while holding a rag under the end. If it is between the full level mark (5) and the low level mark (4), it is O.K.

NOTICE

Be careful not to drop engine oil on the vehicle components.

▶*GS430*

▶*GS300*

If the oil level is below or only slightly above the low level mark, add engine oil of the same type as already in the engine.

Remove the oil filler cap and add engine oil a little at a time, checking the dipstick. We recommend that you use a funnel when adding oil. The approximate quantity of oil needed to raise the level between low and full on the dipstick is indicated as follows:

1.5 L (1.6 qt., 1.3 Imp. qt.)

For the engine oil capacity, see “Specifications” on pages 512 and 515.

When the level reaches within the correct range, return the filler cap and turn the cap clockwise until you hear a click.

NOTICE

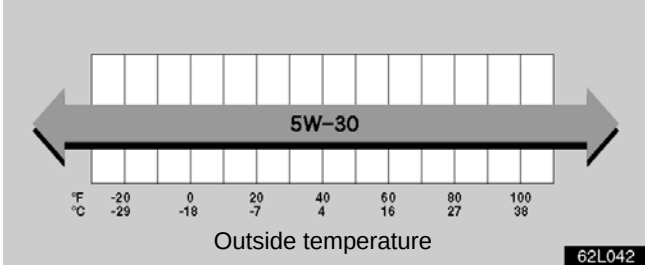
- ***Be careful not to spill engine oil on the vehicle components.***
- ***Avoid overfilling, or the engine could be damaged.***
- ***Check the oil level on the dipstick once again after adding the oil.***

Engine oil selection

“Toyota Genuine Motor Oil” is used in your Lexus vehicle. Use Lexus approved “Toyota Genuine Motor Oil” or equivalent to satisfy the following grade and viscosity.

Oil grade: API grade SL “Energy−Conserving” or ILSAC multigrade engine oil.

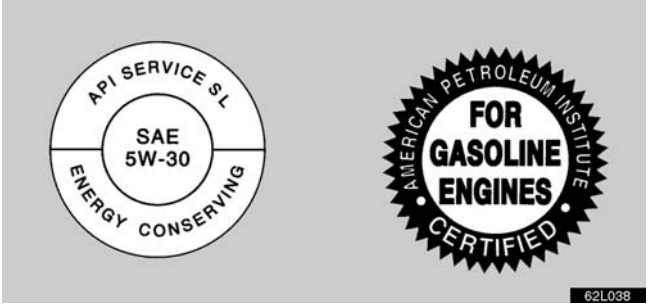
Recommended viscosity: 5W−30



SAE 5W−30 is the best choice for good fuel economy, and good starting in cold weather.

If SAE 5W−30 is not available, SAE10W−30 may be used. However, it should be replaced with 5W−30 at the next oil change.

Oil identification marks



▶*API Service Symbol* ▶*ILSAC Certification Mark*

Either or both API registered marks are added to some oil containers to help you select the oil you should use.

- The API Service Symbol is located anywhere on the outside of the container.

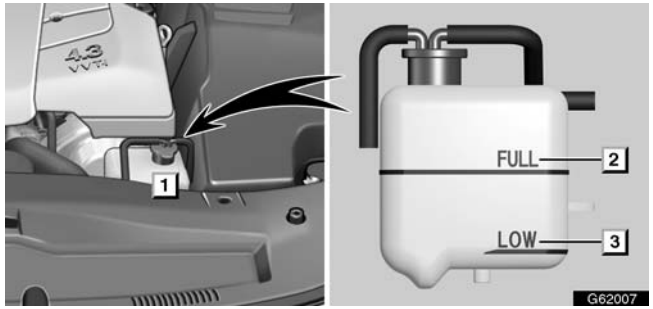
  The top portion of the label shows the oil quality by API (American Petroleum Institute) designation such as SL. The center portion of the label shows the SAE viscosity grade such as SAE 5W–30. ”Energy–Conserving”, shown in the lower portion, indicates that the oil has fuel–saving capabilities.

- The ILSAC (International Lubricant Standardization and Approval Committee) Certification Mark is displayed on the front of the container.

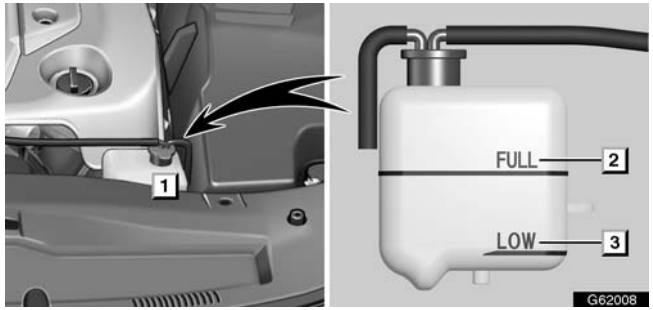
To ensure excellent lubrication for your engine, “Toyota Genuine Motor Oil” is available, which has been specifically tested and approved for all Lexus engines.

Please contact your Lexus dealer for further details about “Toyota Genuine Motor Oil”.

CHECKING THE ENGINE COOLANT LEVEL



▶*GS430*
1 *Reservoir cap* 2 *"FULL" line* 3 *"LOW" line*



▶*GS300*
1 *Reservoir cap* 2 *"FULL" line* 3 *"LOW" line*

Look at the see−through coolant reservoir when the engine is cold. The coolant level is satisfactory if it is between the"FULL" and "LOW" lines on the reservoir. If the level is low, add the coolant. (For the coolant type, see "Coolant type selection" described below.)

The coolant level in the reservoir will vary with engine temperature. However, if the level is on or below the "LOW" line, add coolant. Bring the level up to the "FULL" line.

If the coolant level drops within a short time after replenishing, there may be a leak in the system. Visually check the radiator, hoses, engine coolant filler cap, radiator cap and drain cock and water pump.

If you can find no leak, have your Lexus dealer test the cap pressure and check for leaks in the cooling system.

⚠ CAUTION

To prevent burning yourself, do not remove the radiator cap when the engine is hot.

Coolant type selection

Use of improper coolants may damage your engine cooling system.

Only use ”Toyota Super Long Life Coolant” or similar high quality ethylene glycol based non–silicate, non–amine, non–nitrite, and non–borate coolant with long–life hybrid organic acid technology. (Coolant with long–life hybrid organic acid technology is a combination of low phosphates and organic acids.)

For the U.S.A.—“Toyota Super Long Life Coolant” is a mixture of 50% coolant and 50% deionized water. This coolant provides protection down to about –35°C (–31°F).

For Canada—“Toyota Super Long Life Coolant” is a mixture of 55% coolant and 45% deionized water. This coolant provides protection down to about –42°C (–44°F).

NOTICE
Do not use plain water alone.

Lexus recommends “Toyota Super Long Life Coolant,” which has been tested to ensure that it will not cause corrosion nor result in malfunction of your engine coolant system with proper usage. “Toyota Super Long Life Coolant” is formulated with long–life hybrid organic acid technology and has been specifically designed to avoid engine cooling system malfunction on Lexus vehicles.

Please contact your Lexus dealer for further details.

CHECKING THE RADIATOR AND CONDENSER

If either of the above parts are extremely dirty or you are not sure of their condition, take your vehicle to your Lexus dealer.

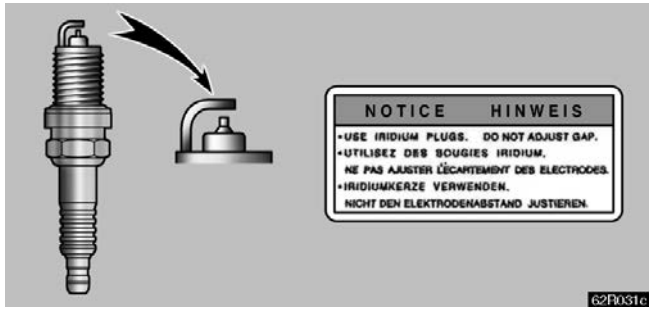
CAUTION

To prevent burning yourself , be careful not to touch the radiator or condenser when the engine is hot.

NOTICE

To prevent damage to the radiator and condenser, do not perform the work by yourself.

SPARK PLUGS

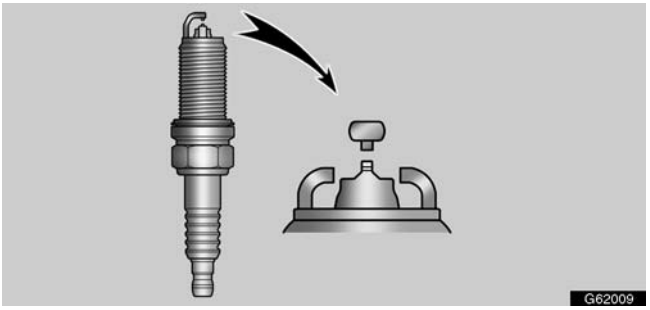


▶*GS430*

Your engine is fitted with iridium−tipped spark plugs.

NOTICE

Use only iridium−tipped spark plugs and do not adjust gaps for your engine performance and smooth drivability.



▶*GS300*

Your engine is fitted with the designated iridium−tipped spark plugs.

NOTICE
Use the designated iridium−tipped spark plugs only and do not adjust gaps for your engine performance and smooth drivability.

SECTION 6 – 3

SERVICE PROCEDURES AND SPECIFICATIONS

Chassis

Specifications (GS430) 532
Specifications (GS300) 535
Checking brake fluid 538
Checking tire inflation pressure 539
Tire information 542
Run–flat tires 552
Types of tires 553
Rotating tires 554
Checking and replacing tires 554
Installing snow tires and chains 558
Replacing wheels 560
Aluminum wheel precautions 561
Suspension and chassis 562

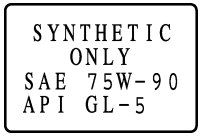
SPECIFICATIONS (GS430)

– DIFFERENTIAL

Oil capacity	1.35 L (1.42 qt., 1.19 lmp.qt.)
Oil type and viscosity	Toyota Genuine Differential Synthetic gear oil API GL−5 SAE 75W−90 or its equivalent

NOTE:

The following label is affixed on the right side of the differential carrier. Use the type and viscosity shown on the label when the differential oil is replaced.



Synthetic oil information label

NOTICE

Use of differential oil other than "Toyota Genuine Differential Synthetic gear oil API GL−5 SAE 75W−90" or its equivalent may damage the differential gear of your vehicle and diminish fuel efficiency. For the reasons mentioned above, Lexus recommends use of "Toyota Genuine Differential Synthetic gear oil API GL−5 SAE 75W−90". Another differential oil of matching quality can also be used, (but note that despite the similarity in nomenclature between "Toyota Genuine Differential Synthetic gear oil API GL−5 SAE 75W−90" and oils that meet SAE 75W−90 specifications, compliance with the SAE specification does not guarantee that an oil has all characteristic required to avoid the problem described above.) If you are unable to locate an equivalent to "Toyota Genuine Differential Synthetic gear oil API GL−5 SAE 75W−90", contact your Lexus dealer for further details or another duly qualified and equipped professional.

– AUTOMATIC TRANSMISSION

Fluid capacity Drain and refill	1.7 L (1.5 qt., 1.8 lmp.qt.)
Fluid type	**Toyota Genuine ATF WS***

*Change automatic transmission fluid only as necessary. Generally, it is necessary to change automatic transmission fluid only if your vehicle is driven under one of the Special Operating Conditions listed in your "Owner's Manual Supplement / Scheduled Maintenance". When changing the automatic transmission fluid, use only "Toyota Genuine ATF WS" (ATF JWS3324 or NWS9638) to aid in assuring optimum transmission performance.

NOTICE

Using automatic transmission fluid other than "Toyota Genuine ATF WS" may cause deterioration in shift quality, locking up of your transmission accompanied by vibration, and ultimately damage the automatic transmission of your vehicle.

– BRAKES

Pedal clearance *1	73 mm (2.9 in.) Min.
Pedal free play	1.0 – 2.0 mm (0.04 – 0.08 in.)
Brake pad wear limit	1.0 mm (0.04 in.)
Parking brake lining wear limit	1.0 mm (0.04 in.)
Parking brake adjustment *2	5 – 7 clicks
Fluid type	SAE J1703 or FMVSS No. 116 DOT 3

*1Minimum pedal clearance when depressed with the force of 196 N (20 kgf, 44 lbf.) with the engine running

*2Parking brake adjustment when depressed with the force of 300 N (30.6 kgf, 67.4 lbf.)

– STEERING

Free play	Less than 30 mm (1.2 in.)

– TIRES AND WHEELS

Tire size	245/40R18 93Y or P245/40R18 93V
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) For sustained high speeds above 160 km/h (100 mph), in countries where such speeds are permitted by law, add 60 kPa (0.6 kgf/cm^2 or bar, 9 psi) to the front tires and rear tires, but never exceed the maximum cold tire inflation pressure molded on the tire sidewall.
Wheel size	18 x 8 JJ
Wheel nut torque	103 N·m (10.5 kgf·m, 76 ft·lbf.)

NOTE:
For complete information on tires (e.g. replacing tires or replacing wheels), see “Checking tire inflation pressure” through “Aluminum wheel precautions” on page 539 through 561.

