GAS STATION INFORMATION

Fuel selection:

Premium unleaded gasoline with an Octane Rating of 91 (Research Octane Number 96) or higher required for optimum engine performance. However, if such premium type cannot be obtained, you may use unleaded gasoline with an Octane Rating as low as 87 (Research Octane Number 91).

Fuel tank capacity:

70 L (18.5 gal., 15.4 Imp. gal.)

Engine oil:

"Toyota Genuine Motor Oil" or equivalent
Oil grade: ILSAC multigrade engine oil

Recommended oil viscosity: SAE 5W−30

Oil capacity: L (qt., Imp. qt.)

Drain and refill	
With filter	4.7 (5.0, 4.1)
Without filter	4.5 (4.8, 4.0)

See page ccclvi for detailed information.

Engine coolant:

Capacity: 9.2 L (9.7 qt., 8.2 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 ccclix.

Automatic transaxle:

Fluid type — Toyota Genuine ATF Type T–IV

See page ccclxiii for detailed information.

Tire information:

See pages ccclxix through ccclxxxix for detailed information.

Tire inflation pressure:

	cold tires kPa (kgf/cm^2 or bar, psi)
Tire size:	P215/60R16 94V
Front	200 (2.0, 29)
Rear	200 (2.0, 29)
Spare	200 (2.0, 29)

For sustained high speeds above 160 km/h (99 mph), in countries where such speeds are permitted by law, add 40 kPa (0.4 kgf/cm^2 or bar, 6 psi) to the front tires and rear tires, but never exceed the maximum cold tire inflation pressure molded on the tire sidewall.

Tire size:	P215/55R17 93V
Front	210 (2.1, 30)
Rear	210 (2.1, 30)
Spare	210 (2.1, 30)

For sustained high speeds above 160 km/h (99 mph), in countries where such speeds are permitted by law, add 30 kPa (0.3 kgf/cm^2 or bar, 4 psi) to the front tires and rear tires, but never exceed the maximum cold tire inflation pressure molded on the tire sidewall.

See page ccclxv or ccclxvi for detailed information.

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 ES330 may be purchased from any Lexus dealer or the Material Distribution Center. To purchase the repair manual, please contact your Lexus dealer or call the Material Distribution Center toll−free at 1−800−622−2033.

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 THIS MANUAL

Safety and vehicle damage warnings

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

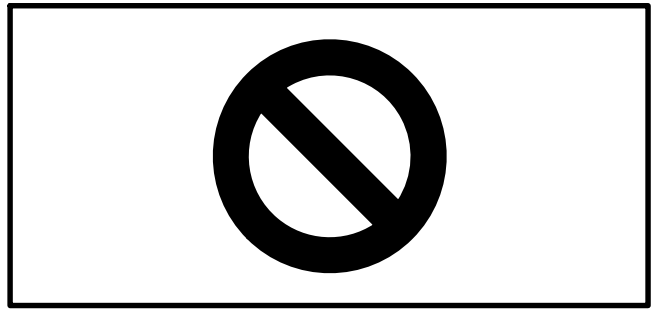
CAUTION

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.

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”.

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 and chest injuries by preventing contact of the head and chest 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, 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 pages ccclxix and ccxcvii.

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.

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 7 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**

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.

HOW TO USE THIS MANUAL

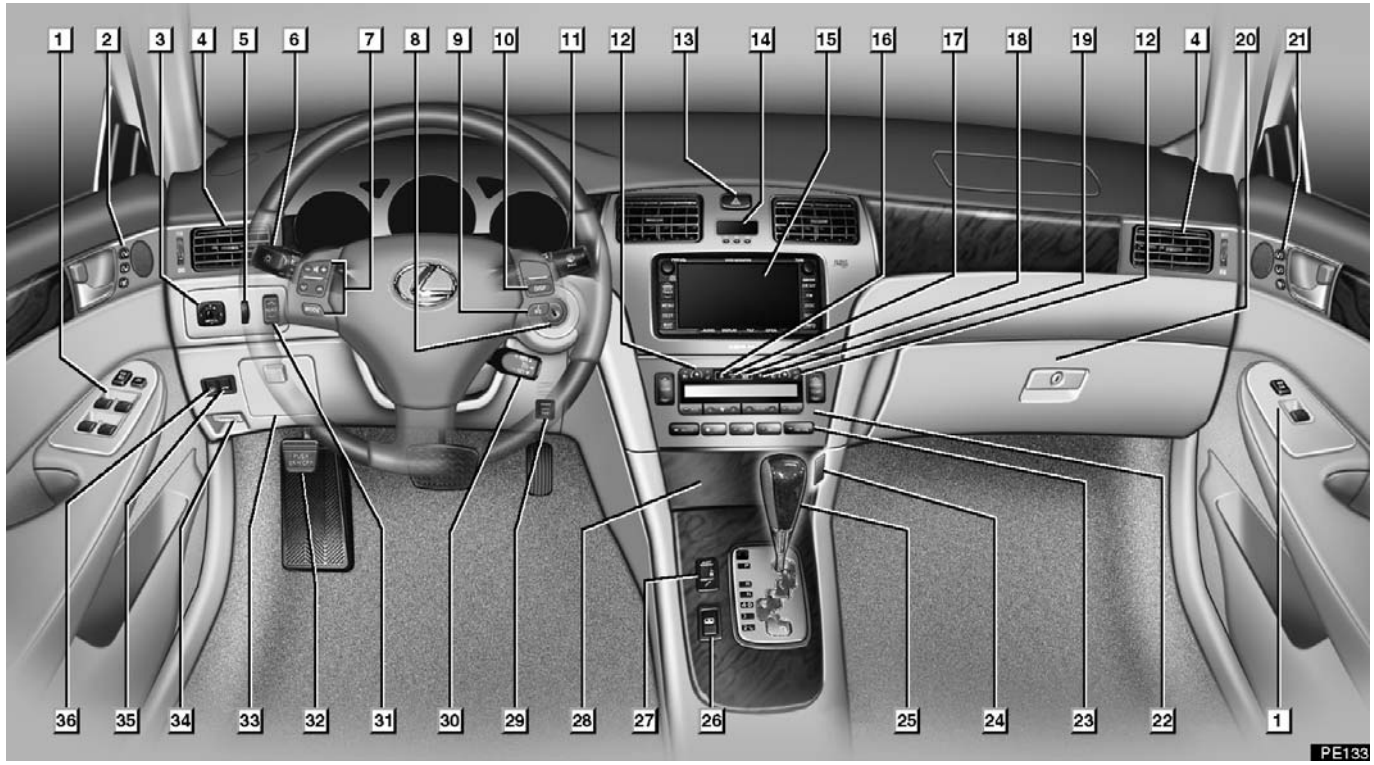
INDEX
The page number is listed for each item in the Owner's Manual so that you can rapidly find the item and page you are searching for.

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.

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



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1	*Door lock switch and power window switches*	*xxvi, xlv*
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3	*Power rear view mirror control switches*	*clxxv*
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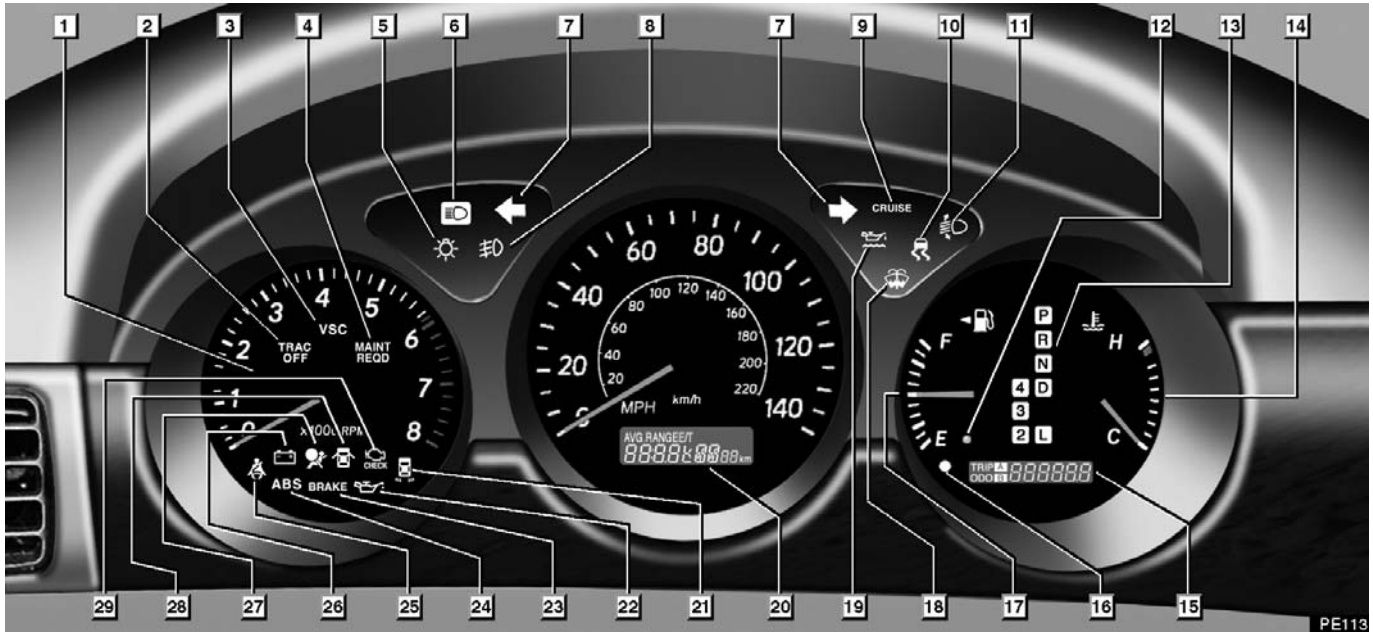
5	*Instrument panel light control dial*	*lxxi*
6	*Headlight, turn signal and fog light switches*	*xxxiii, xxxv, xxxviii, xxxix*
7	*Audio remote control switches*	*ccxviii, ccxlix*
8	*Ignition switch*	*cclx*
9	*Speech command switch*	*See the separate "Navigation System Owner's Manual".*
10	*Multi−information display control button*	*lxviii*
11	*Windshield wiper and washer switches*	*xxxix*
12	*Seat ventilator/heater switches*	*xlix*
13	*Emergency flasher switch*	*xlviii*
14	*Clock*	*lxxvi*
15	*Audio system or navigation system including audio system (For the navigation system, see the separate "Navigation System Owner's Manual".)*	*cci, ccxxv*
16	*Front passenger's seat belt reminder light*	*lxi*
17	*"AIRBAG OFF" indicator light*	*cxliii*
18	*"AIRBAG ON" indicator light*	*cxliii*
19	*Security indicator light*	*xv, xxix*
20	*Glove box*	*lxxviii*
21	*Front passenger seat position memory switches*	*clxix*
22	*Automatic air conditioning controls*	*clxxxv*
23	*Rear window and outside rear view mirror defogger switch*	*xliv*
24	*Grocery bag hook*	*lxxxix*
25	*Automatic transmission selector lever*	*cclxiii*
26	*Rear electric sunshade switch*	*xc*
27	*Electronic modulated suspension control switch*	*cclxxii*
28	*Cigarette lighter and ashtray*	*lxxvi*
29	*Traction control system off switch*	*cclxxiv*
30	*Cruise control switch*	*cclxix*
31	*Power adjustable pedals switch*	*clxxiii*
32	*Parking brake pedal*	*cclxi*
33	*Auxiliary box*	*lxxxvii*
34	*Hood lock release lever*	*xciii*
35	*Trunk lid opener*	*xciv*
36	*Fuel filler door opener*	*xcvii*

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

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



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2	*Traction control system off indicator light*	*cclxxiv*
3	*Vehicle stability control system/traction control system warning light*	*lxvi*
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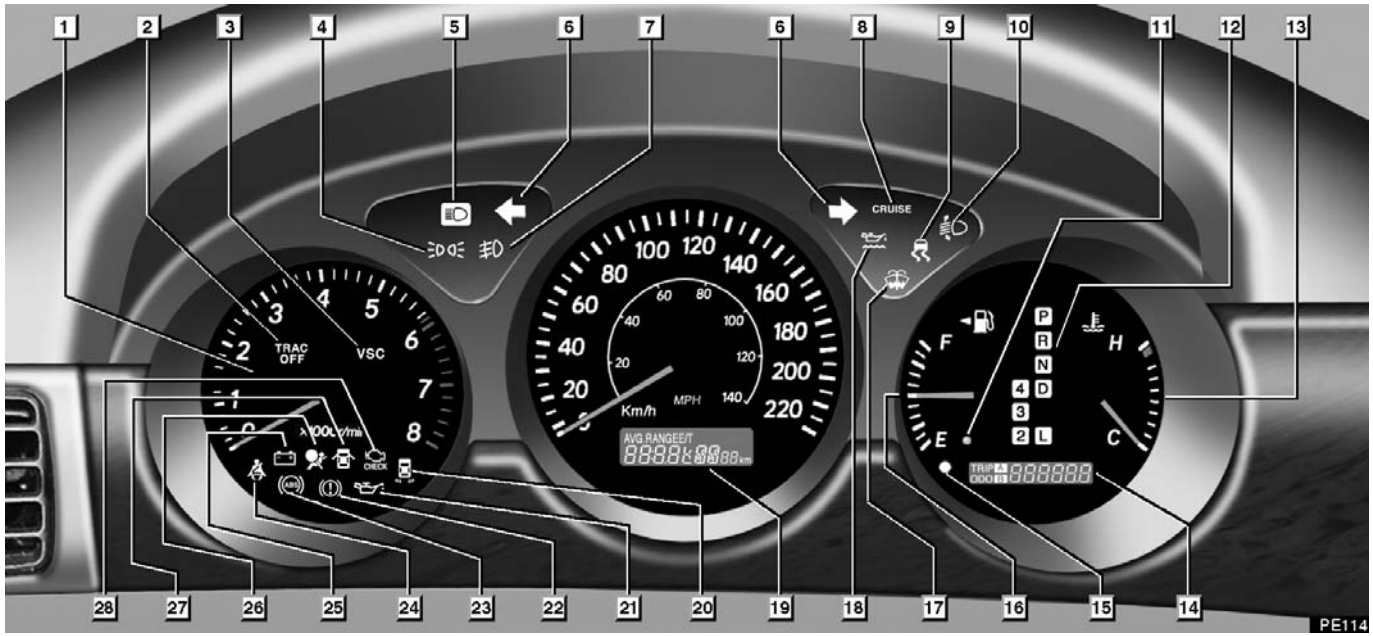
11	*Automatic headlight leveling system warning light*	*lxvii*
12	*Low fuel level warning light*	*lxvii*
13	*Automatic transmission indicator lights*	*cclxiii*
14	*Engine coolant temperature gauge*	*lvi*
15	*Odometer and trip meter*	*lvii*
16	*Trip meter reset knob*	*lvii*
17	*Fuel gauge*	*lv*
18	*Low washer fluid warning light*	*lxvii*
19	*Low engine oil level warning light*	*lxiii*
20	*Multi−information display*	*lxviii*
21	*Rear light failure warning light*	*lxvi*
22	*Low engine oil pressure warning light*	*lxii*
23	*Brake system warning light*	*lx*
24	*Anti−lock brake system warning light*	*lxv*
25	*Driver's seat belt reminder light*	*lxi*
26	*Charging system warning light*	*lxii*
27	*SRS warning light*	*lxi*
28	*Open door warning light*	*lxvi*
29	*Malfunction indicator lamp*	*lxiv*