SPECIFICATIONS (GS300)

– DIFFERENTIAL

Oil capacity Two–wheel drive models Four–wheel drive models Front Rear	 1.15 L (1.21 qt., 1.01 Imp.qt.) 0.70 L (0.73 qt., 0.61 Imp.qt.) 1.05 L (1.10 qt., 0.92 Imp.qt.)
Oil type and viscosity	Hypoid gear oil API GL–5 Above –18°C (0°F): SAE 90 Below –18°C (0°F): SAE 80 or SAE 80W–90

– AUTOMATIC TRANSMISSION

Fluid capacity Drain and refill Two–wheel drive models Four–wheel drive models	 1.5 L (1.6 qt., 1.3 Imp.qt.) 2.7 L (2.8 qt., 2.3 Imp.qt.)
Fluid type	**Toyota Genuine ATF WS***

*Change automatic transmission fluid only as necessary. Generally, it is necessary to change automatic transmission fluid only if your vehicle is driven under one of the Special Operating Conditions listed in your “Owner’s Manual Supplement / Scheduled Maintenance”. When changing the automatic transmission fluid, use only “Toyota Genuine ATF WS” (ATF JWS3324 or NWS9638) to aid in assuring optimum transmission performance.

NOTICE

Using automatic transmission fluid other than “Toyota Genuine ATF WS” may cause deterioration in shift quality, locking up of your transmission accompanied by vibration, and ultimately damage the automatic transmission of your vehicle.

– BRAKES

Pedal clearance *1	65 mm (2.6 in.) Min.
Pedal free play	1.0 – 2.0 mm (0.04 – 0.08 in.)
Brake pad wear limit	1.0 mm (0.04 in.)
Parking brake lining wear limit	1.0 mm (0.04 in.)
Parking brake adjustment *2	5 – 7 clicks
Fluid type	SAE J1703 or FMVSS No. 116 DOT 3

*1Minimum pedal clearance when depressed with the force of 490 N (50 kgf, 110 lbf.) with the engine running

*2Parking brake adjustment when depressed with the force of 300 N (30.6 kgf, 67.4lbf.)

– STEERING

Free play	Less than 30 mm (1.2 in.)

– TIRES AND WHEELS

Tire size	225/50R17 94W or P225/50R17 93V
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) For sustained high speeds above 160 km/h (100 mph), in countries where such speeds are permitted by law, add 50 kPa (0.5 kgf/cm^2 or bar, 7 psi) to the front tires and rear tires, but never exceed the maximum cold tire inflation pressure molded on the tire sidewall.
Wheel size	17 x 7 1/2 JJ
Wheel nut torque	103 N·m (10.5 kgf·m, 76 ft·lbf.)

NOTE:

For complete information on tires (e.g. replacing tires or replacing wheels), see “Checking tire inflation pressure” through “Aluminum wheel precautions” on page 539 through 561.

CHECKING BRAKE FLUID

▶*GS430*

▶*GS300*

To check the fluid level, simply look at the see−through reservoir. The level should be between the ”MAX” and ”MIN” lines on the tank.

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 level is low, take your vehicle to a Lexus dealer as soon as possible. Do not drive your vehicle if the brake system warning light (red) is on. Call a Lexus dealer for assistance.

If the fluid level goes down soon after your vehicle is serviced, it may indicate a serious mechanical problem. Have your vehicle checked by your Lexus dealer.

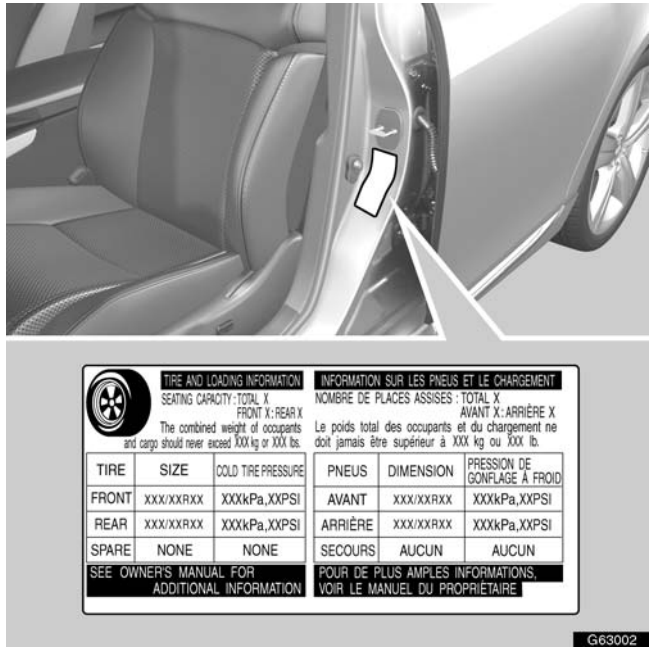
⚠ CAUTION

Brake fluid can harm your hands or eyes. If fluid gets on your hands or in your eyes, flush the affected area with clean water immediately. If you still feel uncomfortable with your hands or eyes, go to the doctor.

NOTICE

If brake fluid is spilled on the vehicle, be sure to wipe it off to prevent damage to parts or paint.

CHECKING TIRE INFLATION PRESSURE



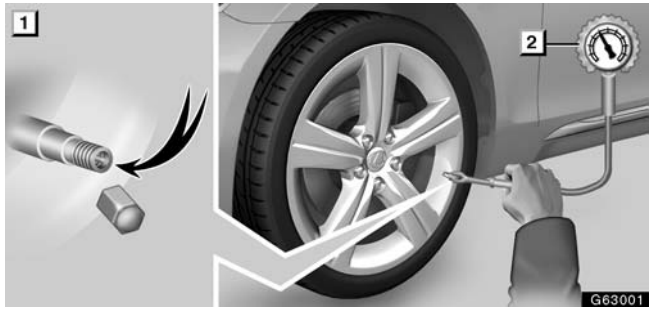
The recommended cold tire inflation pressure, tire size and the combined weight of occupants and cargo (vehicle capacity weight) are described on the tire and loading information label.

You should check the tire inflation pressure every two weeks, or at least once a month. And do not forget the spare! The inflation pressure for the spare tire should be 420 kPa (4.3 kgf/cm^2, 4.2 bar, 60 psi).

The following instructions for checking tire inflation pressure should be observed:

- **The pressure should be checked only when the tires are cold.** If your vehicle has been parked for at least 3 hours and has not been driven for more than 1.5 km or 1 mile since, you will get an accurate cold tire inflation pressure reading.
- **Always use a tire pressure gauge.** The appearance of the tire can be misleading. Besides, tire inflation pressures that are even just a few pounds off can degrade ride and handling.
- **Do not bleed or reduce tire inflation pressure after driving.** It is normal for the tire inflation pressure to be higher after driving.
- **Never exceed the vehicle capacity weight.** Passengers and luggage weight should be located so that the vehicle is balanced.

Inspection and adjustment procedure



▶ 1 ***Tire valve***
2 ***Tire pressure gauge***

1. Remove the tire valve cap.

2. Press the tip of the tire pressure gauge to the tire valve.

3. Read the pressure using the graduations of the gauge.

4. In case the tire inflation pressure is not within the prescribed range, insert the compressed air from the valve. In case of applying too much air, press the center of the valve and release the air to adjust.

5. After completing the tire inflation pressure measurement and adjustment, apply soapy water to the valve and check for leakage.

6. Install the tire valve cap.

If a gauge and air pump are not available, have your vehicle checked by your Lexus dealer.

CAUTION

Be sure to reinstall the tire valve caps. Without the valve caps, dirt or moisture could get into the valve core and cause air leakage. If the caps have been lost, have new ones put on as soon as possible.

Incorrect tire inflation pressure may waste fuel, reduce the comfort of driving, reduce tire life and make your vehicle less safe to drive.

If a tire needs frequent refilling, have it checked by your Lexus dealer.

CAUTION

Keep your tires properly inflated. Otherwise, the following conditions may occur and cause an accident resulting in death or serious injuries.

Low tire pressure (underinflation):

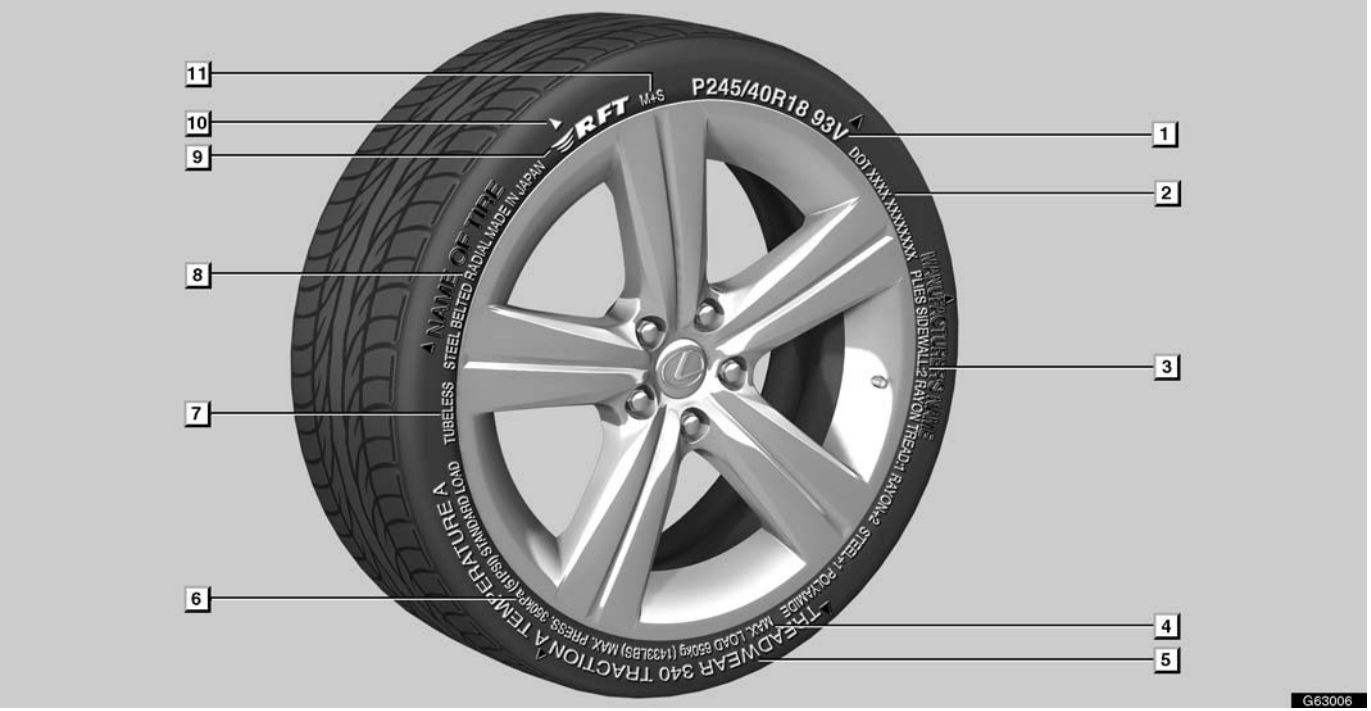
- **Excessive wear**
- **Uneven wear**
- **Poor handling**
- **Possibility of blowouts from an overheated tire**
- **Poor sealing of the tire bead**
- **Wheel deformation and/or tire separation**
- **A greater possibility of tire damage from road hazards**

High tire pressure (overinflation):

- **Poor handling**
- **Excessive wear**
- **Uneven wear**
- **A greater possibility of tire damage from road hazards**

TIRE INFORMATION

Tire symbols (Standard and run−flat tire)



▶*The illustration indicates typical tire symbols.*

1 **Tire size:** For details, see “Tire size” on page 546.

2 **DOT and Tire Identification Number (TIN):** For details, see “DOT and Tire Identification Number (TIN)” on page 546.

3 **Tire ply composition and materials :** Plies mean a layer of rubber−coated parallel cords. Cords mean the strands forming the plies in the tire.

4 **Load limit at maximum cold tire inflation pressure:** For details, see “Checking and replacing tires” on page 554.

5 **Uniform tire quality grading** For details, see “Uniform tire quality grading” on page 548.

6 **Maximum cold tire inflation pressure:** This means the pressure to which a tire may be inflated. For recommended cold tire inflation pressure, see “Specifications” on page 537.

7 **“TUBELESS” or “TUBE TYPE”:** A tubeless tire does not have a tube inside the tire and air is directly filled in the tire. A tube type tire has a tube inside the tire and the tube maintains the air pressure.

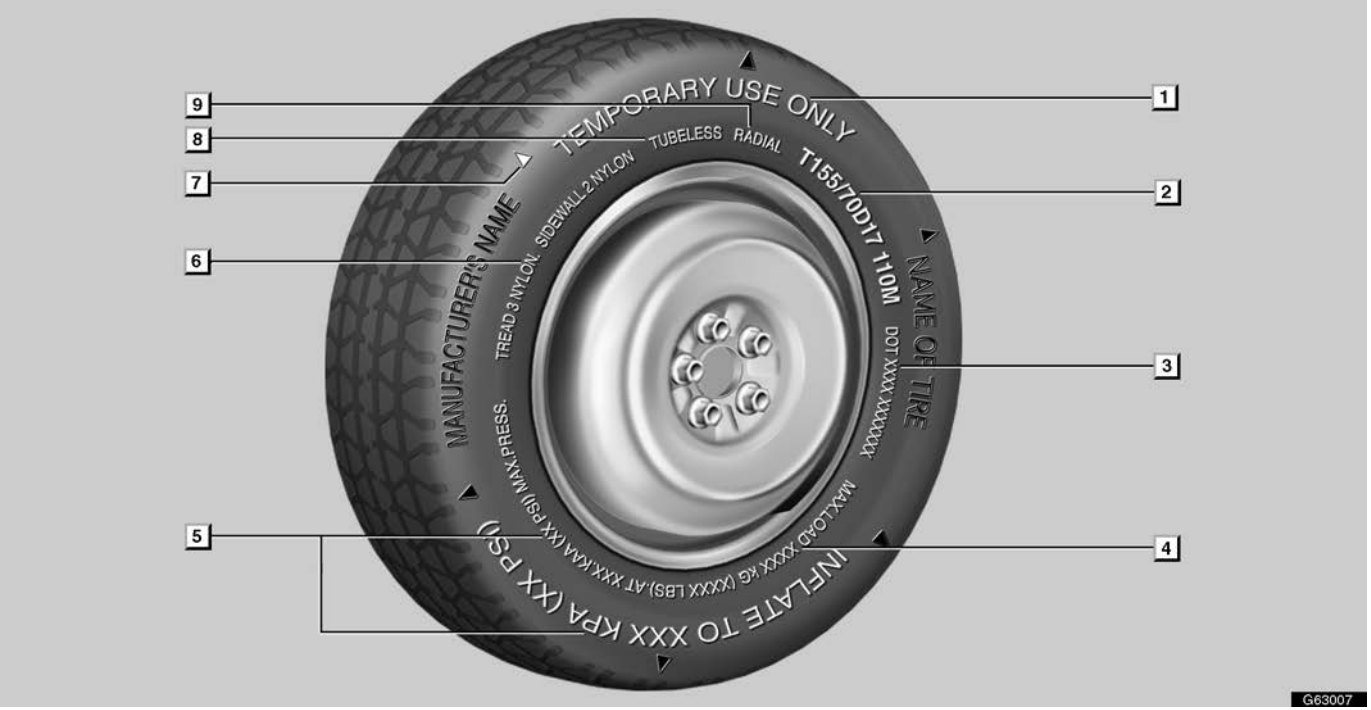
8 **Radial tires or bias−ply tires :** A radial tire has “RADIAL” on the sidewall. A tire not marked with “RADIAL” is a bias−ply tire.

9 **Run−flat tire (RFT) or standard tire:** This vehicle can be equipped with either run−flat tires (RFT) or standard tires. A “RFT” or “DSST” mark is molded on the sidewall of the run−flat tire. For details, see “Run−flat tires” on page 552.

10 **Location of tread wear indicators:** For details, see “Checking and replacing tires” on page 554.

11 **Summer tire or all season tire:** An all season tire has “M+S” on the sidewall. The tire not marked with “M+S” is a summer tire. For details, see “Types of tires” on page 553.

Tire symbols (Compact spare tire)



▶*The illustration indicates typical tire symbols.*

1 **“TEMPORARY USE ONLY”:** A compact spare tire is identified by the phrase “TEMPOTRARY USE ONLY” molded into its sidewall. This tire is designed for temporary emergency use only. For details, see “Compact spare tire” on page 471.

2 **Tire size:** For details, see “Tire size” on page 546.

3 **DOT and Tire Identification Number (TIN):** For details, see “DOT and Tire Identification Number (TIN)” on page 546.

4 **Load limit at maximum cold tire inflation pressure:** For details, see “Checking and replacing tires” on page 554.

5 **Maximum cold tire inflation pressure:** This means the pressure to which a tire may be inflated. For recommended cold tire inflation pressure, see “Specifications” on page 532.

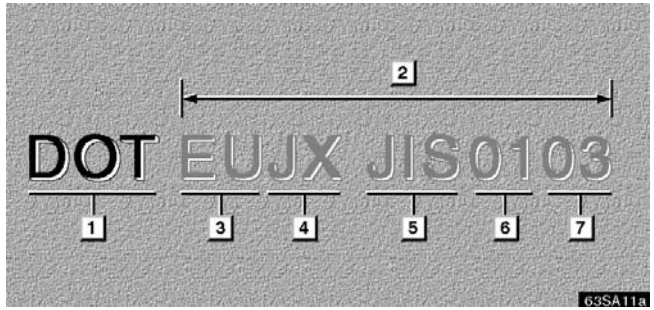
6 **Tire ply composition and materials :** Plies mean a layer of rubber−coated parallel cords. Cords mean the strands forming the plies in the tire.

7 **Location of tread wear indicators:** For details, see “Checking and replacing tires” on page 554.

8 **“TUBELESS” or “TUBE TYPE”:** A tubeless tire does not have a tube inside the tire and air is directly filled in the tire. A tube type tire has a tube inside the tire and the tube maintains the air pressure.

9 **Radial tires or bias−ply tires :** A radial tire has “RADIAL” on the sidewall. A tire not marked with “RADIAL” is a bias−ply tire.

DOT and Tire Identification Number (TIN)

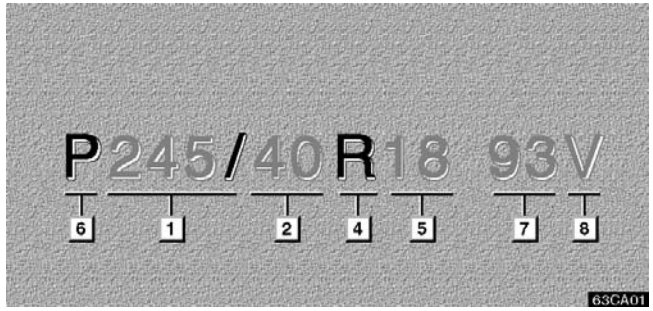


▶***The illustration indicates typical DOT and Tire Identification Number (TIN)***

1 ***"DOT" symbol***
2 ***Tire Identification Number (TIN)***
3 ***Tire manufacturer's identification mark***
4 ***Tire size code***
5 ***Manufacturer's optional tire type code (3 or 4 letters)***
6 ***Manufacturing week***
7 ***Manufacturing year***

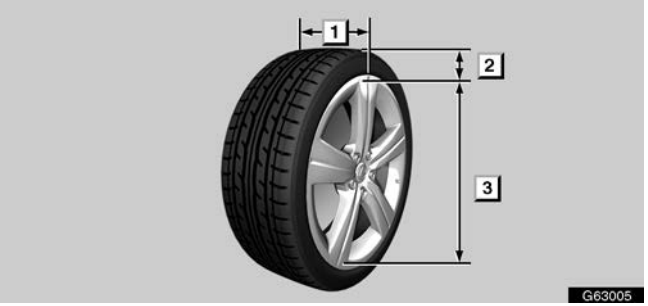
The "DOT" symbol certifies that the tire conforms to applicable Federal Motor Vehicle Safety Standards.

Tire size



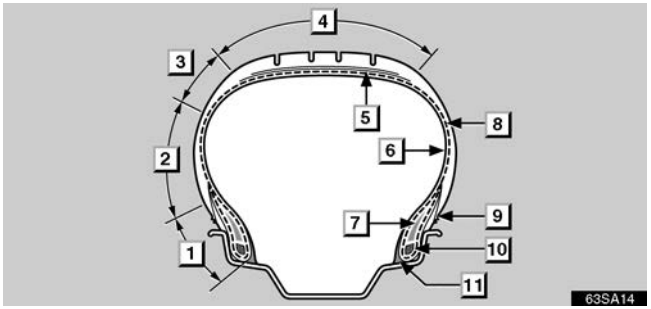
The illustrations indicate typical tire sizes.

1 ***Tire use (P=Passenger car, T=Temporary use)***
2 ***Section width (in millimeters)***
3 ***Aspect ratio (tire height to section width)***
4 ***Speed category (alphabet with one letter)***
5 ***Tire construction code (R=Radial, D=Diagonal)***
6 ***Wheel diameter (in inches)***
7 ***Load index (2 digits or 3 digits)***
8 ***Speed symbol (alphabet with one letter)***



▶ 1 ***Section width***
2 ***Tire height***
3 ***Wheel diameter***

Name of each section of tire



▶ 1 ***Bead***
2 ***Sidewall***
3 ***Shoulder***
4 ***Tread***
5 ***Belt***
6 ***Inner liner***
7 ***Reinforcing rubber***
8 ***Carcass***
9 ***Rim lines***
10 ***Bead wires***
11 ***Chafer***

Uniform tire quality grading

This information has been prepared in accordance with regulations issued by the National Highway Traffic Safety Administration of the U.S. Department of Transportation. It provides the purchasers and/or prospective purchasers of Lexus vehicles with information on uniform tire quality grading.

Your Lexus dealer will help answer any questions you may have as you read this information.

DOT quality grades − All passenger vehicle tires must conform to Federal Safety Requirements in addition to these grades. Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example: Treadwear 200 Traction AA Temperature A

Treadwear – The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and a half (1 – 1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction AA, A, B, C – The traction grades, from highest to lowest, are AA, A, B and C, and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

Warning: The traction grade assigned to this tire is based on braking (straight ahead) traction tests and does not include cornering (turning) traction.

Temperature A, B, C – The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Warning: The temperature grades for this tire are established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

Glossary of tire terminology

Tire related term	Meaning
Cold tire inflation pressure	tire pressure when the vehicle has been parked for at least 3 hours or more, or it has not been driven more than 1.5 km or 1 mile under that condition
Maximum inflation pressure	the maximum cold inflation pressure to which a tire may be inflated and it is shown on the sidewall of the tire
Recommended inflation pressure	cold tire inflation pressure recommended by a manufacturer
Accessory weight	the combined weight (in excess of those standard items which may be replaced) of automatic transmission, power steering, power brakes, power windows, power seats, radio, and heater, to the extent that these items are available as factory–installed equipment (whether installed or not)
Curb weight	the weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil, and coolant, and, if so equipped, air conditioning and additional weight optional engine
Maximum loaded vehicle weight	the sum of — (a) curb weight; (b) accessory weight; (c) vehicle capacity weight; and (d) production options weight

Tire related term	Meaning
Normal occupant weight	68 kg (150 lb.) times the number of occupants specified in the second column of Table 1 that follows
Production options weight	the combined weight of those installed regular production options weighing over 2.3 kg (5 lb.) in excess of those standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim
Vehicle capacity weight (Total load capacity)	the rated cargo and luggage load plus 68 kg (150 lb.) times the vehicle's designated seating capacity
Intended outboard sidewall	(a) the sidewall that contains a whitewall, bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire, or (b) the outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle
Occupant distribution	distribution of occupants in a vehicle as specified in the third column of Table 1 that follows
Rim	a metal support for a tire or a tire and tube assembly upon which the tire beads are seated
Rim diameter (Wheel diameter)	nominal diameter of the bead seat

Tire related term	Meaning
Rim size designation	rim diameter and width
Rim type designation	the industry of manufacturer's designation for a rim by style or code
Rim width	nominal distance between rim flanges
Vehicle maximum load on the tire	the load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two
Vehicle normal load on the tire	the load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight (distributed in accordance with Table 1 that follows) and dividing by two
Weather side	the surface area of the rim not covered by the inflated tire

Table 1 – Occupant loading and distribution for vehicle normal load for various designated seating capacities

Designated seating capacity, Number of occupants	Vehicle normal load, Number of occupants	Occupant distribution in a normally loaded vehicle
2 through 4	2	2 in front
5 through 10	3	2 in front, 1 in second seat

RUN−FLAT TIRES

This vehicle can be equipped with either run−flat tires (RFT) or standard tires. You may continue driving on the vehicle with run−flat tires even if any tire goes flat. It may be able to run for a maximum of 160 km (100 miles) at a speed below 90 km/h (55 mph) after the low tire pressure warning light comes on. When you drive your vehicle after the low tire pressure warning light comes on, the tire must be replaced. Do not use the repaired tire.

A “RFT” or “DSST” mark is molded on the sidewall of the run−flat tire.

If you cannot distinguish between the standard tire and run−flat tire, consult Lexus dealer.

If you have a flat tire, you have to take a different action depending on whether the tires are standard tires or run−flat tires.

Run−flat tires characteristics:

The vehicle with run−flat tires helps you to continue driving for up to 160 km (100 miles) at the moderate speed and do not ever exceed 90 km/h (55 mph) even with a flat tire. After such usage, the tire must be replaced. If you are not sure, consult your Lexus dealer. If you have a flat tire, decrease the speed and drive at lower speed to reduce the extent to which the tire is damaged.

However, in some conditions (such as at high temperatures), you could not continue driving for up to 160 km (100 miles).

The use of non−genuine wheels may prohibit optimum performance.

The run−flat tires equipped on this vehicle are ones dedicated for GS430/300. Do not use them on another model.

Do not mix run−flat tires with standard tires.

The tire warranty book covers the detailed information on run−flat tires. For details, see the tire warranty book.

Tire pressure warning system

The tire pressure warning system is equipped to warn you of the low tire inflation pressure. For details, see “Tire pressure warning system” on page 433.

TYPES OF TIRES

Determine what kind of tires your vehicle is originally equipped with.

1. Summer tires

Summer tires are high–speed capability tires best suited to highway driving under dry conditions.

Since summer tires do not have the same traction performance as snow tires, summer tires are inadequate for driving on snow–covered or icy roads. For driving on snow–covered or icy roads, we recommend using snow tires. If installing snow tires, be sure to replace all four tires.