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

INSTRUMENT CLUSTER (vehicles sold in Canada)



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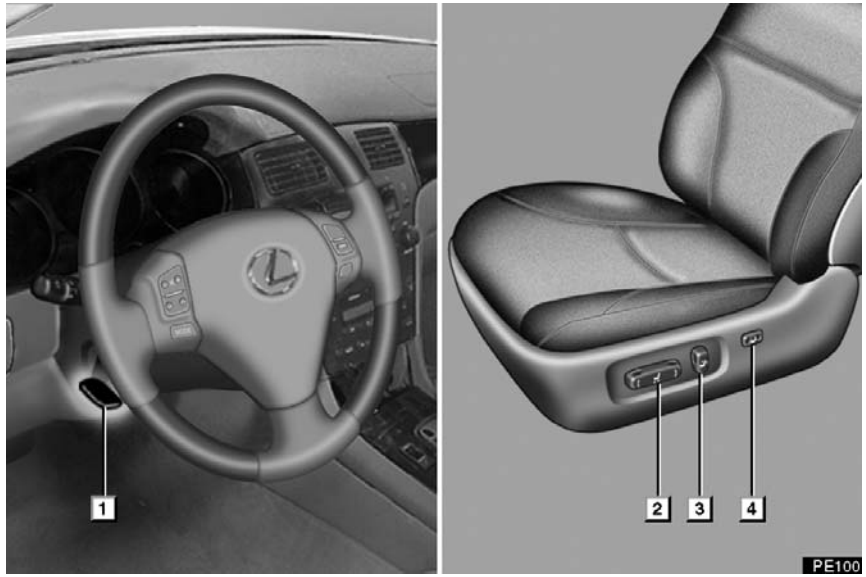
10	*Automatic headlight leveling system warning light*	*lxvii*
11	*Low fuel level warning light*	*lxvii*
12	*Automatic transmission indicator lights*	*cclxiii*
13	*Engine coolant temperature gauge*	*lvi*
14	*Odometer and trip meter*	*lvii*
15	*Trip meter reset knob*	*lvii*
16	*Fuel gauge*	*lv*
17	*Low washer fluid warning light*	*lxvii*
18	*Low engine oil level warning light*	*lxiii*
19	*Multi−information display*	*lxviii*
20	*Rear light failure warning light*	*lxvi*
21	*Low engine oil pressure warning light*	*lxii*
22	*Brake system warning light*	*lx*
23	*Anti−lock brake system warning light*	*lxv*
24	*Driver's seat belt reminder light*	*lxi*
25	*Charging system warning light*	*lxii*
26	*SRS warning light*	*lxi*
27	*Open door warning light*	*lxvi*
28	*Malfunction indicator lamp*	*lxiv*

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

SEAT AND STEERING WHEEL



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1 *Tilt steering lock release lever . . . . . clxxiii*

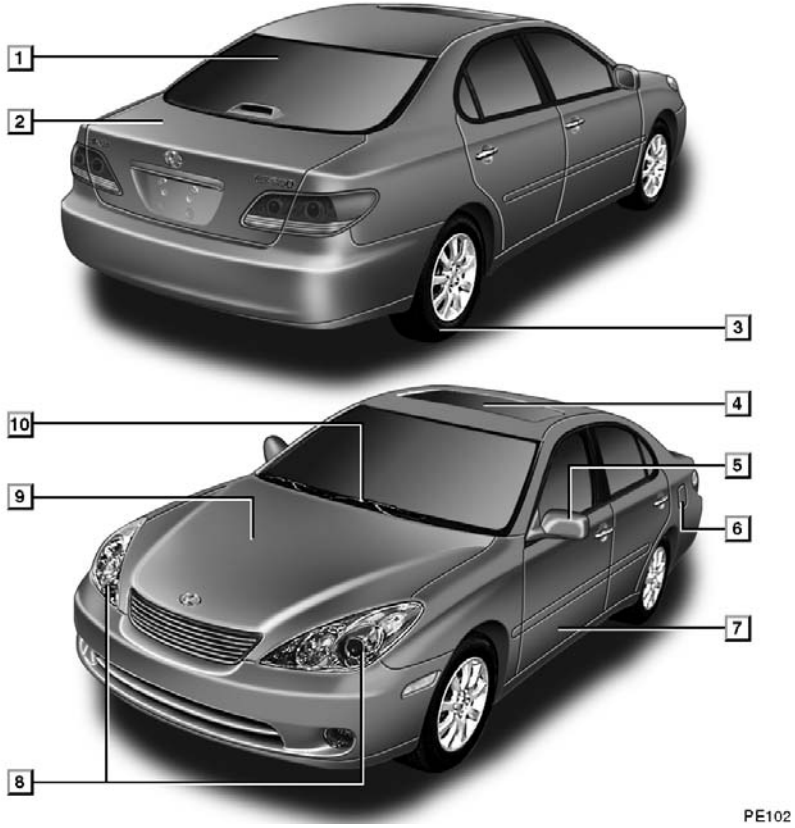
2 *Seat position, seat cushion angle and height control switch . . . . . cviii, cix*

3 *Seatback angle control switch . . . . . cviii*

4 *Lumbar support control switch . . . . . cix*

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

EXTERIOR VIEW



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4	*Moonroof*	*c*
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For detailed information, refer to the description given in each Section.

SECTION 1 – 1

INSTRUMENTS AND CONTROLS

Keys and doors

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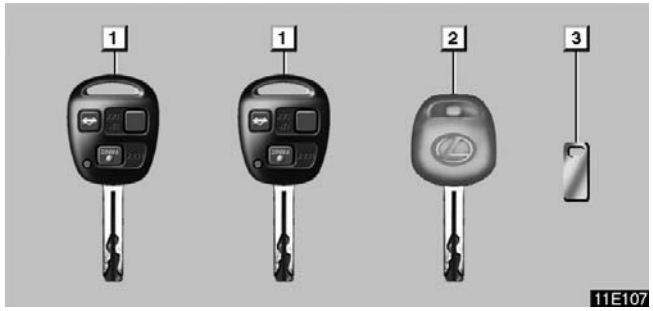
Engine immobilizer system xv
Wireless remote control xvii
Doors xxiv
Theft deterrent system xxix

KEYS



1 **Master keys (black) — These keys work in every lock. For your Lexus dealer to make a new key with a built−in transponder chip, your dealer will need one of them.**

2 **Valet key (gray) — This key will not open the glove box and rear armrest door in the rear seat.**

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

A transponder chip for engine immobilizer system has been placed in the head of the master and valet keys. These chips are needed to enable the system 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 locked in the trunk or glove box when using valet parking, leave the valet key with the attendant.

The trunk lid can be opened using a loop of wire in the trunk even with the trunk lid opener main switch in the glove box turned off. When keeping items in the trunk, be sure to turn off the trunk lid opener main switch and lock the glove box and rear armrest door. To turn off the main switch in the glove box, see page xcv. For locking the glove box, see page lxxviii. For locking the rear armrest door, see page lxxxviii.

Since the doors can be locked without a key, you should always carry the flat key or spare master key in case you accidentally lock your keys inside the vehicle.

If you should lose your keys or if you need additional 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.

Flat key

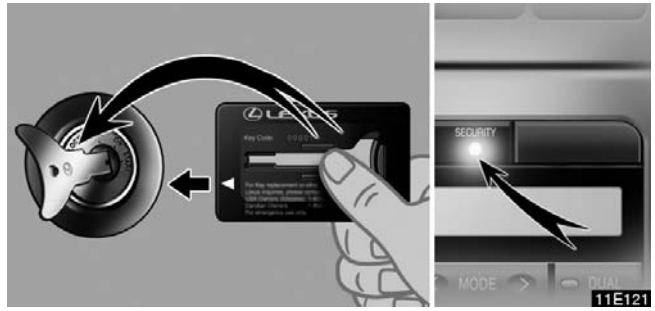
As a transponder chip is built in its key case, you can start the engine with this key.

The flat key works in every lock.

A transponder chip for engine immobilizer system has been placed in the key case of the flat key. This chip is needed to enable the system to function correctly, so be careful not to lose this key. If you make your own duplicate key, you will not be able to cancel the system or start the engine.

Insert your key plate in its key case as shown. We recommend that you always carry this with you for emergency use. Do not leave it in your vehicle.

Starting the engine using a flat key



1. Remove the key plate from the key case.

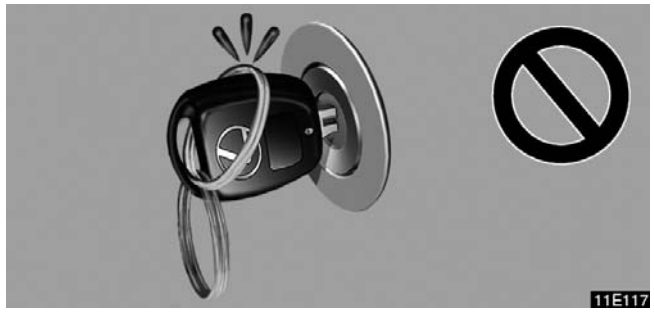
2. Insert the key plate into the ignition switch. The indicator light keeps flashing.

3. Bring the key case closer to the ignition switch within 10 seconds as indicated by the arrow head. The indicator light goes out. This means the engine immobilizer system is automatically canceled. (For details, see “Engine immobilizer system” on page xv.) You can put the key case away then. You cannot cancel the engine immobilizer system if 10 seconds have past after you inserted the key plate. You need to remove the key plate from the ignition switch and try it again from the step 2.

4. Start the engine within 20 seconds after the security indicator light goes out. You cannot start the engine if 20 seconds have past after the security indicator went off. You need to remove the key plate from the ignition switch and try it again from the step 2.

NOTICE

- ***Do not let the key case become bent as the key plate may fall out or become bent also.***
- ***The flat key is designed for emergency use only. So do not use it regularly instead of other master keys.***



When using a key containing a transponder chip, observe the following precautions:

- ***When starting the engine, do not use the key with a key ring resting on the key grip and do not press the key ring against the key grip. Doing so may prevent the engine from starting, or may cause the engine to stop soon after it starts.***

- ***When starting the engine, do not use the key in proximity with other transponder keys (including the flat key and keys of other vehicles), and do not press other key plates against the key grip. Doing so may prevent the engine from starting, or may cause the engine to stop soon after it starts. If this happens, remove the key once and then insert it again after removing other transponder keys (including the flat key and keys of other vehicles) from the ring or while gripping or covering them with your hand to start the engine.***

- ***Do not bend the key grip or flat key.***
- ***Do not cover the key grip or flat key with any material that cuts off electromagnetic waves.***
- ***Do not knock the key or flat key hard against other objects.***
- ***Do not leave the key or flat key exposed to high temperatures for a long period, such as on the dashboard and hood under direct sunlight.***
- ***Do not put the key or flat key in water or wash it in an ultrasonic washer.***
- ***Do not use the key or flat key with electromagnetic materials.***

ENGINE IMMOBILIZER SYSTEM

▶ *Type A*

▶ *Type B*

The engine immobilizer system is a theft prevention system. When you insert the key in the ignition switch, the transponder chip in the key's head transmits an electronic code to the vehicle. The engine will start only when the electronic code in the chip corresponds to the registered ID code for the vehicle.

The system is automatically set when the key is removed from the ignition switch. At this time, the security indicator light flashes. When you insert the key in the ignition switch, the security indicator light goes out and the system is canceled automatically, which enables the engine to start.

For your Lexus dealer to make you a new key with built–in transponder chip, your dealer will need your key number and master 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 system or start the engine.

For vehicles sold in U.S.A.

FCC ID: MOZRI−20BTY

CAUTION

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

(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 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.

WIRELESS REMOTE CONTROL

1 **Locking the doors and sounding an alarm**

2 **Indicator light**

3 **Unlocking the trunk lid**

4 **Unlocking the doors**

When you operate any button on the key, push it slowly and surely. At this time, the indicator light on the key grip 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 key may be discharged. If this is the case, replace it using a special screwdriver.

- The remote control does not work.
- The operational range of wireless remote control becomes extremely short.
- The indicator light on the key is dimmed or does not come on.

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

If you lose the wireless key, contact your Lexus dealer as soon as possible to avoid the possibility of theft, or an accident. (See “If you lose your keys or lock yourself out” on page cccxxviii.)

You can use up to 4 wireless remote control keys for the same vehicle. Contact your Lexus dealer for detailed information.

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

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

Locking/unlocking the doors

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

At this time, one beep sounds and the turn signal lights flash once.* 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 key is in the ignition switch, locking cannot be done.

Make sure all the doors are locked when you leave the vehicle. Push the “LOCK” button once again.

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

NOTICE

Do not push the “LOCK” button any longer than 2 to 3 seconds. Pushing the button longer activates an alarm. For details, see page xx.

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.*

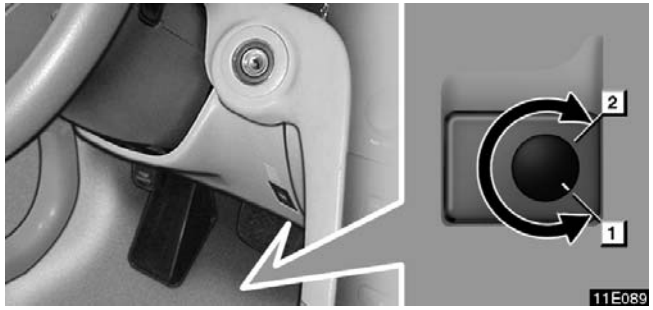
NOTE:
** The 2−step unlocking function can be changed.*
Ask your Lexus dealer for details.

At this time, two beeps sound and the turn signal lights flash twice.* Together with the activation of unlocking, the interior light comes on for 15 seconds if the interior light switch is in “DOOR” position.** However, this function does not work when the ignition key is in the “ACC” or “ON” position. For further information, see “Illuminated entry system” on page lxxiv.

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 the beep volume can be changed.*
*** The duration of lighting can be changed.*
**** The time before automatic re−locking can be changed.*
Ask your Lexus dealer for details.

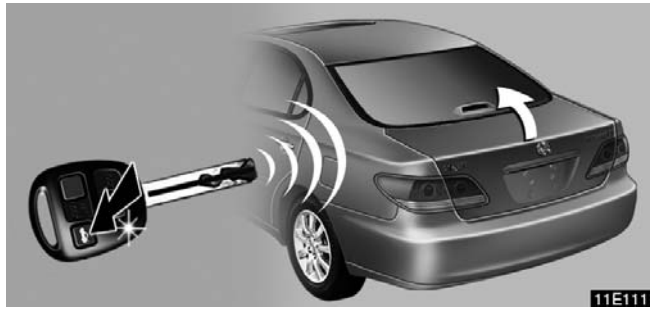


▶ 1 ***Off*** 2 ***Louder***

When you push any button on the key, the vehicle sounds one beep when the doors are locked by remote control, and sounds two beeps when the doors are unlocked.