2. All season tires

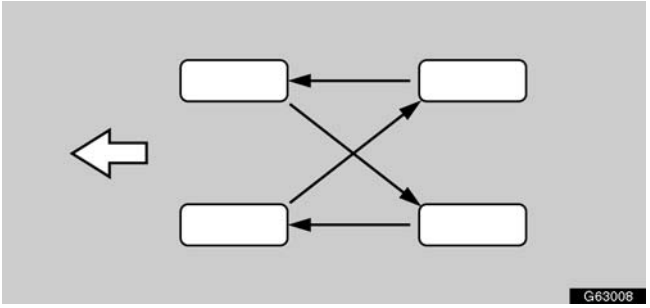
All season tires are designed to provide better traction in snow and to be adequate for driving in most winter conditions, as well as for use all year round.

All season tires, however, do not have adequate traction performance compared with snow tires in heavy or loose snow. Also, all season tires fall short in acceleration and handling performance compared with summer tires in highway driving.

⚠ CAUTION

- **Do not mix summer and all season tires on your vehicle as this can cause dangerous handling characteristics, resulting in loss of control.**
- **Do not use tires other than the manufacturer's designated tires, and never mix tires or wheels of the sizes different from the originals as this could result in loss of control and could cause death or serious injury.**

ROTATING TIRES



To equalize tire wear and help extend tire life, Lexus recommends that you rotate your tires according to the maintenance schedule. (For scheduled maintenance information, please refer to the "Owner's Manual Supplement / Scheduled Maintenance".) However, the most appropriate timing for tire rotation may vary according to your driving habits and road surface conditions.

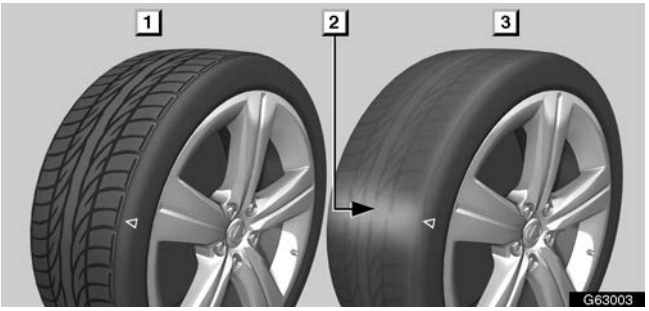
The wheel assemblies must be rotated as illustrated above.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire inflation pressure, improper wheel alignment, out–of–balance wheels, or severe braking.

Before storing radial, snow or studded tires, mark the direction of rotation and be sure to install them in the same direction when using them again. Tires should be stored in a cool dry place.

CHECKING AND REPLACING TIRES

When to replace your tires



▶ 1 *New tread* 2 *Tread wear indicator*
3 *Worn tread*

Replace the tires when the tread wear indicators show. The location of tread wear indicators is shown by the "TWI" or "Δ" marks, etc., molded on the sidewall of each tire.

The tires on your Lexus have built–in tread wear indicators to help you know when the tires need replacement. When the tread depth wears to 1.6 mm (0.06 in.) or less, the indicators will appear. If you can see the indicators in two or more adjacent grooves, the tire should be replaced.

Vehicles equipped with 245/40R18 93Y or P245/40R18 93V tires: Your Lexus has been fitted with specially developed tires which provide exceptional dynamic performance under general road conditions. However your riding comfort may worsen a little and road noise may increase during driving. You may also notice that your tires will wear more rapidly and tire grip performance will be reduced on the snowy and/or icy roads when compared to standard tires. Be sure to have snow tires or tire chains on the snowy and/or icy roads and drive carefully with the speed appropriate for road conditions.

NOTICE

Low profile tire like 245/40R18 93Y or P245/40R18 93V may have greater damage than usual tires to its tire wheel when receiving impact from the road surface. Therefore, pay attention to the following.

- ***Be sure to use with proper tire inflation pressure. If the tire inflation pressure is low, the tire may have greater damage. For detailed information about tire inflation pressure, see page 534.***
- ***Avoid driving onto high, sharp−edged objects and other road hazards. Failure to do so can lead to severe tire damage.***

The effectiveness of snow tires is lost if the tread wears down below 4 mm (0.16 in.).

If you have tire damage such as cuts, splits, cracks deep enough to expose the fabric, or bulges indicating internal damage, the tire should be replaced.

If a tire often goes flat or cannot be properly repaired due to the size or location of a cut or other damage, it should be replaced. If you are not sure, consult with your Lexus dealer.

If air loss occurs while driving, do not continue driving. Driving even a short distance can damage a tire beyond repair.

Any tires which are over 6 years old must be checked by a qualified technician even if damage is not obvious.

Tires deteriorate with age even if they have never or seldom been used.

This applies also to the spare tire and tires stored for future use.

NOTICE

- ***When you purchase new tires, consult your Lexus dealer. If you change from run−flat tires to standard tires, a spare tire should also be equipped.***
- ***When the tires must be repaired or replaced, have them repaired or replaced by Lexus dealer or authorized dealer. The tire pressure sensors will be affected by the installation or removal of tires.***
- ***When the tires must be replaced, replace the grommets for tire pressure sensors as well.***

Tire selection

When replacing a tire, use a tire of the same size and construction, and the same or greater maximum load as the originally installed tires. Also, all the tires must be the same brand and have the same tread patterns.

Using any other size or type of tire may seriously affect handling, ride, speedometer/odometer calibration, ground clearance, and clearance between the body and tires or snow chains.

Check that the maximum load of the replaced tire is greater than 1/2 of the Gross Axle Weight Ratings (GAWR) of either the front axle or the rear axle, whichever is greater. As for the maximum load of the tire, see the load limit at maximum cold tire inflation pressure mentioned on the sidewall of the tire, and as for the Gross Axle Weight Ratings (GAWR), see the Certification Label. For details about the Certification Label and sidewall of the tire, see pages 500 and 542.

⚠ CAUTION

Observe the following instructions. Otherwise, an accident may occur resulting in death or serious injuries.

- **Do not mix radial, bias belted, or bias−ply tires on your vehicle, as this may cause dangerous handling characteristics resulting in loss of control.**
- **Do not use tires other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control.**

INSTALLING SNOW TIRES AND CHAINS

When to use snow tires or chains

Snow tires or chains are recommended when driving on snow or ice.

On wet or dry roads, conventional or radial tires provide better traction than snow or studded tires.

Snow tire selection

If you need snow tires, select tires of the same size, construction and load capacity as the originally installed tires. Also, all the tires must be the same brand and have the same tread patterns.

Do not use tires other than stated above. Since your vehicle has radial tires as original equipment, make sure your snow tires also have radial construction. Do not install studded tires without first checking local regulations for possible restrictions.

CAUTION

Observe the following instruction. Otherwise, an accident may occur resulting in death or serious injuries.

- **Do not use snow tires other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control.**

Snow tire installation

Snow tires should be installed on all wheels.

Installing snow tires on the rear wheels only can lead to an excessive difference in road grip capability between the front and rear tires which could cause loss of vehicle control.

CAUTION

- **Do not drive with the snow tires incorrectly inflated.**
- **Never drive over 120 km/h (75 mph) with any type of snow tires.**

Tire chain selection

Regulations regarding the use of tire chains vary according to location or type of road. Always check local regulations before installing chains.

Use SAE Class "S" type radial tire chains, with the exception of radial cable chains or V–bar type chains.

Chain installation

Install the chains on the rear tires as tightly as possible. Do not use tire chains on the front tires. Retighten chains after driving 0.5 − 1.0 km (1/4 − 1/2 mile).

When installing chains on your tires, carefully follow the instructions of the chain manufacturer.

CAUTION

- **Do not exceed 50 km/h (30 mph) or the chain manufacturer's recommended speed limit, whichever is lower.**
- **Drive carefully avoiding bumps, holes, and sharp turns, which may cause the vehicle to bounce.**
- **Avoid sharp turns or locked−wheel braking, as use of chains may adversely affect vehicle handling.**
- **When driving with chains installed, be sure to drive carefully. Slow down before entering curves to avoid losing control of the vehicle. Otherwise an accident may occur.**

NOTICE

- ***When the snow tires must be repaired or replaced, have them repaired or replaced by Lexus dealer or authorized tire dealer. The tire pressure sensor will be affected by the installation or removal of snow tires.***
- ***When the snow tires must be replaced, replace the grommets for tire pressure sensors as well.***
- ***Do not attempt to use a tire chain on the compact spare tire, as it may result in damage to the vehicle as well as the tire.***

If the chains are installed, the tire pressure warning system may not operate properly. See "Tire pressure warning system" on page 433.

REPLACING WHEELS

As you might have difficulty in identifying a flat or deflated tire, a tire pressure warning system is provided on this vehicle.

When replacing the wheels, be sure to install tire pressure sensors on the wheels.

There are 2 ways to set up the tire pressure sensors.

a. Remove the sensor from the old wheel and install it to the new wheel.

b. Use a new wheel and sensor.

You have to register an ID code for a new sensor. Up to 2 sets of codes can be registered. As one ID for the originally installed sensor is registered at “MAIN” of the selector switch, use the “2nd” position to register an ID for the new sensor.

You do not need to re−register the ID code for any other replacements. For the use of the originally installed tires, put the selector switch at “MAIN” and for the use of tires purchased later, put the switch at “2nd”. For the sensor selector switch, see page 442.

⚠ CAUTION

- **Have the tires, wheels or sensors replaced and ID codes registered by Lexus dealer. If you need sensors, purchase from Lexus dealer.**
- **The sensor nuts should always be tightened to a torque of 4 N·m (0.4 kgf·m, 2.9 ft·lbf).**
- **The use of non−genuine wheels will cause the tire pressure sensor to transmit the electronic code in different manner, resulting in the failure of the system.**

When to replace your wheels

If you have wheel damage such as bending, cracks or heavy corrosion, the wheel should be replaced.

If you fail to replace a damaged wheel, the tire may slip off the wheel or cause loss of handling control.

Replacement with used wheels is not recommended as they may have been subjected to rough treatment or high mileage and could fail without warning. Also, bent wheels which have been straightened may have hidden structural damage and therefore should not be used. Never use an inner tube in a leaking wheel which is designed for a tubeless tire.

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 offset.

Correct replacement wheels are available at your Lexus dealer.

A wheel of a different size or type may adversely affect handling, wheel and bearing life, brake cooling, speedometer/odometer calibration, stopping ability, headlight aim, bumper height, vehicle ground clearance, and tire or snow chain clearance to the body and chassis.

CAUTION

Observe the following instruction. Otherwise, an accident may occur resulting in death or serious injuries.

- **Do not use wheels other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control.**

ALUMINUM WHEEL PRECAUTIONS

- When installing aluminum wheels, check that the wheel nuts are tight after driving your vehicle the first 1600 km (1000 miles).
- If you have rotated, repaired, or changed your tires, check that the wheel nuts are still tight after driving 1600 km (1000 miles).
- When using tire chains, be careful not to damage the aluminum wheels.
- Use only Lexus wheel nuts and wrench designed for your aluminum wheels.
- When balancing your wheels, use only Lexus balance weights or equivalent and a plastic or rubber hammer.
- As with any wheel, periodically check your aluminum wheels for damage. If damaged, replace immediately.

SUSPENSION AND CHASSIS

⚠ CAUTION

Do not modify the suspension/chassis with lift kits, spacers, springs, etc. It can cause dangerous handling characteristics, resulting in loss of control.

SECTION 6 – 4

SERVICE PROCEDURES AND SPECIFICATIONS

Electrical components

Specifications 564
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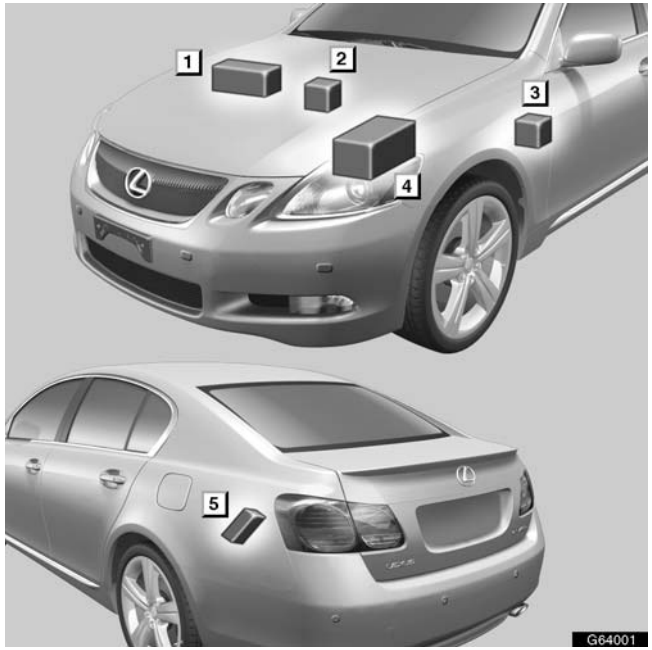
Battery recharging precautions 574
Checking and replacing the blade type fuses 574
Checking the cartridge type fuses 577
Adding washer fluid 579
Checking the headlight aim 579
Replacing light bulbs 584

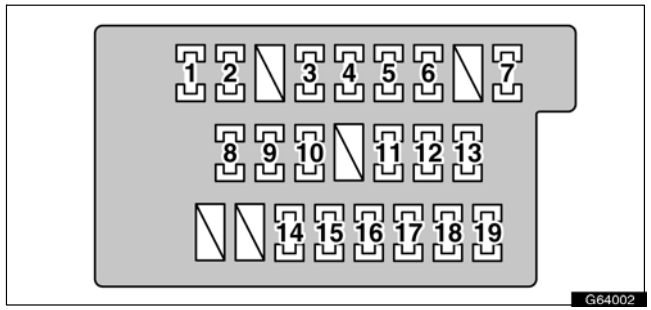
SPECIFICATIONS

− FUSE LOCATION

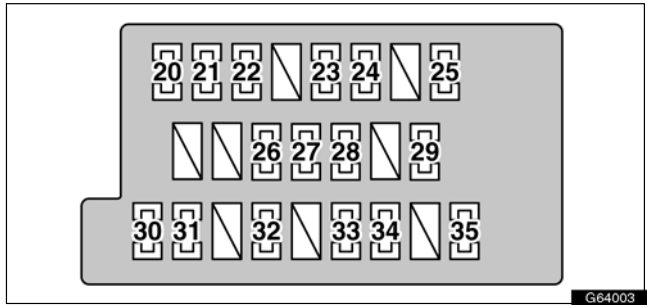


▶ 1 *Engine compartment*
2 *Left side kick panel*
3 *Right side kick panel*
4 *Engine compartment* 5 *Trunk*

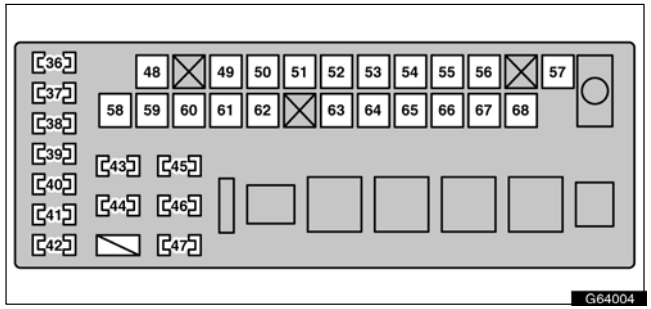
− FUSES



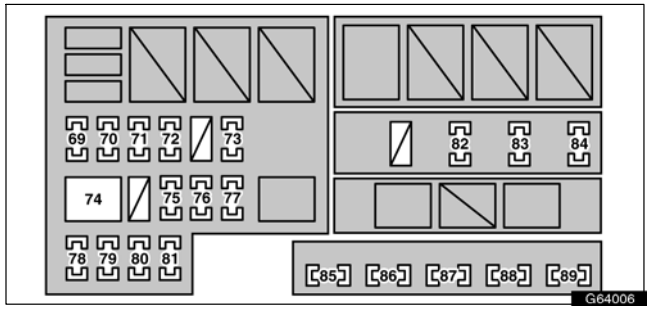
▶*Right side kick panel*



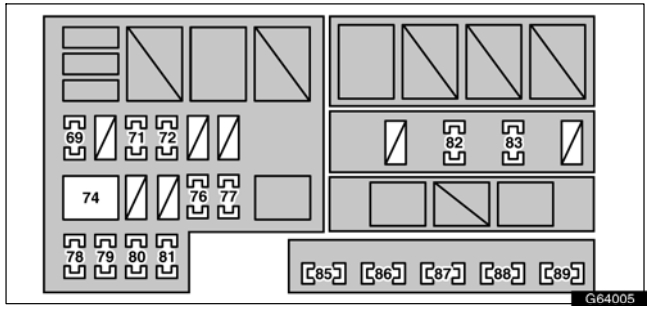
▶*Left side kick panel*



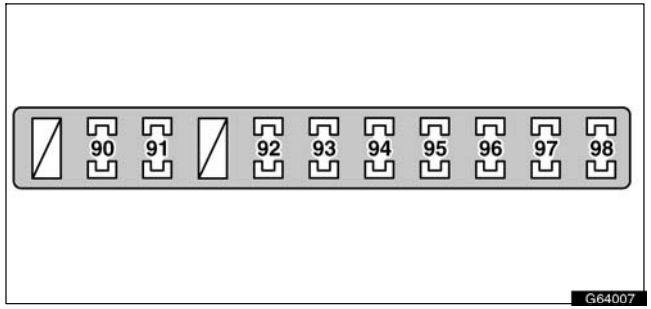
▶*Engine compartment*



▶*Engine compartment (GS300)*



▶*Engine compartment (GS430)*



▶*Trunk*

No.	FUSE	AMPERE	CIRCUIT
1	STR LOCK	25	Steering lock system
2	SECURITY	7.5	Smart access system with push−button start
3	TI &TE	20	Power tilt and telescopic steering wheel, Multiplex communication system
4	AM1	7.5	Starting system
5	STOP SW	7.5	Stop/tail lights, Multi−port fuel injection system/sequential multiport fuel injection system, Starting system, Electronic control brake system, Vehicle stability control system, Shift lock system
6	OBD	7.5	On−board diagnosis system
7	FR P/SEAT RH	30	Power seat system
8	AIR SUS	20	Electronic modulated suspension
9	PWR OUTLET	15	Power outlet
10	CIG	15	Cigarette lighter
11	ACC	7.5	Multiplex communication system, Smart access system with push−button start, Rear view monitor system, Audio system, Air conditioning system

No.	FUSE	AMPERE	CIRCUIT
12	IGN	10	Multi−port fuel injection system/sequential multiport fuel injection system, SRS airbag system, Stop/tail lights, Steering lock system, Electronic control brake system
13	GAUGE	7.5	Gauges and meters
14	ECU−IG RH	10	Power tilt and telescopic steering wheel, Multiplex communication system, Smart access system with push−button start, Audio system, Air conditioning system, Shift lock system, Tire pressure warning system, Combination switch
15	FR S/HTR RH	15	Seat heater, Heated and ventilated seats
16	RH−IG	7.5	Seat heater switches, Front right door control system, Rear right door control system, Capacitor, Combination switch, Seat belt pretensioners, Intuitive parking assist
17	AM2	15	Starting system

No.	FUSE	AMPERE	CIRCUIT
18	FR DOOR RH	20	Front right door control system (Power door lock system, Power rear view mirror control system, Door courtesy light, Outside rear view mirror heater, Power window), Multiplex communication system
19	RR DOOR RH	20	Rear right door control system (Power door lock system, Door courtesy light, Power window)
20	RR DOOR LH	20	Rear left door control system (Power door lock system, Door courtesy light, Power window)
21	FR DOOR LH	20	Front left door control system (Power door lock system, Power rear view mirror control system, Door courtesy light, Outside rear view mirror heater, Power window)
22	RAD NO.3	10	Audio system
23	H−LP LVL	7.5	Adaptive front lighting system (AFS), Automatic headlight leveling control system

No.	FUSE	AMPERE	CIRCUIT
24	LH−IG	10	Charging system, Headlight cleaners, Exhaust gas sensor, Rear window defogger, Electric cooling fans, Rear left door control system, Front left door control system, Emergency flashers, Automatic transmission, Seat belt pretensioners, Intuitive parking assist
25	FR WIP	30	Windshield wipers and washer
26	PANEL	7.5	Steering switch illumination, Audio system, Glove box light, Automatic transmission selector lever illumination, Console box light, Adaptive variable suspension switch illumination, Cigarette lighter illumination, Air conditioning system, Traction control off switch illumination, Driving pattern selector switch, Seat heater or Heated and ventilated seat switches, Register ILL RH, Register ILL LH, Register ILL CTR
27	FUEL OPEN	10	Fuel filler door opener, Trunk lid opener

No.	FUSE	AMPERE	CIRCUIT
28	ECU−IG LH	10	Vehicle stability control system, Electronic control brake system, Yaw rate and G sensor, Steering sensor, Cruise control system, Dynamic radar cruise control system, Electronic power steering system, Variable gear ratio steering system, Rear view monitor system, Four−wheel drive system, Front controller, Moon roof, Rain sensor
29	FR S/HTR LH	15	Seat heater, Heated and ventilated seats
30	FR P/SEAT LH	30	Power seat system
31	A/C	7.5	Air conditioning system
32	TV	7.5	Audio system, Air conditioning system, Rear view monitor system
33	TRK OPN	10	Trunk lid opener
34	LH−B	10	Theft deterrent system
35	S/ROOF	25	Moon roof
36	ECU−B	10	Variable gear ratio steering system, Electronic power steering system, Driver's seat switch module
37	ABS MAIN3	10	Electronic control brake system

No.	FUSE	AMPERE	CIRCUIT
38	TURN−HAZ	15	Turn signal lights, Emergency flashers
39	IG2 MAIN	20	"IG2", "GAUGE" and "IGN"
40	RAD NO.2	30	Audio system
41	D/C CUT	20	"DOME " and "MPX−B"
42	RAD NO.1	30	Audio system
43	MPX−B	10	Multiplex communication system, Front controller, Door control system (Power door lock system, Door courtesy lights, Power windows, Power rear view mirror control system, Outside rear view mirror heaters), Power seat system, Steering sensors, Electronic control brake system, Power tilt and telescopic steering system, Gauges and meters, Combination switch
44	DOME	10	Foot lights, Vanity lights, Gauges and meters, Steering spot light, Steering switch illumination, Rear personal lights, Automatic transmission selector lever spot light, Front personal lights
45	ABS MAIN2	10	Electronic control brake system
46	ABS MOTOR	30	Anti−lock brake system

No.	FUSE	AMPERE	CIRCUIT
47	ABS MAIN1	10	Capacitor
48	E/G−B	60	“FR CTRL BATT”, “ETCS” and “ALT−S”
49	ABS1	50	Vehicle stability control system, “ABS MAIN1”, “ABS MAIN2” and “ABS MTR”
50	RH J/B−B	30	“AM2”, “DOOR FR” and “DOOR RR”
51	VGRS	40	Variable gear ratio steering system
52	MAIN	30	“H−LP R LWR” and “H−LP L LWR”
53	STARTER	30	Starting system
54	LH J/B−B	30	“FL DOOR”, “RL DOOR” and “RAD No.3”
55	P/I−B	60	Multi−port fuel injection system/sequential multiport fuel injection system
56	EPS	80	Electronic power steering system
57	ALT	150	“RH J/B−AM”, “LH J/B−AM”, “E/G−AM”, “RR JB”, “HEATER”, “DEFOG”, “FAN1”, “FAN2”, “ABS2”, “ABS MOTOR”, “ABS MAIN1”, and “ABS MAIN2”

No.	FUSE	AMPERE	CIRCUIT
58	RR J/B	80	“STOP LP R”, “STOP LP L”, “RR−B”, “RR TAIL”, “RR FOG”, “RR−IG1”, “PSB”, and “RR S/SHADE”
59	GLW PLG1	50	Glow plug heater
60	RH J/B−AM	80	“AM1”, “OBD”, “STOP SW”, “TI &TE”, “PWR OUTLET”, “FR P/SEAT RH”, “STR LOCK”, “ECU−IG RH”, “RH−IG”, “ACC”, “CIG”, “SECURITY”, “FR S/HTR RH”, and “AIR SUS”
61	ABS2	30	Vehicle stability control system, Anti−lock brake system
62	DEFOG	50	Rear window defogger, Noise filter
63	FAN1	40	Electric cooling fans
64	HEATER	50	Air conditioning system
65	GLW PLG2	50	Glow plug heater
66	E/G−AM	60	“H−LMP CLN”, “FR CTRL−AM” and “A/C COMP”
67	LH J/B−AM	80	“S/ROOF”, “FR P/SEAT LH”, “TV”, “FR S/HTR LH”, “ECU−IG LH”, “FR WIP”, “H−LP LVL”, “LH−IG”, “FUEL OPEN”, “A/C”, “PANEL”, and “LH−B”
68	FAN2	60	No circuit
69	FR CTRL−B	25	“H−LP UPR” and “HORN”

No.	FUSE	AMPERE	CIRCUIT
70	A/F	15	Multi−port fuel injection system/sequential multiport fuel injection system
71	ETCS	10	Multi−port fuel injection system/sequential multiport fuel injection system
72	ALT−S	7.5	Charging system
73	EM VLV	10	No circuit
74	H−LP CLN	30	Headlight cleaner system
75	A/C COMP	7.5	Air conditioning system
76	DEICER	25	No circuit
77	FR CTRL−AM	30	“FR TAIL”, “FR FOG” and “WASHER”
78	IG2	10	Starting system
79	EFI NO.2	10	Multi−port fuel injection system/sequential multiport fuel injection system, Evaporative system
80	H−LP R LWR	15	Right−hand headlight (low beam)
81	H−LP L LWR	15	Left−hand headlight (low beam)
82	F/PMP	25	Fuel pump

No.	FUSE	AMPERE	CIRCUIT
83	EFI	GS430: 25 GS300: 25	Multi−port fuel injection system/sequential multiport fuel injection system
84	INJ	20	Multi−port fuel injection system/sequential multiport fuel injection system
85	H−LP UPR	15	Headlights (high beam)
86	HORN	10	Horn
87	WASHER	20	Windshield wipers and washer
88	FR TAIL	10	Parking lights, Side marker lights
89	FR FOG	15	Front fog lights
90	RR S/SHADE	7.5	Rear electric sunshade
91	PSB	30	Pre−collision system
92	RR−IG2	10	No circuit
93	RR−IG1	10	Pre−collision system, Rear electric sunshade, Seat belt pretensioners
94	RR−B	10	Luggage compartment light, Noise filter
95	RR FOG	7.5	Rear fog lights
96	STOP LP L	10	Stoplights, Back up lights

No.	FUSE	AMPERE	CIRCUIT
97	STOP LP R	10	High mounted stoplights
98	RR TAIL	10	License plate lights, Tail lights, Rear side marker lights

CHECKING BATTERY CONDITION

Precautions

CAUTION

BATTERY PRECAUTIONS

The battery produces flammable and explosive hydrogen gas.