You can adjust the beep loudness with the knob under the instrument panel. Turning the knob clockwise increases the volume and turning it counterclockwise until it stops turns the buzzer off.

Unlocking the trunk lid

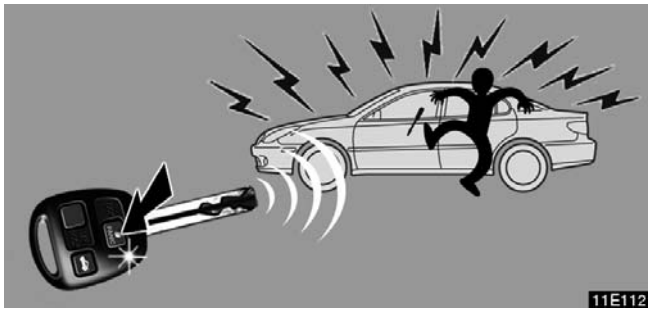


When you keep the button pushed for about 1 second, you can unlock the trunk lid.* One beep sounds.

This function does not work when the ignition key is in the “ON” position.

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

Sounding an alarm*



When you push the “PANIC” button for about 2 to 3 seconds, 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.

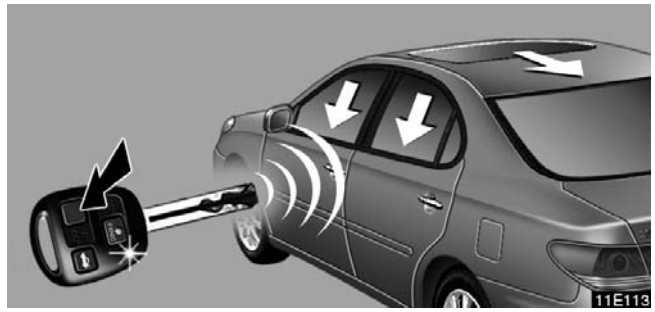
This function does not work when the ignition key is in the “ON” position.

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

Operating the side windows and moonroof

The side windows and moonroof can be opened using a wireless key from outside the vehicle.*

NOTE:
** The windows and moonroof can be deactivated.*
Ask your Lexus dealer for details.



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

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 CR2016 or equivalent and a special screwdriver.

⚠ CAUTION

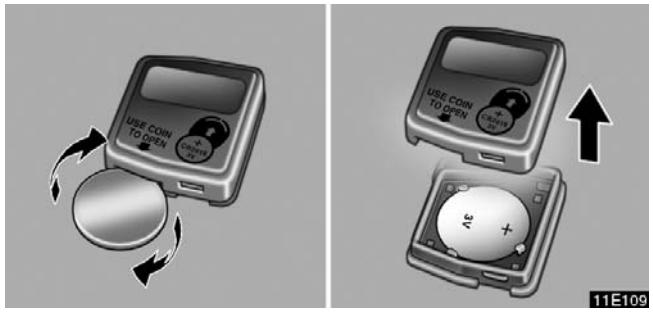
Special care should be taken to prevent small children from swallowing the removed battery or components.

NOTICE

- ***When replacing the battery, be careful not to lose the components.***
- ***Replace only with the same or equivalent type recommended by a Lexus dealer.***
- ***Dispose of used batteries according to the local laws.***

1. Remove the screw, and then the cover while pushing it in the arrow direction.

2. Remove the module from the key frame.



3. Open and remove the battery case cover using a coin.

4. Remove the discharged battery and put in a new battery with the positive side up.

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.***
- ***Take care not to lose the screws.***

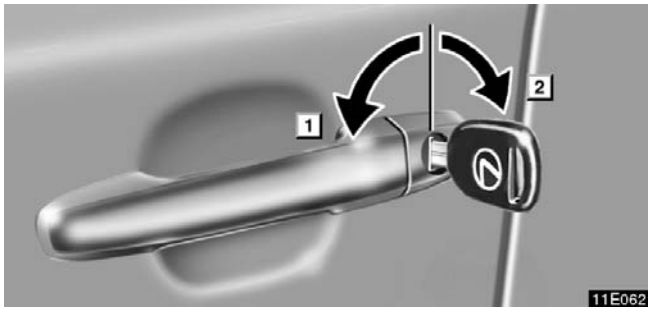
5. Replace the battery case cover.

6. Install the module into the key frame and secure the cover with the screw.

7. When pushing any button on the wireless key, make sure the indicator light comes on.

DOORS

Locking with key



▶ 1 ***Lock*** 2 ***Unlock***

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

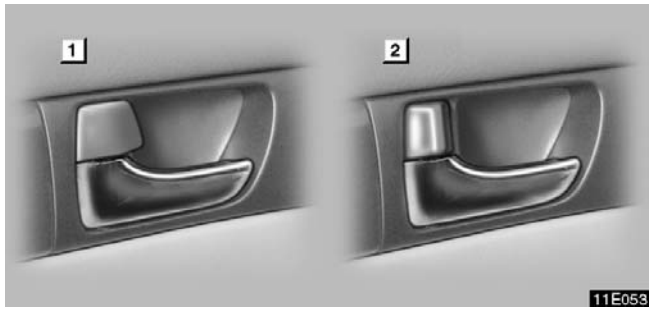
The doors lock and unlock simultaneously with the driver's door. Turning the key once will unlock the driver's door and twice in succession will unlock all doors simultaneously.*

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 moonroof can be opened from outside the vehicle using the key. For details, see page xlvii and page ci.

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.

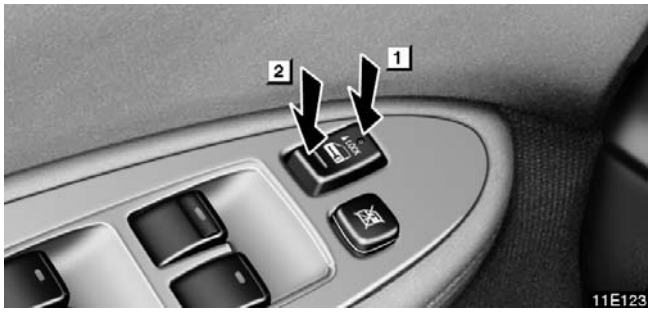
Closing the door with the lock button pushed in will also lock the door. Be careful not to lock your keys in the vehicle. Doors cannot be locked when either front door is open and the key is in the ignition switch.

If the vehicle is subjected to a severe frontal, rear or side impact with the ignition switch turned to the “ON” position, all 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 in 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 front side. Pushing down on the rear side will unlock them.

The same switch is also located on the front passenger's side.

If you do any of the following, no door can be unlocked with the power door lock switch.

- Lock all the doors with the key or wireless remote control when all the doors are closed.
- Open the driver's door or front passenger's door and move the inside lock buttons of both front doors to the lock position, then close the front doors.

The power door lock switch can be reset in the following ways.

- Turn the ignition key to the "ON" position.
- Unlock all the doors with the key or wireless remote control.
- Unlock the driver's door or front passenger's door with the inside lock button, and then unlock all the doors with the power door lock switch.

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 turn the ignition switch to the “ON” position.

2. Shift the selector lever to the “P” position.

3. Within 10 seconds of turning the ignition switch to the “ON” position, 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 turn the ignition switch to the “ON” position.

2. Shift the selector lever from “P” to the ”N” position.

3. Within 10 seconds of turning the ignition switch to the “ON” position, 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 shift position**

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

- **Unlocking linked with the ignition switch**

  All doors are automatically unlocked when the driver’s door is opened within 10 seconds after the ignition switch is turned to the “ACC” or “LOCK” position, or the key is removed.

You can set or cancel the automatic door unlocking functions:

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

To select the unlocking linked with the shift position:

1. Close all doors and turn the ignition switch to the “ON” position.

2. Shift the selector lever to the “P” position.

3. Within 10 seconds of turning the ignition switch to the “ON” position, 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 ignition switch:

1. Close all doors and turn the ignition switch to the “ON” position.

2. Shift the selector lever from “P” to the “N” position.

3. Within 10 seconds of turning the ignition switch to the “ON” position, 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, move the lever to the lock position as shown on the label next to the lever.

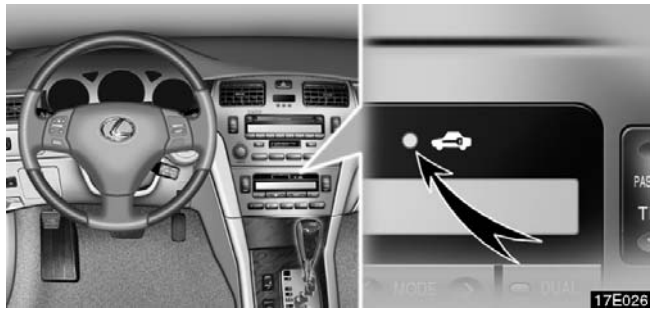
THEFT DETERRENT SYSTEM

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 the battery terminal is disconnected and then reconnected while the vehicle is locked.

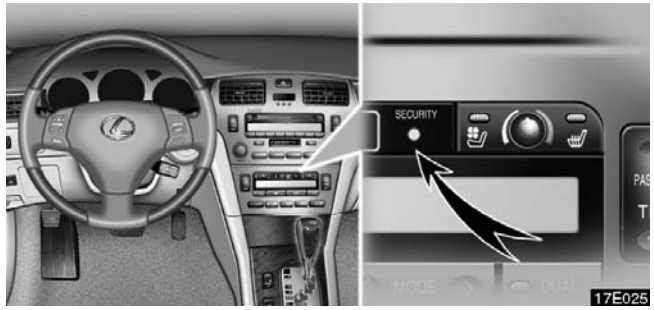
The alarm blows the horn intermittently and flashes the headlights, tail lights and turn signal lights.

Further more when the interior light switch is in the “DOOR” position, the interior light turns on.

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



▶ *Security indicator light (type A)*



▶ *Security indicator light (type B)*

Setting the system

1. Turn the ignition key to the “LOCK” position and remove it.

The engine immobilizer system causes the indicator light to flash.

2. Close and lock all the doors, trunk and hood using an ignition key or wireless remote control.

If you lock them with wireless remote control, the turn signal lights flash once.

The flashing indicator light will remain on when all the doors, trunk and hood are closed and locked.

3. After 30 seconds, the indicator starts flashing and the system is set.

Cancelling the system

When you unlock any door or trunk using an ignition key or wireless remote control, the system is cancelled.

If you unlock any door or trunk with wireless remote control, the turn signal lights flash twice.

Activating the system

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

- Unlocking any door or trunk without using an ignition key or wireless remote control
- Opening the hood forcibly
- Reconnecting the battery

If any door is unlocked and the ignition key is not in the ignition switch during the alarm sounding, the door is automatically locked.

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

- Unlock the door using an ignition key or wireless remote control.
- Turn the ignition switch on.

Testing the system

1. Open all the windows.

2. Set the system as described above.

The front doors should be locked with the ignition key or wireless remote control. Be sure to wait until the indicator light starts flashing.

3. Unlock one of the doors from the inside.

The system should activate the alarm.

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

5. Repeat this operation for the other doors 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

Disconnecting the battery may result in the erasure of information you have set in the computer memory. After reconnecting the battery, check that the memorized data has been retained. If it has been erased, input it into the computer once more.

SECTION 1 – 2

INSTRUMENTS AND CONTROLS

Switches

Headlight switch (U.S.A.) xxxiii
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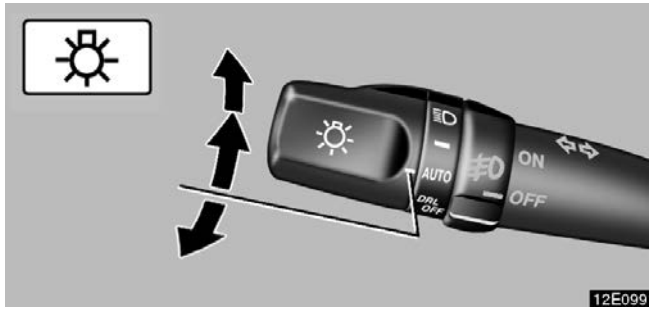
Fog light switch xxxix
Windshield wiper and washer switch xxxix
Rear window and outside rear view mirror defogger switch xliv
Power window switches xlv
Emergency flasher switch xlviii
Seat ventilator/heater switches xlix

HEADLIGHT SWITCH (U.S.A.)



“AUTO” position

The headlights and all other lights automatically turn on depending on the darkness of the surroundings when the ignition key is in the “ON” position.*

NOTE:
** The sensitivity of the automatic light control sensor can be changed.*
Ask your Lexus dealer for details.

To turn on the lights manually, 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.

When the headlights are on, the headlight 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 instrument panel light control dial is turned fully up.

“DRL OFF” position

The daytime running light (DRL) system does not work when the knob is set in this position.

For details, see the following “Daytime Running Light (DRL) System”.

The automatic light control sensor is on the top of the driver's side 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 are on, they automatically turn off about 30 seconds after any door or trunk lid is opened and closed with the ignition key turned to the "ACC" or "LOCK" position.* If you want to turn off the lights immediately, push the "LOCK" button on the wireless remote control key twice. The lights also can be turned off immediately by pushing the "LOCK" button on the wireless remote control key with all the doors locked and the trunk lid closed.

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

When only the tail lights are on, they automatically turn off with the driver's door opened and the ignition key turned to the "ACC" or "LOCK" position.

To turn on the lights again, turn the ignition key to the "ON" position, or twist the knob on the end of lever to the "AUTO" position and then twist the knob until the first or second clickstop.

If you are going to park for over one week, make sure the knob is in the "AUTO" or "DRL OFF" position.

Daytime Running Light (DRL) System

When the knob is set in the "AUTO" position, the headlights turn on at reduced intensity when the parking brake is released with the engine started. They will not go off until the ignition switch is turned off.

The headlights will automatically adjust to full intensity and/or turn on the other lights depending on the darkness of the surroundings.

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

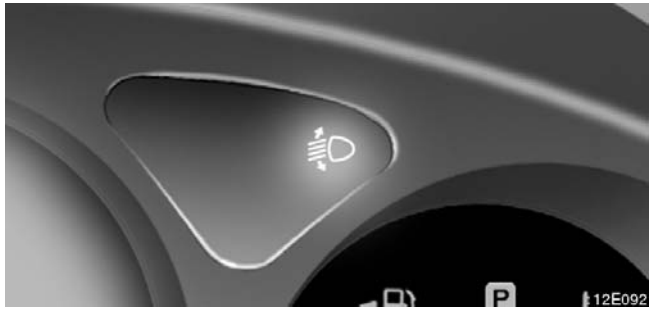
Twist the knob to the second clickstop to turn on the headlights to full intensity for driving at night.

To cancel the DRL system, twist the knob to the "DRL OFF" position.