- **Do not cause a spark by contacting the battery terminals with tools.**
- **Do not smoke or light a match near the battery.**

The electrolyte contains poisonous and corrosive sulfuric acid.

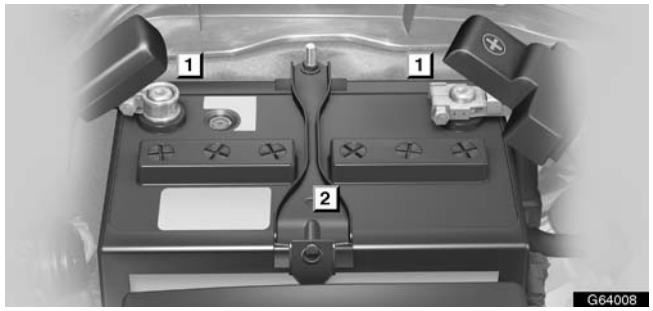
- **Avoid contact with eyes, skin or clothes.**
- **Never inhale or swallow electrolyte.**
- **Wear protective safety glasses when working near the battery.**
- **Keep children away from the battery.**

EMERGENCY MEASURES

- **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 medical office.**

- **If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel a pain or burn, get medical attention immediately.**
- **If electrolyte gets on your clothes, there is a possibility of its soaking through to your skin, so immediately take off the exposed clothing and follow the procedure above, if necessary.**
- **If you accidentally swallow electrolyte, drink a large quantity of water or milk. Follow with milk of magnesia, beaten raw egg or vegetable oil. Then go immediately for emergency help.**

Checking battery exterior



▶ 1 *Terminals* 2 *Hold−down clamp*

Check the battery for corroded or loose connections, cracks, or loose hold−down clamps.

1. If the battery is corroded, wash it off with a solution of warm water and baking soda. Coat the terminals with grease to prevent further corrosion.

2. If the connections are loose, tighten the clamp bolts – but do not overtighten.

3. Tighten the hold−down clamp only enough to keep the battery firmly in place. Overtightening may damage the battery case.

NOTICE

- ***Make sure the engine and all accessories are turned off before performing maintenance.***
- ***When checking the battery, remove the ground cable first and reinstall it last.***
- ***Be careful not to cause a short circuit with tools.***
- ***Take care no solution gets into the battery when washing it.***

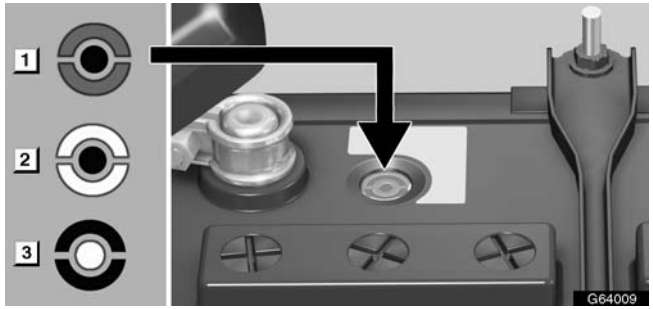
If the battery is disconnected or run down

The following functions may not operate correctly when you reconnect or replace the battery. In these cases, you should normalize each system referring to the following pages.

- Power windows (See page 59.)
- Moon roof (See page 134.)
- Variable gear ratio steering system (See page 424.)
- Intuitive parking assist (See page 380.)

Checking battery condition

Checking by indicator



Check the battery condition by the indicator color.

1 BLUE – Good condition.

2 WHITE – Charging necessary. Have the battery checked by your Lexus dealer.

3 RED – Have the battery checked by your Lexus dealer.

NOTICE

Do not refill the battery with water.

BATTERY RECHARGING PRECAUTIONS

During recharging, the battery is producing hydrogen gas.

Therefore, before recharging:

1. If recharging with the battery installed on the vehicle, be sure to disconnect the ground cable.

2. Make sure the power switch on the recharger is off when connecting the charger cables to the battery and when disconnecting them.

CAUTION

- **Always charge the battery in an unconfined area. Do not charge the battery in a garage or closed room where there is not sufficient ventilation.**
- **Only do a slow charge (5 A or less). Charging at a quicker rate is dangerous. The battery may explode causing personal injuries.**

NOTICE

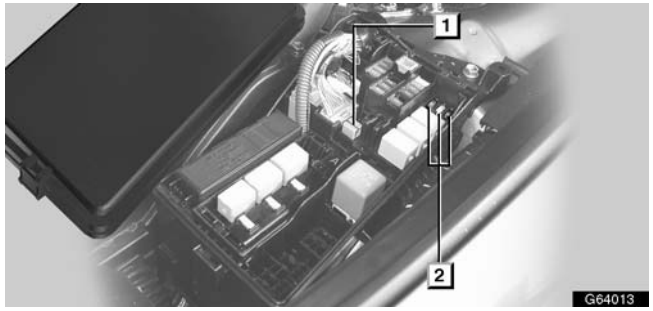
Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.

CHECKING AND REPLACING THE BLADE TYPE FUSES

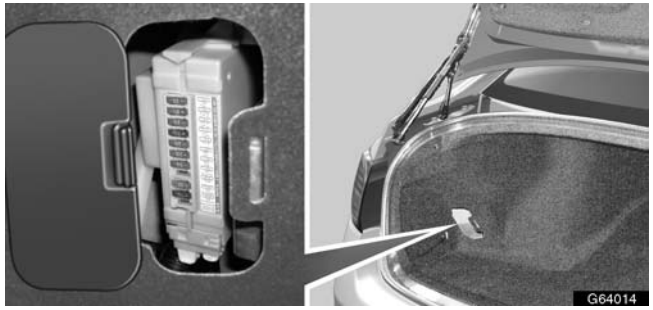
▶*Left side kick panel*

▶*Right side kick panel*

▶*Engine compartment*



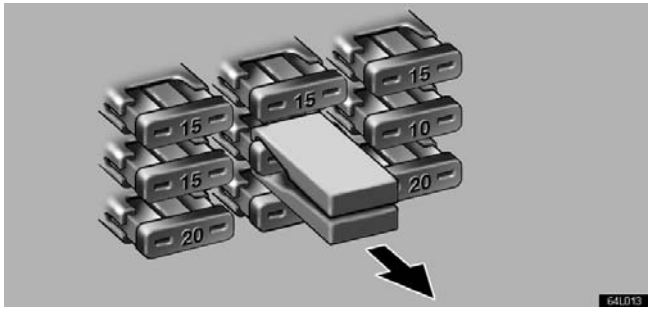
▶*Engine compartment* 1 *Pull−out tool* 2 *Spare fuses*



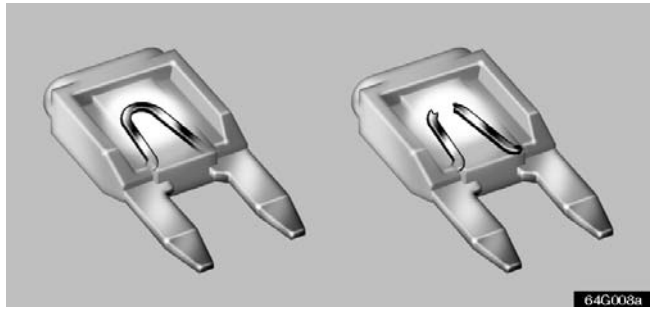
▶*Trunk*

1. Turn the engine switch off and open the fuse box lid.

Determine which fuse may be causing the problem. The lid of the fuse box shows the name of the circuit for each fuse.



2. Make sure the inoperative component is turned off. Pull the suspected fuse straight out with the pull−out tool and check it. If it has blown, push a new fuse into the clips.



▶Good ***▶Blown***

a. Look carefully at the fuse. If the thin wire is broken, the fuse has blown. If you are not sure or if it is too dark to see, try replacing the suspected fuse with one of the same value that you know is good.

b. Install only a fuse with the amperage rating designated on the fuse box lid.

If you do not have a spare fuse, in an emergency you can pull out the ”CIG”, ”RAD NO.1” or ”OBD” fuse, which may be dispensable for normal driving, and use it if its amperage rating is the same.

If you cannot use one of the same amperage, use one lower than, but as close to the amperage as possible. If the amperage is lower than that specified, the fuse might blow out again but this does not indicate anything wrong. Be sure to get the correct fuse as soon as possible and return the substitute to its original clips.

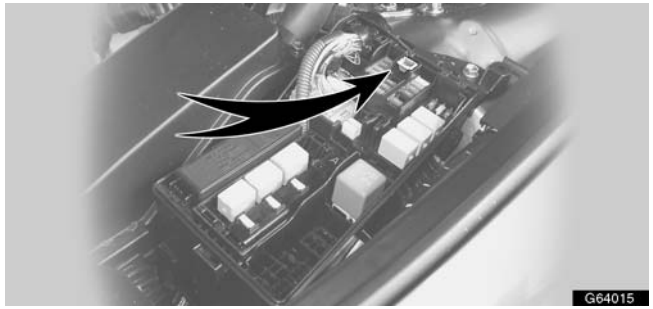
It is a good idea to purchase a set of spare fuses and keep them in your vehicle for emergencies.

If the new fuse immediately blows out, there is a problem with the electrical system. Have your Lexus dealer correct it as soon as possible.

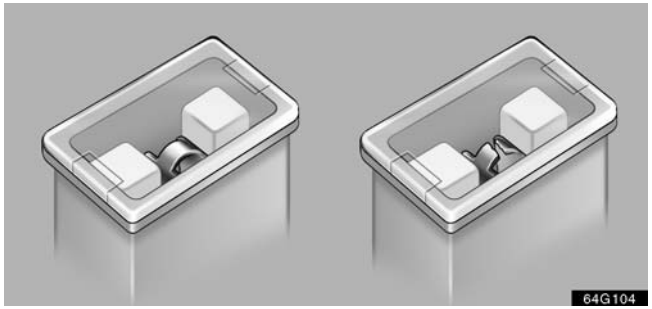
⚠ CAUTION

Never use a fuse with a higher amperage rating, or any other object, in place of a fuse. This may cause extensive damage and possibly a fire.

CHECKING THE CARTRIDGE TYPE FUSES



▶*Engine compartment*



▶*Good* ▶*Blown*

If the headlights or other electrical components do not work and the blade type fuses are O.K., check the cartridge type fuses. If any of the cartridge type fuses are blown, they must be replaced.

If there is an overload in the circuits from the battery, the fuses are designed to blow before the entire wiring harness is damaged.

⚠ CAUTION

Always use a genuine Lexus fuse or equivalent for replacement. Never install an ordinary wire − even for a temporary fix. This may cause extensive damage and possibly a fire.

NOTICE

Before replacing the fuses, have the cause of electrical overload determined and repaired by your Lexus dealer.

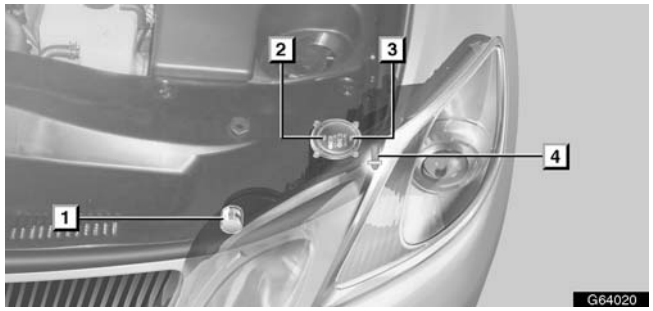
ADDING WASHER FLUID

If the washer tank becomes nearly empty, add washer fluid.

You may use plain water as washer fluid. However, in cold areas where temperatures range below the freezing point, use washer fluid containing antifreeze. This product is available at your Lexus dealer and most auto parts stores. Follow the manufacturer's directions for how much to mix with water.

NOTICE
Do not use engine antifreeze or any other substitute because it may damage your vehicle's paint.