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 (vehicles with discharge headlight only)

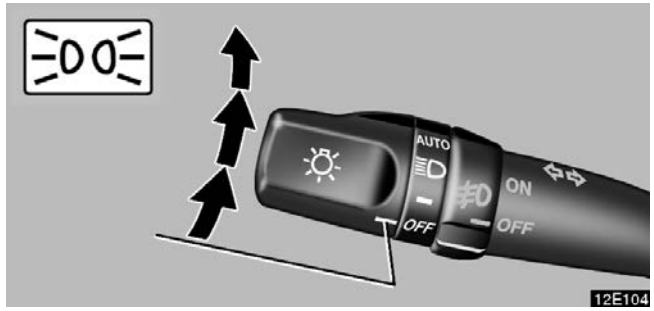


Vehicle position changes according to loading condition, passengers getting on and off, vehicle acceleration and deceleration, etc. However, as the headlight beam level is always maintained automatically by the system at the proper level, your headlights do not dazzle other road users.

If this system fails, the warning light in the instrument cluster comes on. If this occurs, have your vehicle checked by your Lexus dealer.

If you replace the rear suspension and/or the vehicle height changes, contact your Lexus dealer to check the automatic headlight leveling system and headlight beam level.

HEADLIGHT SWITCH (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 sensitivity of the automatic light control sensor can be changed.*
Ask your Lexus dealer for details.

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 tail lights are on, the tail light indicator lights up in the instrument cluster.

When the headlight switch is turned to the first or second clickstop, the brightness of the instrument cluster will be reduced slightly unless the instrument panel light control dial is turned fully up.

The automatic light control sensor is on the top of the driver's side 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 are on, they automatically turn off about 30 seconds after any door or trunk lid is opened and closed with the ignition key turned to the "ACC" or "LOCK" position.* If you want to turn off the lights immediately, push the "LOCK" button on the wireless remote control key twice. The lights also can be turned off immediately by pushing the "LOCK" button on the wireless remote control key with all the doors locked and the trunk lid closed.

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

When only the tail lights are on, they automatically turn off with the driver's door opened and the ignition key turned to the "ACC" or "LOCK" position.

To turn on the lights again, turn the ignition key to the “ON” position, 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.

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 ignition switch is turned off.

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

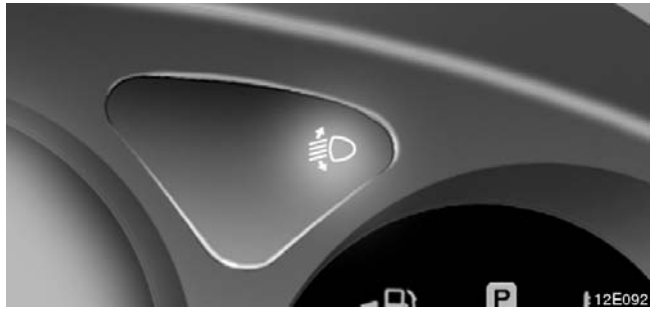
Twist the knob to the second clickstop to turn on the headlights to full intensity for driving at night.

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 (vehicles with discharge headlight only)

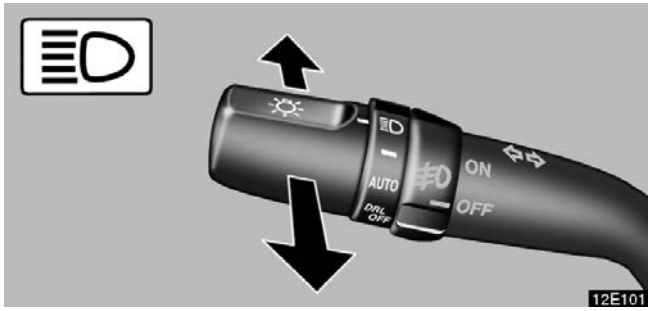


Vehicle position changes according to loading condition, passengers getting on and off, vehicle acceleration and deceleration, etc. However, the headlight beam level is always maintained automatically by the system at the proper level so that your headlights do not dazzle other road users.

If this system fails, the warning light in the instrument cluster comes on. If this occurs, have your vehicle checked by your Lexus dealer.

If you replace the rear suspension and/or the vehicle height changes, contact your Lexus dealer to check the automatic headlight leveling system and headlight beam level.

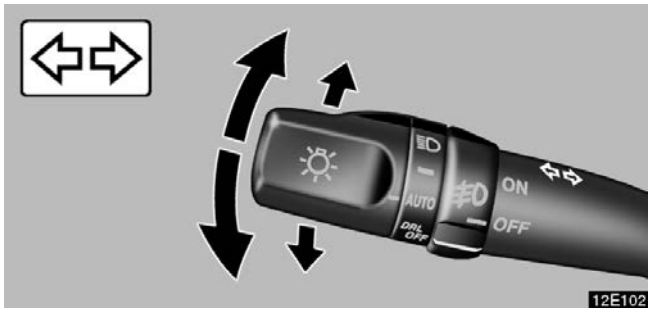
HEADLIGHT DIMMER AND TURN SIGNAL SWITCH



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.



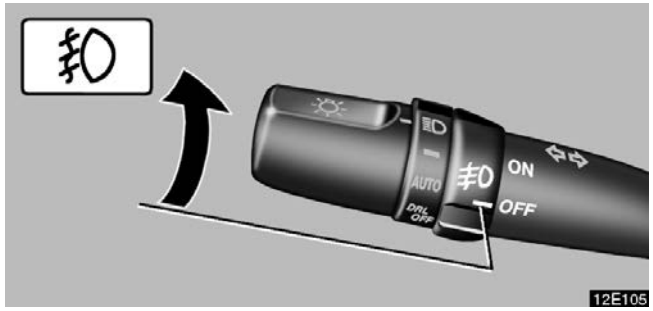
For signaling turns, move the lever up or down in the conventional manner.

The ignition key must be in the “ON” position.

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

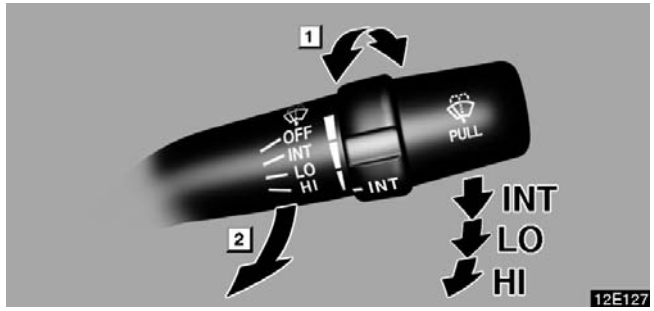


To turn on the fog lights, turn the switch to the "ON" position. The fog lights come on only when the headlights are on low beam.

Fog light indicator light in the instrument cluster will tell you that the fog lights are on.

WINDSHIELD WIPER AND WASHER SWITCH

Variable intermittent windshield wipers



▶ 1 ***Interval adjuster*** 2 ***Washer on***

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

The ignition key must be in the "ON" position.

There are 3 settings:

"INT" position: Variable 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.

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

Also, the wipers will automatically operate a couple of times after the washer squirts even with the lever in the “OFF” position.

The low washer fluid warning light in the instrument cluster comes on when the fluid level in the tank becomes nearly empty. For information on adding washer fluid, see “Adding washer fluid” on page cdvi.

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

NOTICE

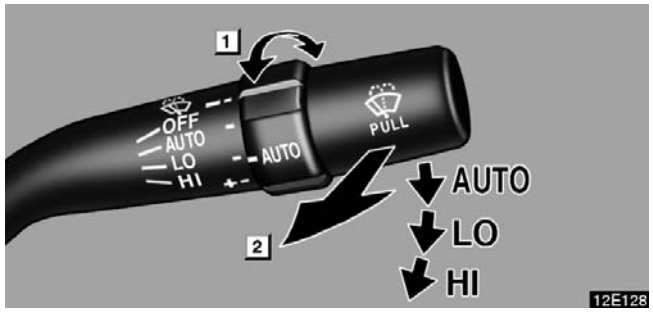
Do not operate the wipers if the windshield is dry. It may scratch the glass.

When waxing your vehicle, make sure that the washer nozzles do not become blocked. If a nozzle becomes blocked, contact your Lexus dealer to have the vehicle serviced.

NOTICE

If a nozzle becomes blocked, do not try to clear it with a pin or other object. The nozzle will be damaged.

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 ignition switch must be in the “ON” position.

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 amount of raindrops and sunlight detected by the automatic wiper control sensor.

You may adjust the automatic wiper control sensitivity by twisting the automatic control adjuster in the “–” direction, which requires more raindrop volume to start the wiper, or in the “+” direction, which requires less raindrop volume to start the wiper.

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

Even if the wiper lever is in the “AUTO” position, the system will switch to intermittent operations in the following conditions:

- When the windshield gets extremely cold (at less than –10°C [14°F])
- When the system malfunctions

However, when the windshield gets extremely hot (at more than 90°C [194°F]), the wipers do not operate even if the wiper lever is in the “AUTO” position.

When the ignition switch is turned off with the wiper lever in the “AUTO” position, and then the ignition 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 ignition 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.**

NOTICE

Do not apply detergent to or wet the automatic wiper control sensor when cleaning the inside of the windshield.

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

Also, the wipers will automatically operate a couple of times after the washer squirts even with the lever in the “OFF” position.

The low washer fluid warning light in the instrument cluster comes on when the fluid level in the tank becomes nearly empty. For information on adding washer fluid, see “Adding washer fluid” on page cdvi.

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

NOTICE

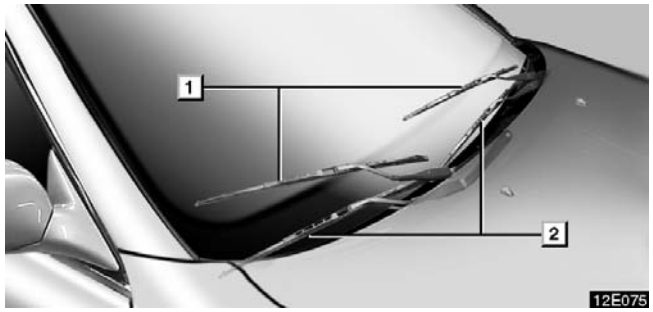
Do not operate the wipers if the windshield is dry. It may scratch the glass.

When waxing your vehicle, make sure that the washer nozzles do not become blocked. If a nozzle becomes blocked, contact your Lexus dealer to have the vehicle serviced.

NOTICE

If a nozzle becomes blocked, do not try to clear it with a pin or other object. The nozzle will be damaged.

Shifting the windshield wiper position



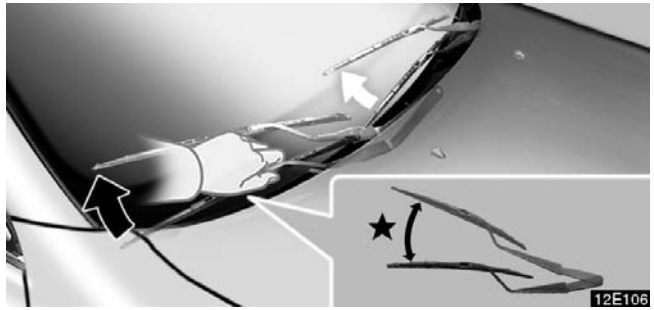
▶ 1 *Rest position* 2 *Retracted position*

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 (position 2) to the rest position (position 1) 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.



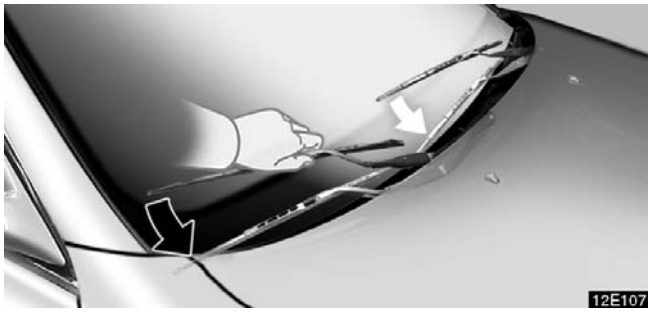
▶ ** More than 10 cm (3.9 in.)*

SHIFTING TO THE REST POSITION

Hold the connection of the wiper arm and wiper blade and pull it upward for more than 10 cm (3.9 in.) 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.



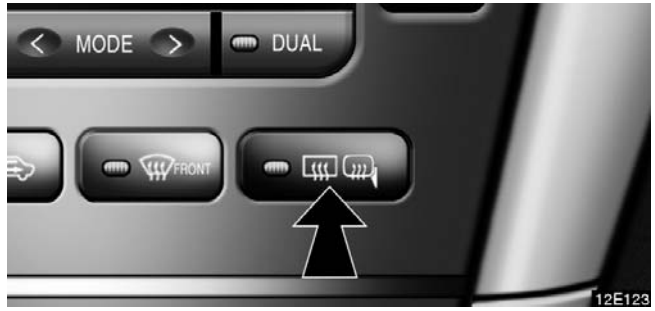
RETURNING TO THE RETRACTED POSITION

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.

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 ignition key must be in the “ON” position.

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. 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.***

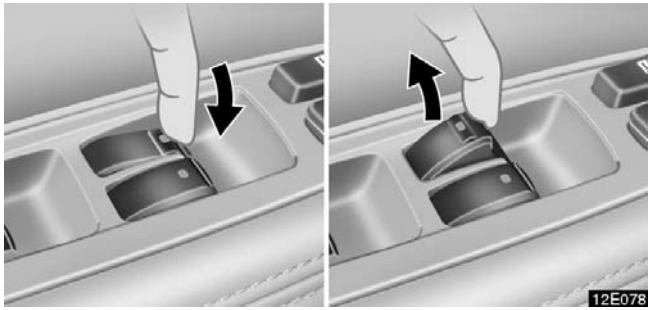
POWER WINDOW SWITCHES

▶ 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 ignition key is in the "ON" position.

Retained accessory power operation: Even if the ignition key is turned to the "ACC" or "LOCK" position with all the doors closed, the window can be operated until a front door is opened (or for 43 seconds).



Operating the switch

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 lights***

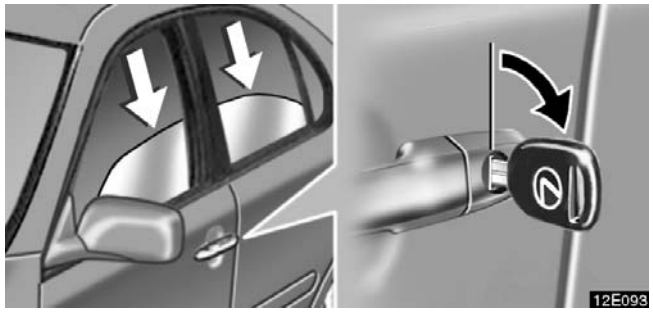
With the window lock switch pressed in, only the driver's window can be raised or lowered.

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

Operating the windows from outside the vehicle

The windows can be opened using an ignition key.*

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



Insert the ignition key into the key hole on the driver's door.

Turn the key in the unlocking direction and hold it.

After the doors are unlocked, the windows begin to open. To stop in the middle, return the key.

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

Jam protection function

During automatic raising operation or retained accessory power raising operation, 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.