CHECKING THE HEADLIGHT AIM

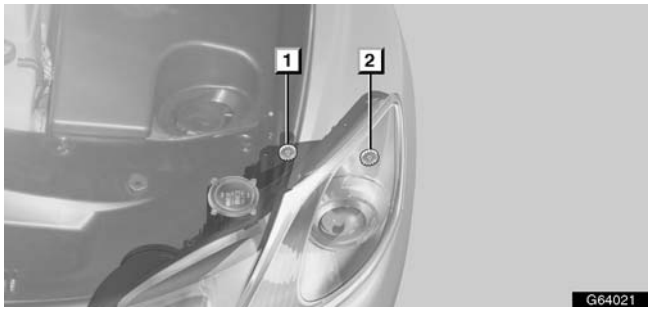


▶ 1 ***Beam angle gauge (horizontal movement for high beam)***
2 ***Beam angle gauge (vertical movement for high beam)***
3 ***Beam angle gauge (vertical movement for low beam)***
4 ***Beam angle gauge (horizontal movement for low beam)***

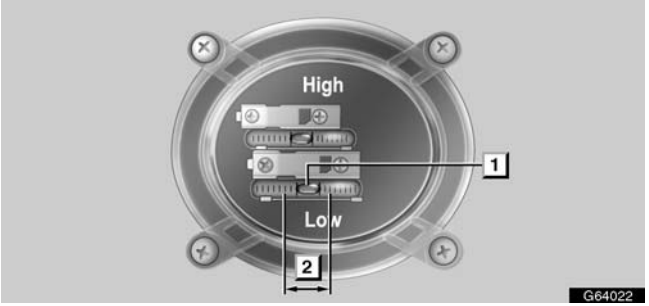
Before checking the headlight aim:

1. Be sure that the body around the headlight is not deformed.
2. Park the vehicle on a level spot.
3. The driver gets into the driver's seat and puts the vehicle in a state readying for a driving (with a full tank).
4. Bounce the vehicle several times.

Adjusting the headlight aiming (low beam)



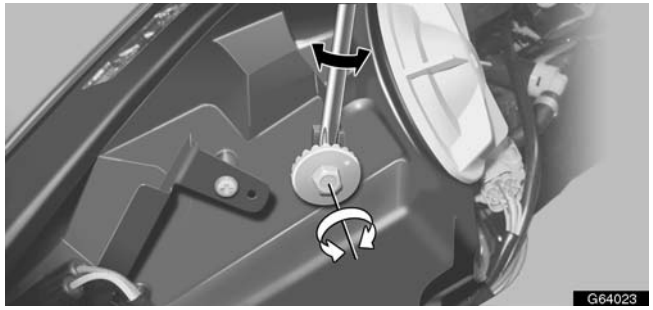
▶ 1 ***Adjusting bolt A***
2 ***Adjusting bolt B***



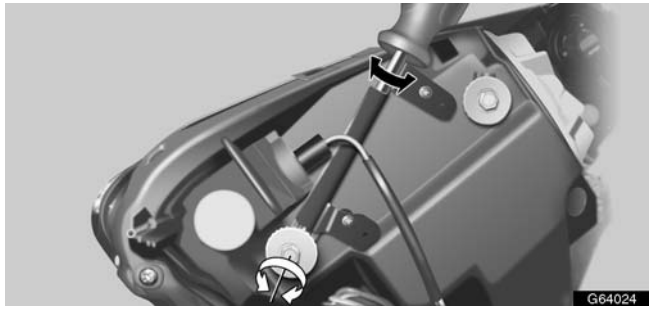
▶ 1 ***Bubble*** 2 ***Acceptable range***

Vertical movement gauge: The bubble of the gauge should not deviate from the center of the gauge by more than 2 marks to either side of the gauge.

If the bubble is out of the acceptable range of the beam angle gauge, adjust it using bolt A and B.



1. Turn the bolt A in either direction using a Phillips−head screwdriver. At this time, keep the turning direction and number of turns in mind.

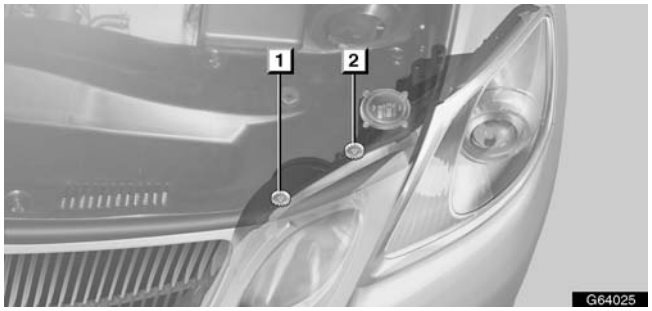


2. Turn the bolt B the same number of turns and in the same direction as step 1 using a Phillips−head screwdriver.

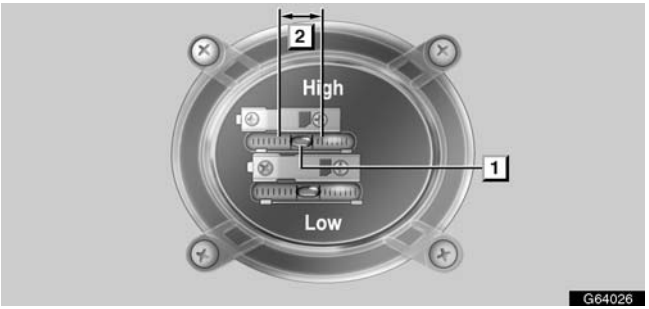
If you do not know or cannot find the original position, or if you feel that there is a large deviation, take the vehicle to your Lexus dealer to adjust the headlight aim.

After adjusting the headlight in the vertical direction, check that the light has been shifted from the adjusted position in the horizontal direction.

Adjusting the headlight aiming (high beam)



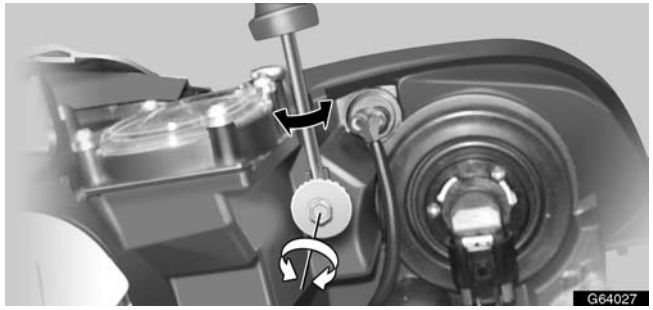
▶ 1 ***Adjusting bolt A***
2 ***Adjusting bolt B***



▶ 1 ***Bubble*** 2 ***Acceptable range***

Vertical movement gauge: The bubble of the gauge should not deviate from the center of the gauge by more than 2 marks to either side of the gauge.

If the bubble is out of the acceptable range of the beam angle gauge, adjust it using bolt A.

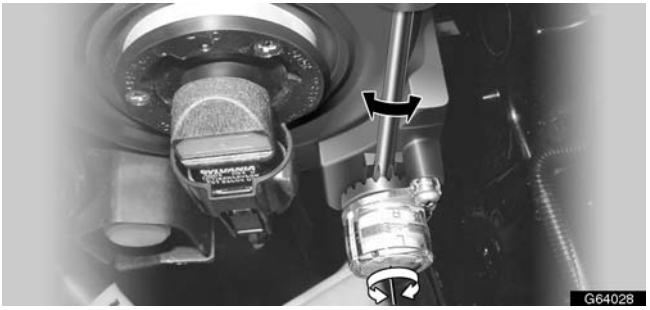


Turn the bolt A in either direction using a Phillips–head screwdriver.

▶ 1 ***Red line*** 2 ***Acceptable range***

Horizontal movement gauge: The red line should not deviate by more than 2 blue lines to either side of the gauge.

If the red line is out of the acceptable range of the beam angle gauge, adjust it using bolt B.



Turn the bolt B in either direction using a Phillips–head screwdriver.

If you do not know or cannot find the original position, or if you feel that there is a large deviation, take the vehicle to your Lexus dealer to adjust the headlight aim.

REPLACING LIGHT BULBS

The illustrations on the following pages show the locations of light bulbs. If it is necessary to replace a bulb, take your vehicle to your Lexus dealer as soon as possible. Use bulbs with the bulb numbers and wattage ratings given in the table.

The tail lights, stop lights, high mounted stoplight and rear side marker light consist of a number of LEDs. If any LED burns out, we recommend you take your vehicle to your Lexus dealer to have the light inspected as soon as possible.

⚠ CAUTION

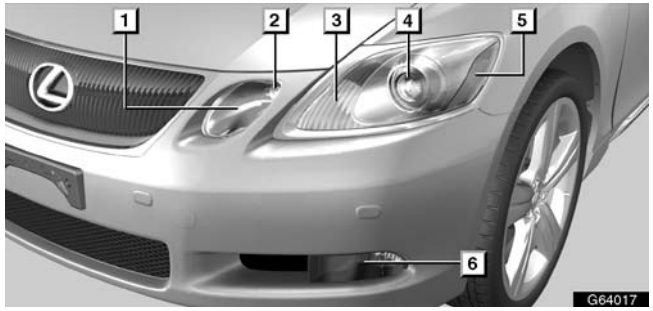
- **To prevent burning yourself, do not replace the light bulbs while they are hot.**
- **Halogen bulbs have pressurized gas inside and require special handling. They can burst or shatter if scratched or dropped. Hold a bulb only by its plastic or metal case. Do not touch the glass part of a bulb with bare hands.**
- **Do not touch the high voltage socket when the headlights turn on. 20000 V is momentarily generated and may cause severe injury by electric shock.**
- **Do not disassemble, repair or take apart the headlight bulbs, connector, power supply circuits and rotated components. Or you may be injured by electric shock. Call your dealer when the headlights fail to work or have to be replaced or disposed of.**

NOTICE

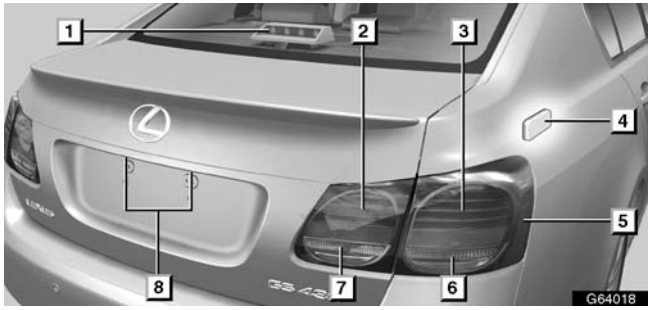
Only use a bulb of the listed type.

The inside of the lens of exterior lights such as headlights may temporarily fog up when the lens becomes wet in the rain or in a car wash. This is not a problem because the fogging is caused by the temperature difference between the outside and inside of the lens, just like the windshield fogs up in the rain. However, if there is a large drop of water on the inside of the lens, or if there is water pooled inside the light, contact your Lexus dealer.

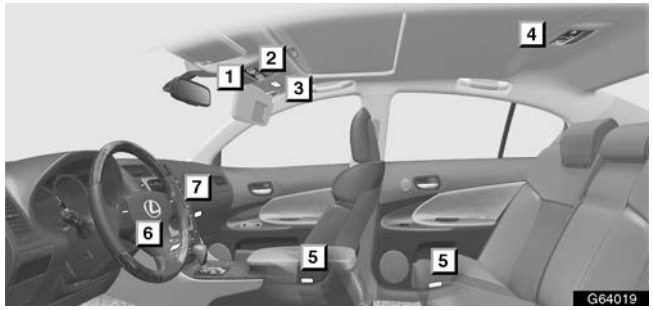
LIGHT LOCATION



	Light Bulbs	Bulb No.	W	Type
1	Headlight (High beam)	HB3	60	A
2	Parking light	–––	5	D
3	Front turn signal light	–––	21	E
4	Headlight (Low beam)	D4S	35	B
5	Front side marker light	194	5	D
6	Fog light	HB4	51	C



	Light Bulbs	Bulb No.	W	Type
1	High mounted stoplight	–––	3.6	G
2	Tail light	–––	0.9/0.5	G
3	Tail/stop light	–––	0.9/10.8	G
4	Trunk light	–––	5	F
5	Rear side marker light	–––	0.5	G
6	Rear turn signal light	–––	21	E
7	Back–up light	921	16	D
8	License plate light	–––	0.85	G



	Light Bulbs	Bulb No.	W	Type
1	Front interior lights	–––	0.1	G
2	Front seat spot lights	–––	0.1	G
3	Vanity lights	–––	8	D
4	Rear seat spot lights	–––	0.2	G
5	Door courtesy lights	–––	0.2	G
6	Foot lights	–––	0.2	G
7	Glove box light	–––	0.2	G

A: HB3 halogen bulbs
B: D4S discharge bulbs
C: HB4 halogen bulbs
D: Wedge base bulbs (clear)
E: Wedge base bulbs (amber)
F: Double end bulbs
G: LEDs (Light−emitting Diodes)

SECTION 6 – 5

SERVICE PROCEDURES AND SPECIFICATIONS

Body

Specifications 590
Protecting your vehicle from corrosion 591
Washing and waxing 592
Cleaning the interior 594

SPECIFICATIONS

− DIMENSIONS AND WEIGHT

Overall length	4825 mm (189.9 in.)
Overall width	1820 mm (71.6 in.)
Overall height Two−wheel drive models Four−wheel drive models	 1425 mm (56.1 in.)* 1435 mm (56.4 in.)*
Wheelbase	2850 mm (112.2 in.)
Tread – Front – Rear	1535 mm (60.4 in.) 1540 mm (60.6 in.)
Vehicle capacity weight (occupants + luggage)	370 kg (815 lb.)

*Unladen vehicle

− FUEL TANK

Capacity	71 L (18.7 gal., 15.6 Imp.gal.)

PROTECTING YOUR VEHICLE FROM CORROSION

Proper care of your Lexus can help ensure long–term corrosion prevention.

The most common causes of corrosion to your vehicle are:

- The accumulation of road salt, dirt and moisture in hard–to–reach areas under the vehicle.
- Chipping of paint or undercoating caused by minor accidents or by stones and gravel.

The following conditions will cause or accelerate corrosion of your vehicle, so it is important to keep your vehicle, particularly the underside, as clean as possible and to repair any damage to paint or protective coatings as soon as possible.

- The presence of road salt or dust control chemicals, salt in the air near the sea coast, industrial air pollution.
- High humidity, especially at temperatures just above freezing point.
- Certain parts of your vehicle are wet or damp for an extended period of time, even though other parts of the vehicle are dry.
- Components of the vehicle which do not dry quickly due to lack of proper ventilation are exposed to high ambient temperature.

To help prevent corrosion on your Lexus, follow these guidelines:

Keep your vehicle clean by regular washing. In addition, observe the following points.

- If you drive on salted roads in the winter or if you live near the ocean, you should hose off the undercarriage at least once a month to minimize corrosion.
- High pressure water or steam is effective for cleaning the vehicle's underside and wheel housings. Pay particular attention to these areas as it is difficult to see all the mud and dirt. It will do more harm than good to simply wet the mud and debris without removing them. The lower edge of doors, rocker panels and frame members have drain holes which should not be allowed to clog with dirt as trapped water in these areas can cause corrosion.
- Wash the underside of the vehicle thoroughly when winter is over.

See "Washing and waxing" on page 592 for more tips.

Check the condition of your vehicle's paint and trim. If you find any chips or scratches in the paint, touch them up immediately to prevent corrosion from starting. If the chips or scratches have gone through the bare metal, have a qualified body shop make the repair.

Check the interior of your vehicle. Water and dirt can accumulate under the floor mats and could cause corrosion. Occasionally check under the mats to make sure the area is dry. Be particularly careful when transporting chemicals, cleansers, fertilizers, salt, etc. These should be transported in proper containers. If a spill or leak should occur, immediately clean and dry the area.

Keep your vehicle in a well ventilated garage or a roofed place. Do not park your vehicle in a damp, poorly ventilated garage. If you wash your vehicle in the garage, or if you drive it covered with water or snow, your garage may be so damp as to cause corrosion. Even if your garage is heated, a wet vehicle can corrode if the ventilation is poor.

WASHING AND WAXING

Washing your Lexus

Keep your vehicle clean by regular washing.

The following cases may cause weakness to the paint or corrosion to the body and parts. Wash your vehicle as soon as possible.

- When driving in a coastal area
- When driving on a road sprinkled with antifreeze
- When exposed to coal tar, tree sap, bird droppings and carcass of an insect
- When driving in areas where there is a lot of smoke, soot, dust, iron dust or chemical substances
- When the vehicle becomes remarkably dirty with dust and mud

Hand−washing your Lexus

Work in the shade and wait until the vehicle body is not hot to the touch.

1. Rinse off loose dirt with a hose. Remove any mud or road salt from the underside of the vehicle or the wheel wells.

2. Wash with a mild car−wash soap, mixed according to the manufacturer's instructions. Use a soft cotton mitt and keep it wet by dipping it frequently into the wash water. Do not rub hard − let the soap and water remove the dirt.

Fuel filler door: Do not apply water (high–pressure car wash, for example) at or near the fuel tank inlet with the fuel filler door opened. If the water enters the air vent, you may experience trouble with refueling or rough engine idling.

Plastic wheel ornaments: The plastic wheel ornaments are damaged easily by organic substances. If any organic substances splash an ornament, be sure to wash them off with water and check if the ornament is damaged.

Aluminum wheels: Use only a mild soap or neutral detergent.

Plastic bumpers and side moldings: Wash carefully. Do not scrub with abrasive cleaners. The bumper and side molding faces are soft.

Exterior lights: Wash carefully. Do not use organic substances or scrub them with a hard brush. This may damage the surfaces of the lights.

Road tar: Remove with turpentine or cleaners that are marked safe for painted surfaces.

3. Rinse thoroughly – dried soap can cause streaking. In hot weather you may need to rinse each section right after you wash it.

4. To prevent water spots, dry the vehicle using a clean soft cotton towel. Do not rub or press hard – you might scratch the paint.

NOTICE

- ***Do not use organic substances (gasoline, kerosene, benzine or strong solvents), which may be toxic or cause damage.***
- ***Do not scrub any part of the vehicle with a hard brush, which may cause damage.***

Automatic car wash

Your vehicle may be washed in an automatic car wash, but remember that the paint can be scratched by some types of brushes, unfiltered washing water, or the washing process itself. Scratching reduces paint durability and gloss, especially on darker colors. The manager of the car wash should be able to advise you whether the process is safe for the paint on your vehicle.

Waxing your Lexus

Polishing and waxing is recommended to maintain the original beauty of your Lexus' finish.

Apply wax once a month or if the vehicle surface does not repel water well.

1. Always wash and dry the vehicle surface before you begin waxing, even if you are using a combined cleaner and wax.

2. Use a good quality polish and wax. If the finish has become extremely weathered, use a car–cleaning polish, followed by a separate wax. Carefully follow the manufacturer's instructions and precautions. Be sure to polish and wax the chrome trim as well as the paint.

3. Wax the vehicle again when water does not bead but remains on the surface in large patches.

Exterior lights: Do not apply wax on the surfaces of the lights. Wax may cause damage to the lenses. If you accidentally put wax on the light surfaces, wipe or wash it off.

CLEANING THE INTERIOR

CAUTION

- **Be careful not to splash water or spill liquid on the floor. This may prevent the SRS side airbags from activating correctly, resulting in serious injury.**
- **Do not wash the vehicle floor with water, or allow water to get onto the floor when cleaning the vehicle interior or exterior. Water may get into audio components or other electrical components above or under the floor carpet (or mat) and cause a malfunction; and it may cause body corrosion.**

Leather−trimmed interior

The selected leather is used in your Lexus. Due to characteristics of leather products, some parts of leather may be rough, uneven or scratched originally.

To keep good appearance, we recommend you to clean it periodically twice a year.

Remove dirt on the leather in the following ways:

1. Wipe it off lightly using a soft cloth (e.g. gauze) dampened with 5% solution of neutral detergent for wool.

2. Wring water from a clean cloth and thoroughly wipe off all traces of detergent with it.

3. Wipe off the surface of the leather with a dry soft cloth. Allow the leather to dry in a ventilated shaded area. Excess of wet may cause the hardening or shrinking of the leather.

NOTICE

- ***Dirt or sand adhered to the leather may damage the treated surface and cause it to wear earlier. Remove dirt or sand using a vacuum cleaner.***
- ***If a stain should fail to come out with a neutral detergent, apply a cleaner that does not contain an organic solvent.***
- ***Never use organic substances such as benzine, alcohol or gasoline, or alkaline or acid solutions for cleaning the leather as these could cause discoloring.***
- ***Use of a nylon brush or synthetic fiber cloth, etc. may scratch the fine grained surface of the leather.***
- ***Mildew may develop on soiled leather upholstery. Be especially careful to avoid oil spots. Try to keep your upholstery always clean.***
- ***Long exposure to direct sunlight may cause the leather surface to harden and shrink. Keep your vehicle in a shaded area, especially in the summer.***
- ***The interior of your vehicle is apt to heat up on hot summer days, so avoid placing on the upholstery items made of vinyl or plastic or containing wax as these tend to stick to leather when warm.***

- ***Improper cleaning of the leather upholstery could result in discoloration or staining.***

Non−leather trim (Dash and sun visors)

The non−leather trim may be easily cleaned with a mild soap or detergent and water.

First vacuum over the upholstery to remove loose dirt. Then, using a sponge or soft cloth, apply the soap solution to the non−leather trim. After allowing it to soak in for a few minutes to loosen the dirt, remove the dirt and wipe off the soap with a clean damp cloth. If all the dirt does not come off, repeat the procedure. Commercial foaming−type cleaners are also available which work well. Follow the manufacturer's instructions.

NOTICE

Do not use solvent, thinner, gasoline or window cleaner on the interior.

Carpets, Windows and Seat Belts

Begin by vacuuming thoroughly to remove as much dirt as possible. Several types of foam cleaners are available; some are in aerosol cans and others are powders or liquids which you mix with water to produce a foam. To shampoo the carpets, use a sponge or brush to apply the foam. Rub in overlapping circles. Do not apply water – the best results are obtained by keeping the carpet as dry as possible. Read the shampoo instructions and follow them closely.

The seat belts may be cleaned with mild soap and water or with lukewarm water.

Use a cloth or sponge. As you are cleaning, check the belts for excessive wear, fraying or cuts.

NOTICE

- ***Use a good foam−type shampoo to clean the carpets.***
- ***Do not use dye or bleach on the belts − it may weaken them.***
- ***Do not use the belts until they become dry.***
- ***The windows may be cleaned with any household window cleaner.***
- ***When cleaning the inside of the rear window, be careful not to scratch or damage the heater wires.***

Air Conditioning Control Panel, Audio System, Instrument Panel, Console Panel, and Switches

Use a soft damp cloth for cleaning.

Soak a clean soft cloth in water or lukewarm water then lightly wipe off any dirt.

NOTICE

- ***Do not use organic substances (solvents, kerosene, alcohol, gasoline, etc.) or alkaline or acidic solutions. These chemicals can cause discoloring, staining or peeling of the surface.***
- ***If you use cleaners or polishing agents, make sure their ingredients do not include the substances mentioned above.***
- ***If you use a liquid car freshener, do not spill the liquid onto the vehicle's interior surfaces. It may contain the ingredients mentioned above. Immediately clean any spill using the method mentioned above.***

If you have any questions about the cleaning of your Lexus, your local Lexus dealer will be pleased to answer them.

SECTION 7

REPORTING SAFETY DEFECTS FOR U.S. OWNERS

Reporting safety defects for U.S. owners

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REPORTING SAFETY DEFECTS FOR U.S. OWNERS

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Toyota Motor Sales, U.S.A., Inc. (Toll–free: 1–800–25–LEXUS).

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Toyota Motor Sales, U.S.A., Inc.

To contact NHTSA, you may either call the Auto Safety Hotline toll–free at 1–800–424–9393 (or 366–0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.

You should know as much about the quality and importance of proper maintenance of your new vehicle as the people who built it.

The Lexus authorized Repair Manual tells you how to maintain your vehicle and enables you to correctly perform your own maintenance.

The best way to keep your new vehicle in top running order is to maintain it properly from the moment you drive it off the showroom floor.

The Lexus authorized Repair Manual is packed with literally everything you need to know to perform your own maintenance in virtually every area of your new vehicle.

Maintenance procedures for the engine, chassis, body, electrical system, and more, are clearly explained and illustrated.

Periodic maintenance and tune−up

Periodic maintenance and tune−up helps to prevent small problems from growing into larger ones later on. The repair manual outlines exactly what maintenance is required and clearly explains how to do the work yourself step−by−step.

Areas covered include such things as spark plug replacement, valve clearance adjustment and engine oil and filter replacement.

Where to obtain the Repair Manual

The repair manual for GS430, GS300 may be purchased from any Lexus dealer or call the Material Distribution Center. To purchase the repair manual, please contact your Lexus dealer or the Material Distribution Center toll−free at 1−800−622−2033.

GAS STATION INFORMATION

- **Fuel selection:**
  Select premium unleaded gasoline with an Octane Rating of 91 (Research Octane Number 96) or higher for optimum engine performance. However, if such premium type cannot be obtained, you may temporarily use unleaded gasoline with an Octane Rating as low as 87 (Research Octane Number 91).

- **Fuel tank capacity:**
  71 L (18.7 gal., 15.6 Imp.gal.)

- **Engine oil:**
  "Toyota Genuine Motor Oil" or equivalent

  Oil grade: API grade SL "Energy–Conserving" or ILSAC multigrade engine oil.

  Recommend oil viscosity – SAE 5W–30 if normal temperatures are below 38°C (100°F)

  Oil capacity: L (qt., Imp.qt.)

Drain and refill	with filter	without filter
GS430	5.1 (5.4, 4.5)	4.5 (4.8, 4.0)
GS300 (2WD)	6.3 (6.6, 5.5)	5.9 (6.2, 5.1)
GS300 (4WD)	6.4 (6.7, 5.6)	6.0 (6.3, 5.2)

  See page 522 for detailed information.

- **Engine coolant:**
  Capacity: GS430 – 10.1 L (10.7 qt., 8.9 Imp.qt.)
  GS300 – 9.1 L (9.6 qt., 8.0 Imp.qt.)

  Coolant type – "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non–silicate, non–amine, non–nitrite, and non–borate coolant with long–life hybrid organic acid technology (Coolant with long–life hybrid organic acid technology is a combination of low phosphates and organic acids.)

  Do not use plain water alone.

  For checking the engine coolant, see page 527.

- **Automatic transmission:**
  Fluid type – **"Toyota Genuine ATF WS"**

  See page 532 or 535 for detailed information.

- **Tire information:**
  See page 539 through 561 for detailed information.

- **Tire inflation pressure:**
  Tire size: GS430 – 245/40R18 93Y or P245/40R18 93V
  GS300 – 225/50R17 94W or P225/50R17 93V

  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)

  For sustained high speeds above 160 km/h (100 mph), in countries where such speeds are permitted by law, add the tire inflation pressure given below to the front tires and rear tires, but never exceed the maximum cold tire inflation pressure molded on the tire sidewall.

  GS430 60 kPa (0.6 kgf/cm^2 or bar, 9 psi)
  GS300 50 kPa (0.5 kgf/cm^2 or bar, 7 psi)