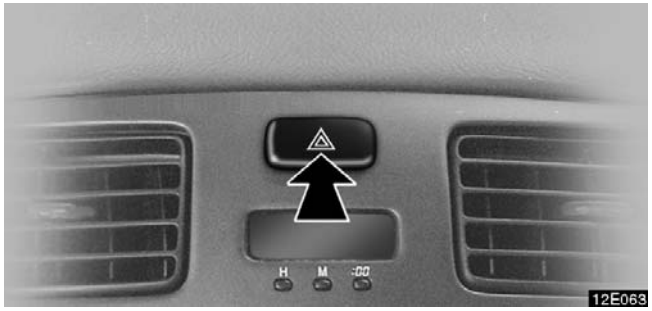
⚠ CAUTION

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 remove the ignition key when you leave your vehicle.**
- **Never leave anyone (particularly a small child) alone in your vehicle, especially with the ignition key still inserted. Otherwise, he/she could use the power window switches and get trapped in a window. Unattended person (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, as it could result in a serious injury.**
- **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.

All the turn signal lights will flash. The emergency flashers will work with the engine running or off and with or without the ignition 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 VENTILATOR/HEATER SWITCHES

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

Operating this switch warms the seats or provides airflow from inside the seats.

Seat heater

To turn on the seat heater, push the knob to pop it out and then turn the knob clockwise. The indicator light (yellow) comes on.

The ignition switch must be in the “ON” position to activate seat heaters.

Three setting levels are available.

To disable this function, turn the knob to the center position. The indicator light goes off.

Push the knob into the recessed 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 or seat surface.***
- ***Before cleaning the seats, fully wring out the towel that will be used. Water entering the 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 ventilator

To turn on the seat ventilator, push the knob to pop it out and then turn the knob counterclockwise. The indicator light (green) comes on.

The ignition switch must be in the “ON” position to activate seat ventilators.

Three setting levels are available.

To disable this function, turn the knob to the center position. The indicator light goes off.

Push the knob into the recessed 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 or seat surface.***
- ***Before cleaning the seats, fully wring out the towel that will be used. Water entering the 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 lv
Engine coolant temperature gauge lvi
Tachometer lvii
Odometer and trip meter lvii
Service reminder indicators and warning buzzers lviii
Multi–information display lxviii
Instrument panel light control lxxi

FUEL GAUGE

▶ ***Low fuel level warning light***

The gauge is displayed when the ignition switch is on and indicates the approximate quantity of fuel remaining in the tank.

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 ignition switch is on. 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.

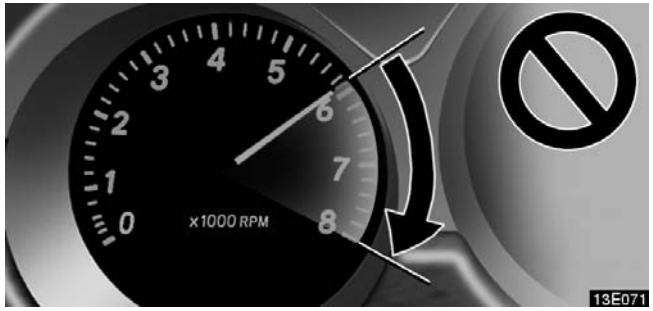
Your vehicle may overheat during severe operating conditions, such as:

- 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.
- Towing a trailer.

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 cccviii.***

TACHOMETER

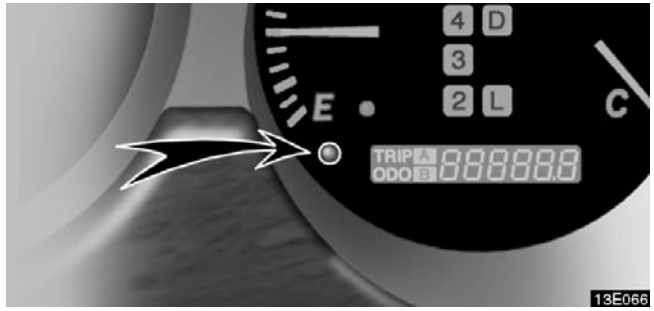


The tachometer indicates engine speed in thousands of rpm (revolutions per minute). Use it while driving to prevent engine over−revving.

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



▶ ***Trip meter reset knob***

This meter displays the odometer and two trip meters. To change the mode indication, push the trip meter reset knob briefly. Each time you push the knob, the mode changes in order from the odometer to trip meter A to trip meter B, then back to the odometer.

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 set the A trip meter to zero, display the A meter reading, push the knob and hold it. The same applies for the B trip meter.

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

SERVICE REMINDER INDICATORS AND WARNING BUZZERS

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

IF THIS INDICATOR OR BUZZER COMES ON...		DO THIS.
(e)		Stop and check.
(f)		Stop and check.
(g)		Add engine oil.
(h)	MAINT REQD	Replace engine oil.
(i)	CHECK	Take vehicle to Lexus dealer.

IF THIS INDICATOR OR BUZZER COMES ON...		DO THIS.
(j)	ABS or ABS	Take vehicle to Lexus dealer.
(k)		Close all doors.
(l)		Replace bulb.
(m)	VSC	Take vehicle to Lexus dealer.
(n)		Add washer fluid.

IF THIS INDICATOR OR BUZZER COMES ON...		DO THIS.
(o)		Take vehicle to Lexus dealer.
(p)	Low fuel level warning light	Fill up tank.
(q)	Key reminder buzzer	Remove key.

(a) Brake System Warning Light

This light comes on in the following cases when the ignition key is in the “ON” position.

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

This light comes on for a few seconds when the ignition key is turned to the “ON” position even after the parking brake is released.

- **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 cases.

- The light does not come on even if the parking brake is applied when the ignition key is in the “ON” position.
- The light does not come on even if the ignition key is turned on 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.

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

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

Once the ignition key is turned to "ON" or "START", the reminder light and buzzer come on if the driver's seat belt is not fastened. Unless the driver fastens the belt, the light remains on and the buzzer stops after about 4 to 8 seconds.

(c) 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 ignition key is turned to the "ON" position, the reminder light flashes if a front passenger sits in the front passenger seat and does not fasten the seat belt.

If luggage or other load is placed on the front passenger seat, depending on its weight, the reminder light may come on.

(d) SRS Warning Light

This indicator comes on when the ignition key is turned to the "ON" position. 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, front passenger occupant classification system, "AIRBAG OFF" indicator light, "AIRBAG ON" indicator light, front passenger's seat belt buckle switch, seat belt pretensioner assemblies, inflators, warning light, interconnecting wiring and power sources.

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.

- The light does not come on when the ignition key is turned to the “ON” position or remains on for more than 6 seconds.
- The light comes on while driving.

The SRS warning light and “AIRBAG OFF” indicator light will be illuminated if there is a malfunction in the front passenger occupant classification system.

(e) Charging System Warning Light

This warning light comes on when the ignition switch is turned to the “ON” position, and goes off when the engine is started.

When there are problems in the charging system while the engine is running, the warning light comes on.

NOTICE

When the charging system warning light comes on while the engine is running, malfunctions such as the engine drive belt being broken may have occurred. If the warning light comes on, immediately stop the vehicle in a safe place and contact your Lexus dealer.

(f) Low Engine Oil Pressure Warning Light

This light warns that the engine oil pressure is too low.

If it flickers or stays on 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 light may occasionally flicker when the engine is idling or it may come on briefly after a hard stop. There is no cause for concern if it then goes out when the engine is accelerated slightly.

The light may come on 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 with the warning light on — even for one block. It may ruin the engine.

(g) Low Engine Oil Level Warning Light

This light warns that the engine oil level is too low. Add oil as soon as possible. (For instructions, see “Checking the engine oil level” on page ccclvi.)

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

In normal conditions, due to engine oil consumption, this light may come on 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 cccliv.)

NOTICE

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

(h) Engine Oil Replacement Reminder Light (for vehicles sold in U.S.A.)

This light acts as a reminder to replace the engine oil.

This light will come on when the ignition key is turned to the “ON” position and will go off after about a few seconds.

When you drive for about 7200 km (4500 miles) after the engine oil replacement, this light illuminates for about 3 seconds and then flashes for about 12 seconds with the ignition key turned to the “ON” position. If you continue driving without replacing the engine oil, and if the distance driven exceeds 8000 km (5000 miles), the light will come on after the ignition key is turned to the “ON” position. The light will remain on thereafter.

If the light is flashing, we recommend that you replace the engine oil at an early opportunity depending on the driving and road conditions. If the light comes on, replace it as soon as possible.

The system must be reset after the engine oil replacement. Reset the system by the following procedure:

1. Turn the ignition key to the “ACC” or “LOCK” position with the odometer reading shown. (For details, see “Odometer and trip meter” on page lvii.)

2. Turn the ignition key to the “ON” position while holding down the trip meter reset knob.

Hold down the knob for at least 5 seconds. The odometer indicates “000000” and the light goes off.

If the system fails to reset, the light will continue flashing.

(i) Malfunction Indicator Lamp

This lamp comes on when the ignition key is turned to the "ON" position 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 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 ignition key is turned to the "ACC" or "LOCK" position.

⚠ CAUTION

Be especially careful to prevent erroneous pedal operation.

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 cccxxxvi.

(j) “ABS” Warning Light

Vehicles without vehicle stability control system —

The light comes on with the ignition key turned to the “ON” position. If the anti–lock brake system works properly, the light turns off after a few seconds. Thereafter, if the system malfunctions, the light comes on again.

When the “ABS” warning light is on (and the brake system warning light is off), the anti–lock brake system does not operate, but the brake system still operates conventionally.

When the “ABS” warning light is on (and the brake system warning light is off), the anti–lock brake system does not operate so that the wheels could lock up during a sudden braking or braking on slippery road surfaces.

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

- The light does not come on when the ignition key is turned to the “ON” position, or remains on.
- 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, 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.

Vehicles with vehicle stability control system —

The light comes on with the ignition key turned to the “ON” position. If the anti–lock brake system and the brake assist system work properly, the light turns off after a few seconds. Thereafter, if the system malfunctions, the light comes on again.

When the “ABS” warning light is on (and the brake system warning light is off), the anti–lock brake system, the brake assist system, the traction control system and the vehicle stability control system do not operate, but the brake system still operates conventionally.

When the “ABS” warning light is on (and the brake system warning light is off), the anti–lock brake system does not operate so that the wheels could lock up during a sudden braking or braking on slippery road surfaces.

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

- The light does not come on when the ignition key is turned to the “ON” position, or remains on.
- 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, 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.

(k) Open Door Warning Light

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

(l) Rear Light Failure Warning Light

If this light comes on when the headlight switch is turned on (at the first or second clickstop), it indicates that one or more of the tail lights are burned out.

If it comes on when the brake pedal is depressed, one or more stop lights are burned out.

Have defective bulbs replaced as soon as possible.

(m) Vehicle Stability Control System/Traction Control System Warning Light

This light warns that there is a problem somewhere in the vehicle stability control system or traction control system.

The light will come on when the ignition key is turned to “ON” and will go off after a few seconds.

If the light comes on while driving, the system does not work. However, as conventional braking operates when applied, there is no problem to continue your driving.

In the following cases, contact your Lexus dealer:

- The warning light does not come on after the ignition key is turned to “ON”.
- The warning light remains on after the ignition key is turned to “ON”.
- The warning light comes on while driving.

The “TRAC OFF” indicator light will come on when the “VSC” warning light comes on even if the “TRAC OFF” switch is not pushed.

(n) Low Washer Fluid Warning Light

This light comes on when the fluid level in the tank becomes nearly empty. Fill the tank as soon as possible.

(o) Automatic Headlight Leveling System Warning Light (vehicles with discharge headlight only)

This light warns that when there is a problem somewhere in the automatic headlight leveling system.

If it comes on, have your vehicle checked by your Lexus dealer.

(p) Low Fuel Level Warning Light

This light comes on when the fuel level in the tank becomes nearly empty. 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.

(q) Key Reminder Buzzer

This buzzer acts as a reminder to remove the key when you open the driver's door with the ignition key in the "ACC" or "LOCK" position.

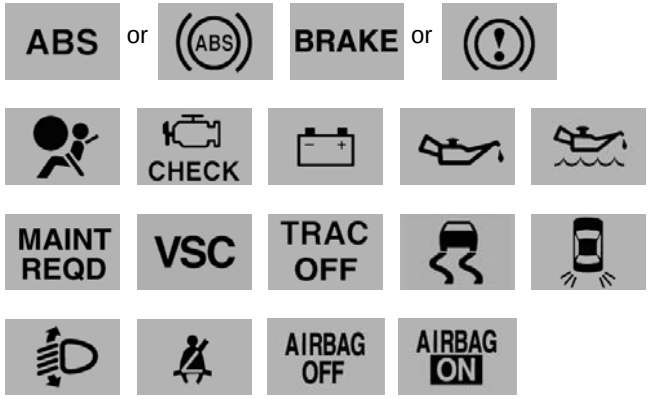
How to check all the service reminder indicators (except the low fuel level warning light and low washer fluid warning light)

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

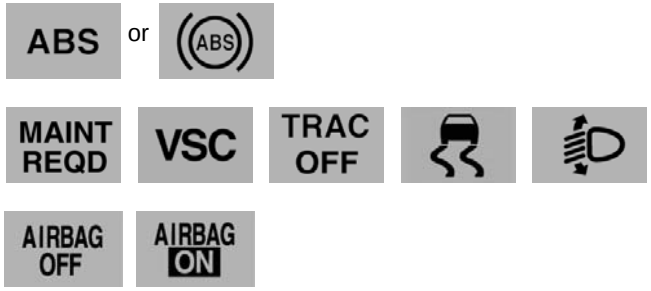
The following service reminder indicator should come on. It goes off when you close the door completely.

3. Turn the ignition key to "ON".

The following service reminder indicators should come on.



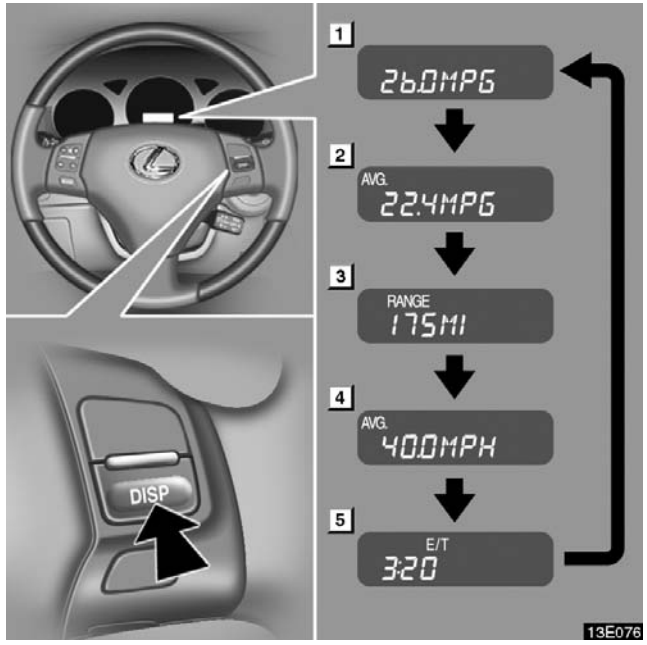
The following service reminder indicators go off after a few seconds.



The following service reminder indicator goes off after 6 seconds.

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 following information is displayed in the instrument cluster when you push the “DISP” button with the ignition switch turned on.

Each time you push the “DISP” button, the display toggles through this information.

(1) Instantaneous fuel consumption

(2) Average fuel consumption

(3) Driving range

(4) Average vehicle speed

(5) Driving time

The displayed values in the multi–information display indicate general driving conditions. Accuracy varies with driving habits and road conditions.

When the ignition switch is on, the last previously used mode displayed just before the ignition switch is off will appear.

If the electrical power source has been disconnected from the multi–information display, the display will automatically be set to the initial mode.

When the instrument panel lights are turned on, the brightness of the display will be reduced.

CAUTION

Do not adjust the display while the vehicle is moving. Be sure to adjust the display only when the vehicle is stopped.

(1) Instantaneous fuel consumption (“MPG” or “L/100km”)

The instantaneous fuel consumption is calculated and displayed based on distance and fuel consumption for 2 seconds with the engine running.

The displayed value is updated every 2 seconds.

Note that an accurate figure may not be shown in the following cases.

- The vehicle is stopped with the engine running. (The display will indicate the extremely high fuel consumption.)
- The vehicle is driving down a long slope applying the engine brake. (The display will indicate the extremely low fuel consumption.)

The calculation is reset when the ignition switch is turned off.

(2) Average fuel consumption (“AVG. MPG” or “AVG. L/100 km”)

Average fuel consumption is calculated and displayed based on total driving distance and total fuel consumption with the engine running.

The displayed value is updated every 10 seconds.

To reset the calculations, push and hold the “DISP” button.

(3) Driving range (“RANGE MI” or “RANGE km”)

The distance the vehicle can travel with the remaining fuel is calculated and displayed based on the quantity of remaining fuel and past fuel consumption.

The driving range display indicates the approximate distance that you can drive until the fuel gauge reaches “E”. It is different from the actual distance traveled.

The displayed value is updated every time the fuel equivalent for 1 mile or 1 km is consumed.

Every time you refuel the vehicle, the calculation is reset.

The actual driving range varies with driving habits and road conditions. If fuel consumption is good, the driving range will be longer than indicated. If fuel consumption is poor, the driving range will be shorter than indicated.

If the low fuel level warning light comes on, refuel the vehicle even if the display indicates that the vehicle can be driven further.

(4) Average vehicle speed (“AVG. MPH” or “AVG. km/h”)

Average vehicle speed is calculated and displayed based on total driving distance and total driving time with the engine running.

The displayed value is updated every 10 seconds.

To reset the calculations, push and hold the “DISP” button.

(5) Driving time (“E/T”)

The elapsed time after the engine starts is displayed.

When the engine is started, driving time is counted from 0:00. Up to 99:59 (99 hours, 59 minutes) can be displayed. When the driving time exceeds 99:59, the counter returns to 0:00.

To reset the calculations, push and hold the “DISP” button.

INSTRUMENT PANEL LIGHT CONTROL

To adjust the brightness of the instrument panel lights, turn the dial.

With the dial turned fully up, the intensity of the instrument panel lights will not be reduced when the headlight switch is on.

If the instrument panel light control dial is turned fully down, the foot lights will turn off.

SECTION 1 – 4

INSTRUMENTS AND CONTROLS

Interior equipment

Sun visors lxxiii
Interior light lxxiii
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Illuminated entry system lxxiv
Clock lxxvi
Cigarette lighter and ashtray lxxvi
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Garage door opener lxxx
Cupholders lxxxv
Overhead console box lxxxvi
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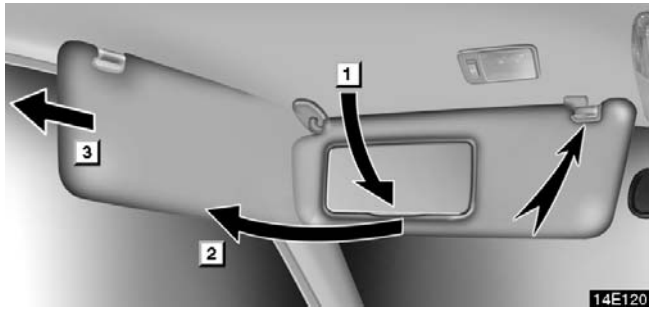
Trunk storage extension lxxxviii
Floor mat lxxxviii
Grocery bag hook lxxxix
Coat hooks xc
Rear electric sunshade xc
Tie–down hooks xci

SUN VISORS



To block out glare, move the sun visor:

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

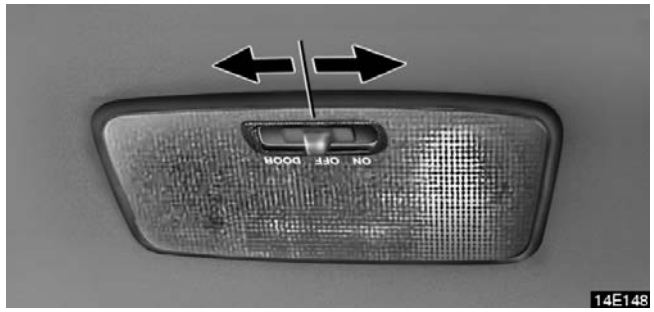
2 **To block out glare from the side, remove the sun visor from the hook and swing it to the side.**

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

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

Even in position 1 or 2, the vanity light may not come on if the visor has been slid out. Return the visor to its lock position.

INTERIOR LIGHT



To turn on the interior light, slide the switch.

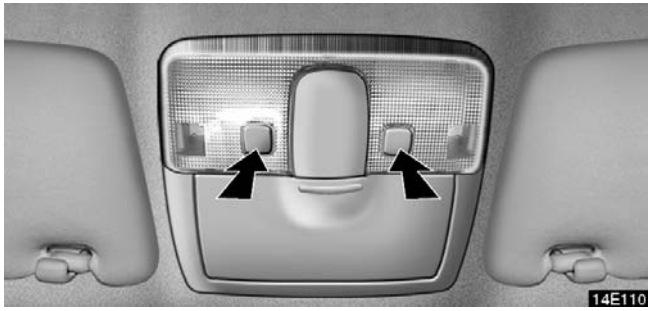
The interior light switch has the following positions:

“ON” — Keeps the light on all the time.

“OFF” — Turns the light off.

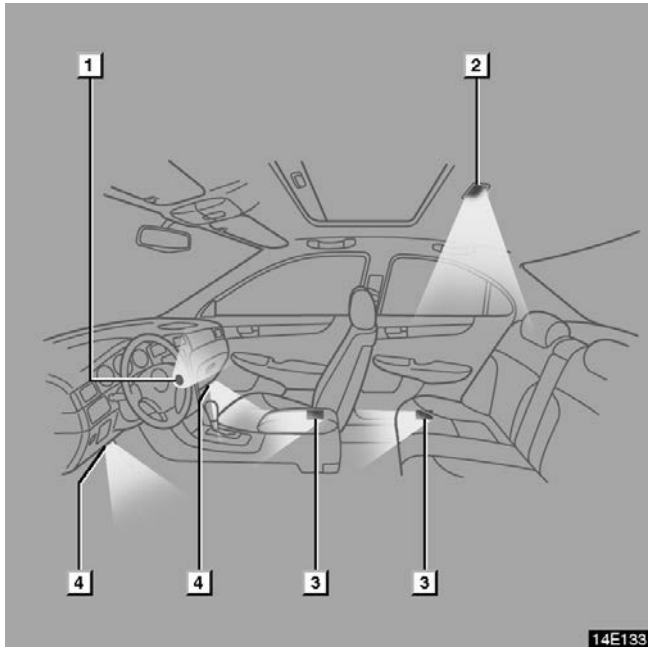
“DOOR” — Turns the light on when any door is opened. The light goes off when all the doors are closed. For details, see “Illuminated entry system” on page lxxiv.

PERSONAL LIGHTS



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

ILLUMINATED ENTRY SYSTEM



▶ 1 ***Ignition switch light***
2 ***Interior light (with the "DOOR" position)***
3 ***Door courtesy lights***
4 ***Foot lights***

All of the lights will come on when any of the doors are opened.* After all the doors are closed, the lights remain on for about 15 seconds before fading out.**

NOTE:
** The operating condition can be changed.*
*** The duration of lighting can be changed and only the foot lights can be set not to come on.*
Ask your Lexus dealer for details.

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

- All the doors are closed and the ignition key is in the “ACC” or “ON” position. (The foot lights come on when the ignition switch is in the “ON” position. See the following “Foot lights”.)
- All the doors are locked.

When all the doors are unlocked simultaneously using either the key or the wireless remote control, all of the lights will come on and remain on for about 15 seconds before fading out.

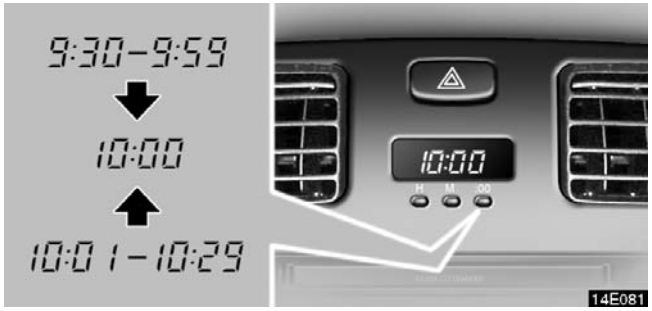
Foot lights

The foot lights also come on when the ignition switch is in the “ON” position with the selector lever in the “P” position. When the selector lever is moved out of the “P” position, the foot lights will be dimmed.*

NOTE:
** The foot lights can be set to turn off when the selector lever is moved out of the “P” position.*
Ask your Lexus dealer for details.

When the instrument panel control dial is turned fully down, the foot lights will turn off.

CLOCK



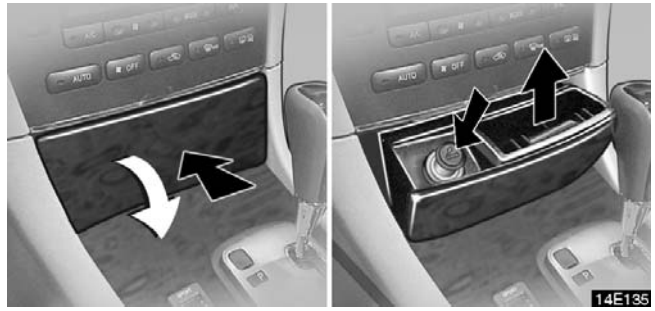
The digital clock indicates the time with the ignition key at the "ACC" or "ON" position. To reset the hour, press the "H" button. To reset the minutes, press the "M" button. To adjust the time to the nearest hour, press the ":00" button.

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

With the tail lights on, the brightness of the time indication will be reduced.

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

CIGARETTE LIGHTER AND ASHTRAY



▶ ***Cigarette lighter and ashtray***

To use the cigarette lighter and ashtray, first push against the ashtray cover. 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, the ignition key must be in the "ACC" position to use the lighter.

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.

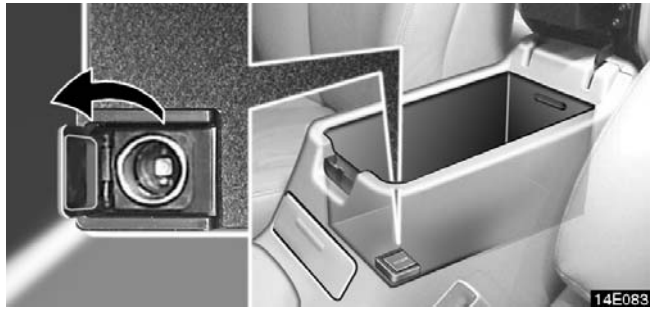
To remove the ashtray, just pull it up.

Use a Lexus genuine cigarette lighter or equivalent for replacement.

⚠ CAUTION

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

POWER OUTLET



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

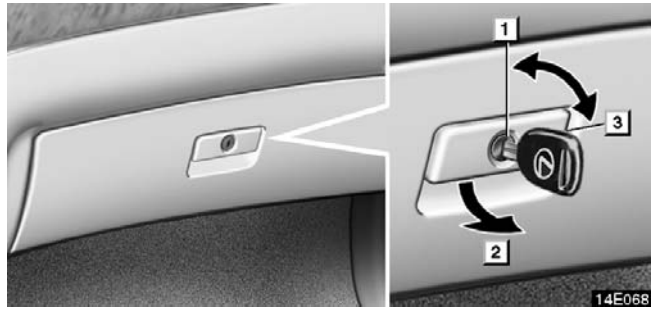
The ignition key must be in the “ACC” or “ON” position for the power outlet to be used.

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.***

GLOVE BOX



▶ 1 ***Unlock*** 2 ***Open*** 3 ***Lock***

To open the glove box door, pull the lever. To lock the glove box door, insert the master key and turn it clockwise.

With the tail lights on, the glove box light will come on when the glove box door is open.

The trunk lid opener main switch is installed inside the glove box. See page xcv for further information.

⚠ 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.

REAR CONSOLE BOX

▶ *Upper tray*

▶ *Console box*

To access the upper tray, push the lock release button and raise the lid. To access the console box, pull up the lock release lever and raise the lid.

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

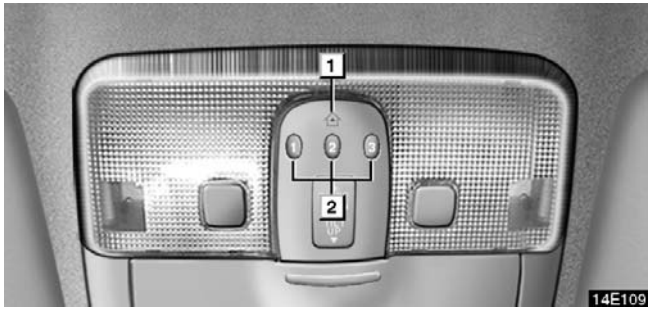
⚠ CAUTION

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

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*

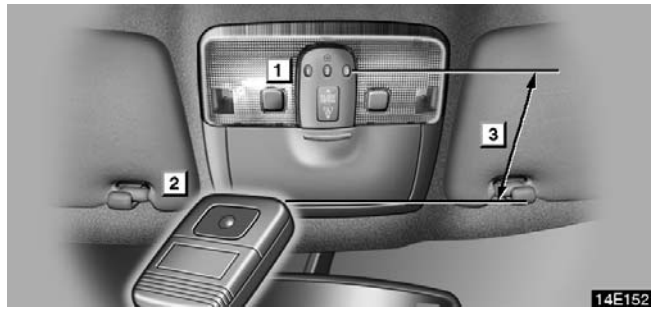
The HomeLink® in your vehicle has 3 buttons and you can store one program for each button.

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”.

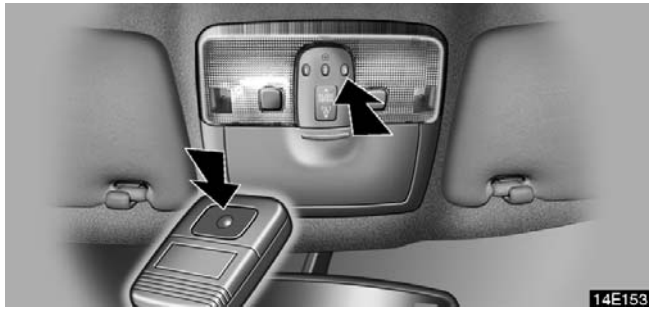
1. Decide which of 3 HomeLink® buttons you want to program.



▶ 1 *HomeLink®* 2 *Hand−held garage transmitter* 3 *25 to 75 mm (1 to 3 in.)*

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

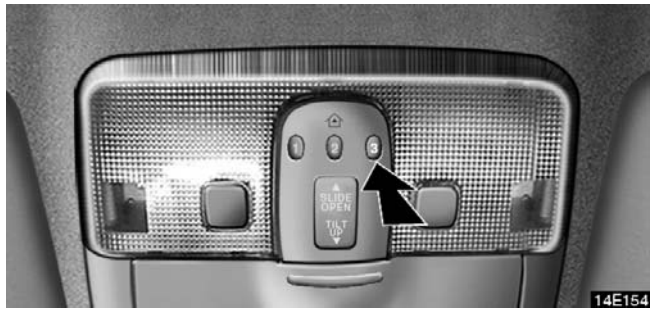
Keep the indicator light on the HomeLink® in view while programming.



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 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.

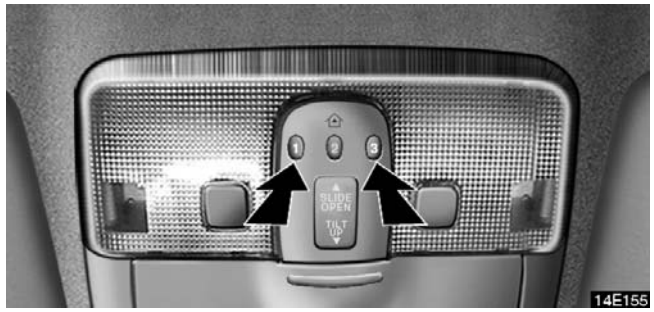
Reprogramming a button

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.

INTERIOR EQUIPMENT

⚠ 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 cupholder*

To use the front cupholder, push the cupholder portion of the rear console box.

▶ *Rear cupholder*

To use the rear cupholder, pull down the armrest and open the cover.

The cupholder 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.**

OVERHEAD CONSOLE BOX

To use the overhead console box, push the lid.

⚠ CAUTION

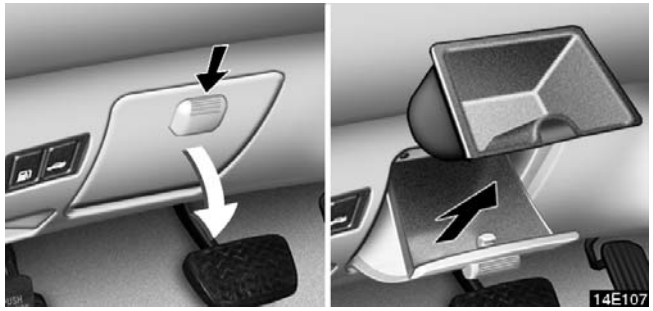
- **To reduce the chance of injury in case of an accident or a sudden stop, always keep the overhead console box closed while driving.**
- **As this box is designed for holding eyeglasses, do not place any object heavier than approximately 60 g (0.13 lb.) in it. Heavier objects may cause the box to open 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.

AUXILIARY BOXES

To use them, open as shown in the following illustrations.



▶ ***On the instrument panel***

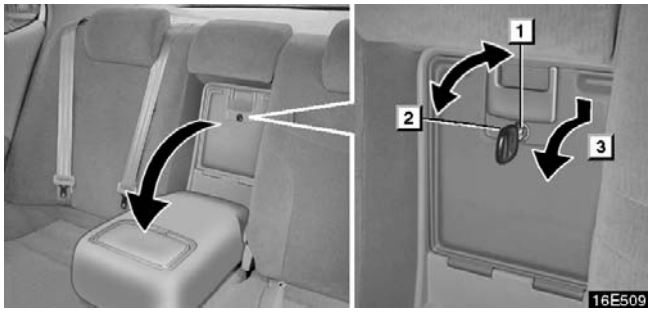
To remove the adapter tray inside of the box, pull it up.

▶ ***In the trunk***

⚠ CAUTION

To reduce the chance of injury in case of an accident or a sudden stop, always keep the auxiliary box 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.

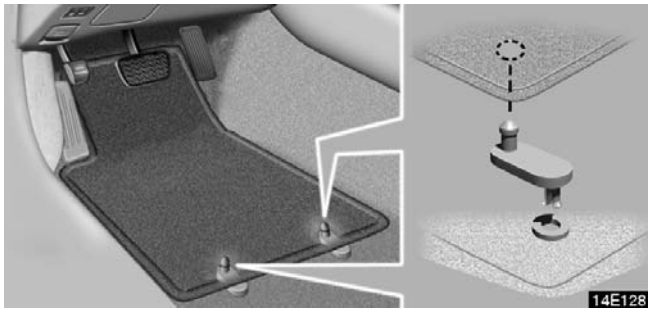
Access to the trunk can be prevented by locking the armrest door with the master key.

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

⚠ CAUTION

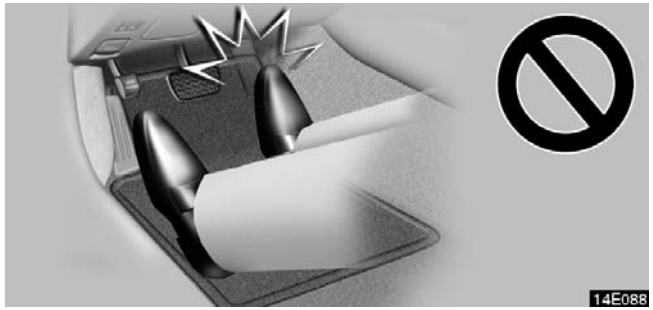
Be sure to close the door when the trunk storage extension is not in use. Luggage or cargo in the trunk may be thrown into the passenger compartment in a sudden stop or crash resulting in injury.

FLOOR MAT



Use a floor mat of the correct size.

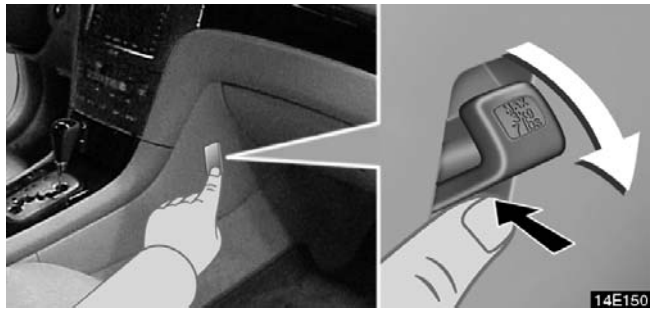
If the floor carpet and floor mat have 2 holes, then they are designed for use with locking clips. Fix the floor mat with locking clips into the holes in the floor carpet.



⚠ 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.

GROCERY BAG HOOK



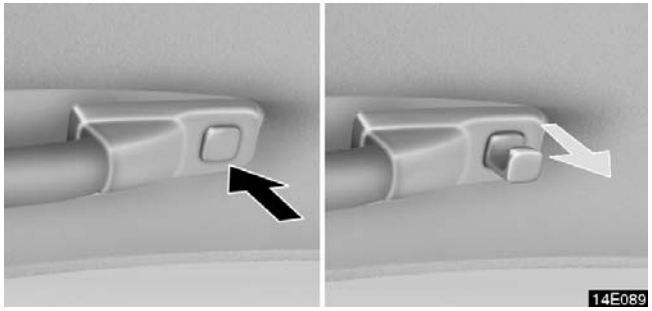
To use the grocery bag hook, push the lower portion of the hook.

This hook is designed for hanging things like a grocery bag.

NOTICE

To prevent damage to the hook, do not hang any object heavier than approximately 3 kg (7 lb.) on it.

COAT HOOKS



To use the coat hook, push the hook.

CAUTION

Do not hook a hanger, heavy or sharp pointed object on the coat hook. If the curtain shield airbag inflates, those items will be hurled away with great force or the curtain shield airbag may not activate correctly. When you hang clothes, hang them on the coat hook directly.

REAR ELECTRIC SUNSHADE

To raise the rear electric sunshade, push the switch. To lower the sunshade, push the same switch again.

The sunshade works when the ignition switch is in the “ON” 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, move the selector lever out of “R” position and push the switch again.

CAUTION

- **Do not touch the brackets fastening the sunshade to avoid injuring your fingers or hands.**
- **Do not put your fingers in the sunshade groove while the sunshade is operating to avoid getting them caught or injured by the runner.**

NOTICE

- ***To prevent the vehicle battery from being discharged, always operate the sunshade while the engine is running.***
- ***Observe the following to avoid damage and/or malfunction:***

  Do not overload the sunshade motor and other parts (for instance by pushing down on the sunshade bracket while it is opening).

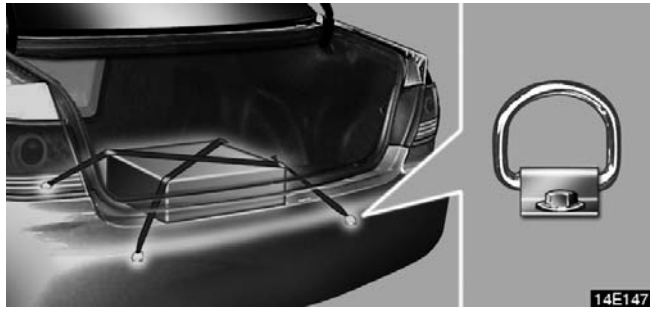
  Do not place anything where they may hinder the opening/closing of the sunshade.

  Do not affix anything to the sunshade.

  Clean the sunshade 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 “Stowage precautions” on page ccxcviii for precautions when loading luggage.

SECTION 1 – 5

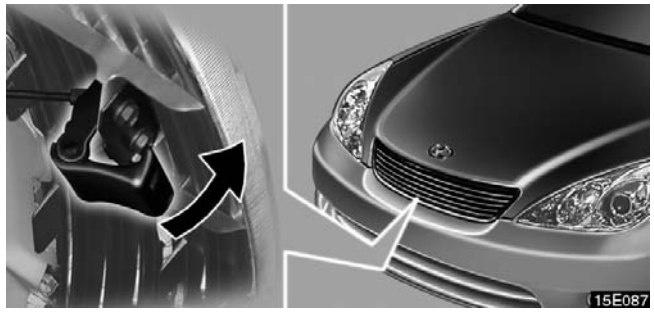
INSTRUMENTS AND CONTROLS

Exterior equipment

Hood xciii
Trunk lid xciv
Fuel tank cap xcvii
Moonroof c

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 securely locked. Otherwise, the hood may open unexpectedly while driving and an accident may occur.

TRUNK LID

Trunk lid opener

To open the trunk lid, push the switch.

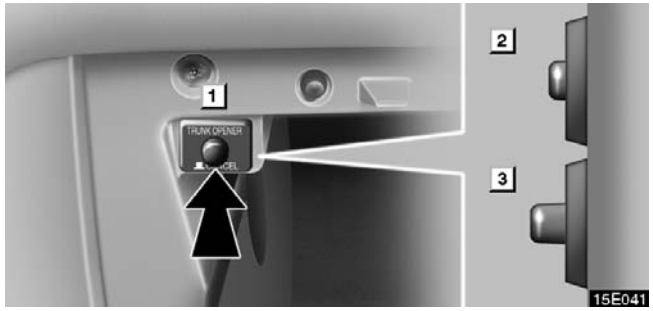
To close the trunk lid, lower it and press down on it. After closing the trunk lid, try pulling it up to make sure it is securely closed.

The trunk lid can be unlocked using the wireless remote control key. For details, see page xix.

⚠ 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.

Trunk lid opener main switch

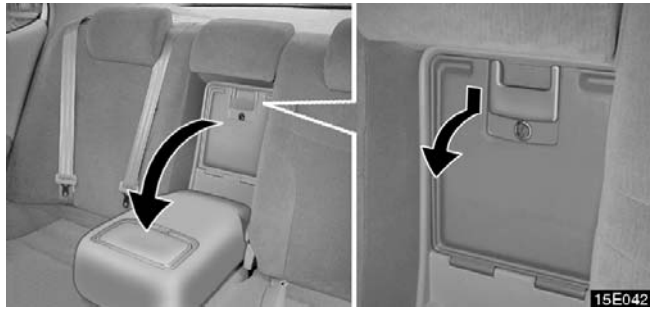


▶ 1 *Main switch* 2 *Operative* 3 *Inoperative*

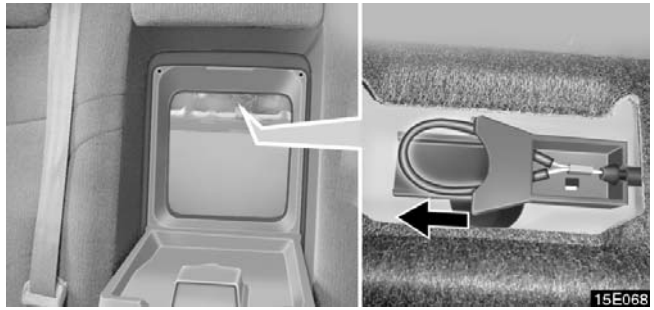
If you do not want to activate the trunk lid opener system, turn off the main switch in the glove box. To turn it on, push in the main switch.

The trunk lid can be opened using a loop of wire in the trunk even with the main switch in the glove box turned off. When keeping items in the trunk, be sure to turn off the main switch and lock the glove box and rear armrest door. For locking the glove box, see page lxxviii. For locking the rear armrest door, see page lxxxviii.

In case the opener is not actuated



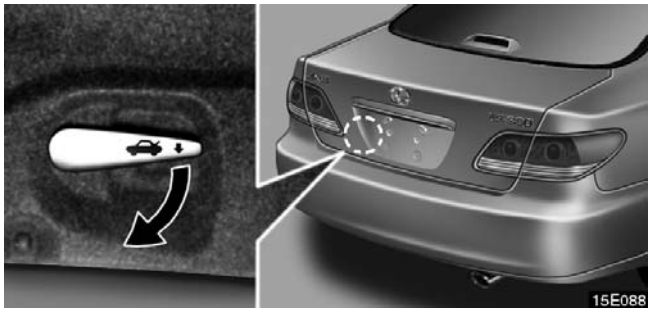
1. Pull down the rear armrest and open the rear armrest door.



2. Pull the loop of wire to unlock the trunk lid.

This is used in case the trunk lid cannot be unlocked due to a discharged battery or other trouble.

Internal trunk release handle



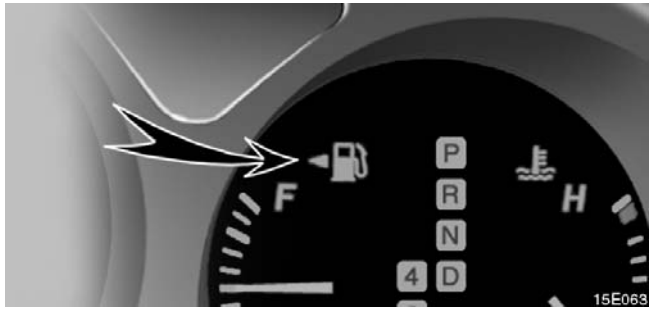
If a person is locked in the trunk, he/she can pull down the phosphorescent handle on the inside of trunk lid to open the trunk lid.

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.

⚠ CAUTION

- **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. Unsupervised children may lock themselves in the vehicle or trunk and suffer serious injuries or death.**

FUEL TANK CAP



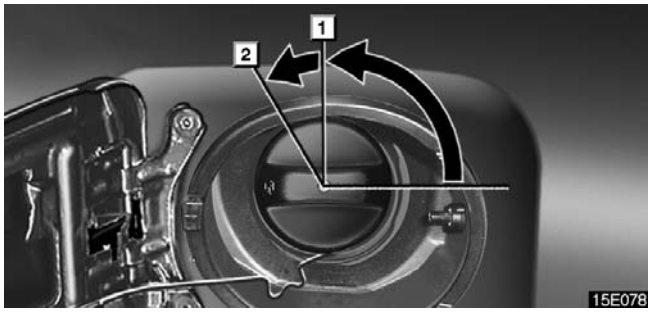
This indicates that the fuel filler door is on the left side of your vehicle.

1. To open the fuel filler door, push the switch.

When refueling, turn off the engine.

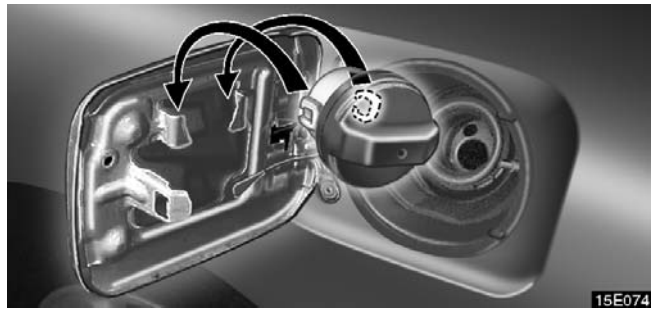
⚠ CAUTION

- **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.**



2. To remove the fuel tank cap, turn the cap counterclockwise by 90 degrees (to the pressure point 1), and then turn it an 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 tightened 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.

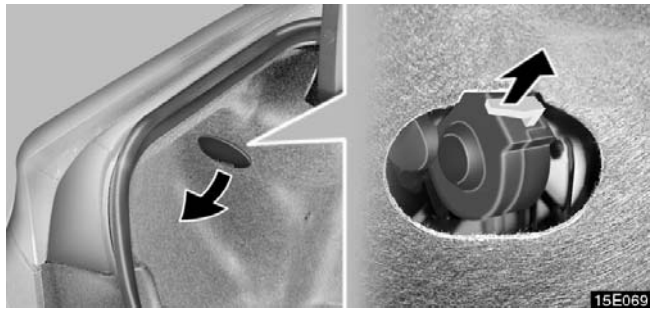
CAUTION

- **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.

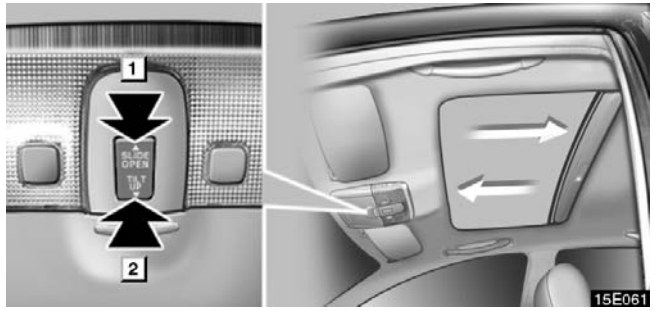
In case the opener is not actuated



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.

MOONROOF



▶ 1 *Open* 2 *Close*

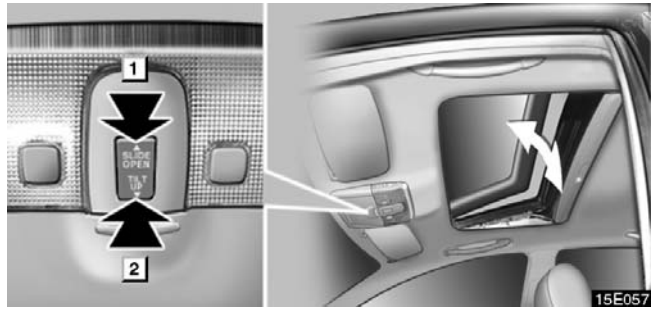
To slide open the moonroof, push the switch on the "SLIDE OPEN" side for about 1 second. The moonroof will fully open. To stop partway, push the same side or "TILT UP" side briefly.

The sunshade can be opened or closed manually. However, if you open the moonroof, the sunshade will be opened with the moonroof.

To close the moonroof, push the switch on the "TILT UP" side for about 1 second. The moonroof will fully close. To stop partway, push the same side or "SLIDE OPEN" side briefly.

To slide open the tilted−up moonroof:

Push the switch on the "SLIDE OPEN" side to tilt down the moonroof. After releasing the switch, push the switch on the same side again.



▶ 1 *Tilt down* 2 *Tilt up*

To tilt up the moonroof, push the switch on the "TILT UP" side for about 1 second. The moonroof will fully tilt up. To stop partway, push the same side or "SLIDE OPEN" side briefly.

To tilt down the moonroof, push the switch on the "SLIDE OPEN" side for about 1 second. The moonroof will fully tilt down. To stop partway, push the same side or "TILT UP" side briefly.

To operate the moonroof, the ignition key must be in the "ON" position.

Retained accessory power operation: Even if the ignition key is turned to the “ACC” or “LOCK” position, the moonroof can be operated until a front door is opened (or for 43 seconds).

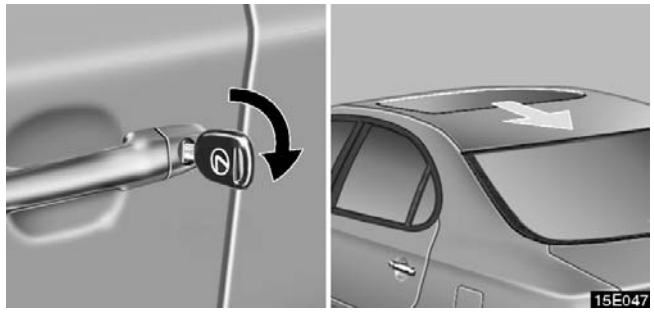
To tilt up the slide−opened moonroof:

Push the switch on the “TILT UP” side to close the moonroof fully. After releasing the switch, push the switch on the same side again.

Operating the moonroof from outside the vehicle

The moonroof can be opened using an ignition key.*

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



Insert the ignition key into the key hole on the driver’s door.

Turn the key in the unlocking direction and hold it.

After the door is unlocked, the moonroof begins to open. To stop in the middle, return the key.

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

Jam protection function

If something gets caught into the roof opening during closing operation, the moonroof stops and opens.

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

If the battery is disconnected or run down

The moonroof 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 moonroof.

To normalize the moonroof, push and hold the switch on the “TILT UP” side until the moonroof tilts all the way up and then tilts down a little automatically.

Make sure that the moonroof opens and closes automatically. If the moonroof 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 moonroof, always make sure there is nobody around the moonroof. 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 moonroof, first make sure it is safe to do so.**
- **Be sure to remove the ignition key when you leave your vehicle.**
- **Never leave anyone (particularly a small child) alone in your vehicle, especially with the ignition key still inserted. Otherwise, he/she could use the moonroof switch and get trapped in the roof opening. Unattended person (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, as it could result in a serious injury.**
- **The jam protection function may not work if something gets caught just before the moonroof fully closed.**

SECTION 1 – 6

INSTRUMENTS AND CONTROLS

Occupant restraint system

Seats cv
Front seats cv
Head restraints cx
Seat belts cxi
SRS driver airbag and front passenger airbag cxxiii
SRS side airbags and curtain shield airbags cxxxiii
Front passenger occupant classification system cxliii
Child restraint cxlvii
Driving position memory system clxvii
Front passenger seat position memory system clxix

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 (with SRS side airbags)

CAUTION

The SRS 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 side airbag inflates with considerable speed and force. Otherwise, you may be killed or seriously injured.**
- **Do not use seat accessories which cover the area 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 seats or upholstery of the seats with side airbags. Such change 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.**

Seat adjustment precautions

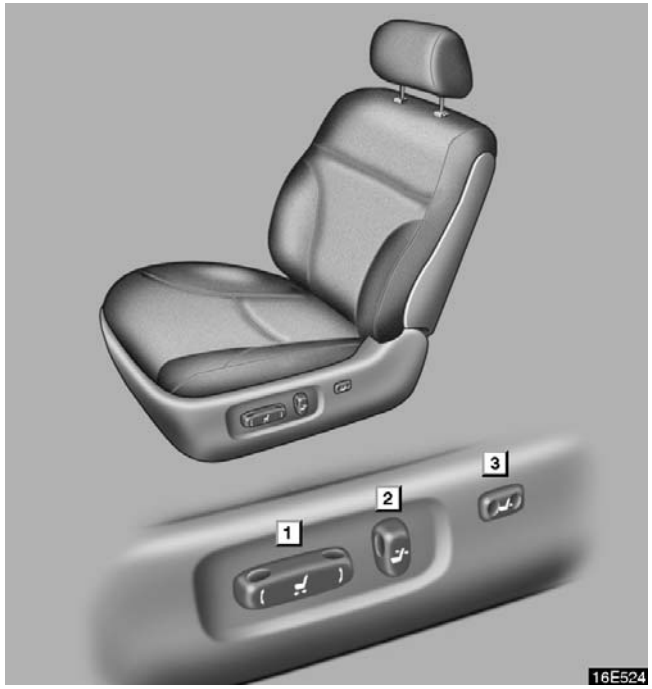
CAUTION

- **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

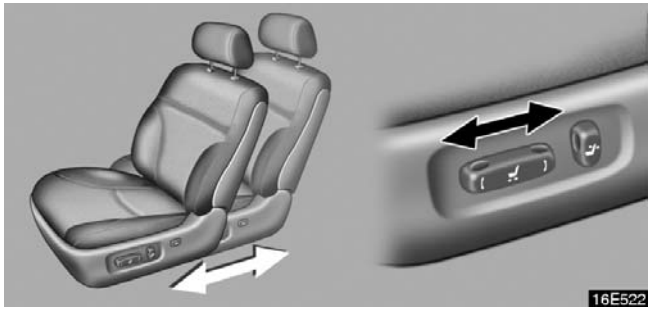
Do not operate the control switch in more than one dimension at a time. It may cause electrical overload.

Adjusting front seats



▶ 1 ***Seat position, seat cushion angle and seat cushion height control switch***
2 ***Seatback angle control switch***
3 ***Lumbar support control switch***

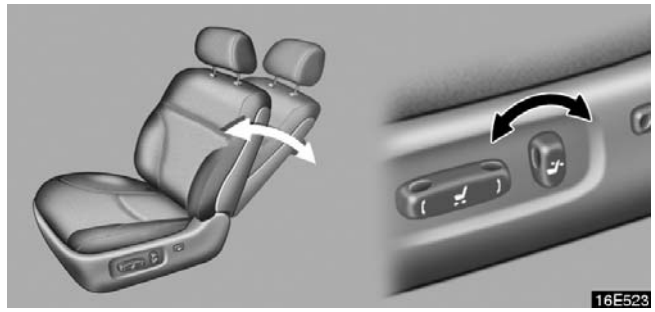
Adjusting seat position



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



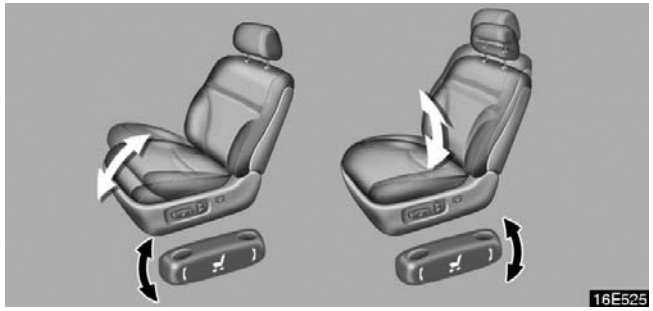
Move the control switch in the desired direction.

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.

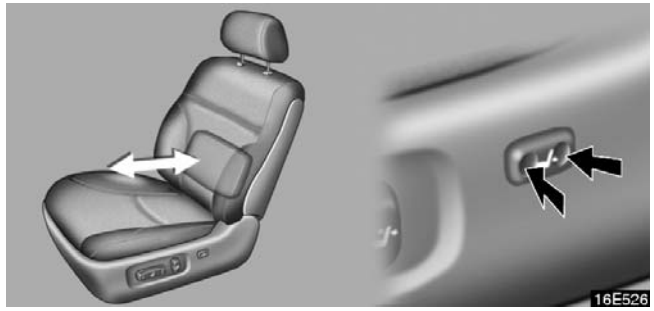
Adjusting seat cushion angle and height



Move the control switch in the desired direction.

Releasing the switch will stop the seat cushion in that position.

Adjusting lumbar support (driver's seat only)



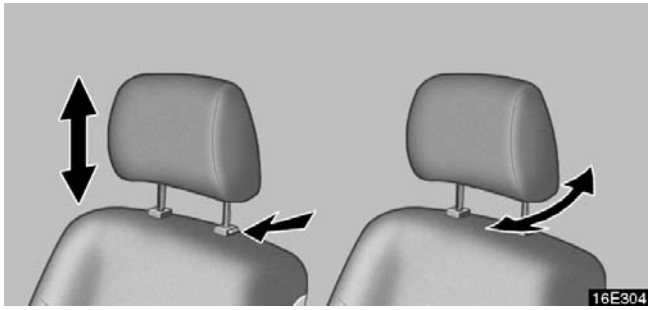
Push the control switch on either side.

The amount of lumbar support will change while the switch is pushed.

HEAD RESTRAINTS

For your safety and comfort, adjust the head restraint before driving.

Front seats



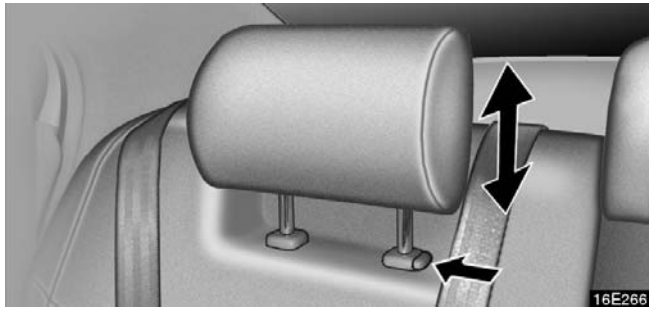
To raise the head restraint, pull it up. To lower it, press the lock release button and push the head restraint down. To move the head restraint forward or rearward, pull or push the base of the head restraint.

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



To raise the head restraint, pull it up. To lower it, press the lock release button and push the head restraint down.

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 pagecxlvii 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.

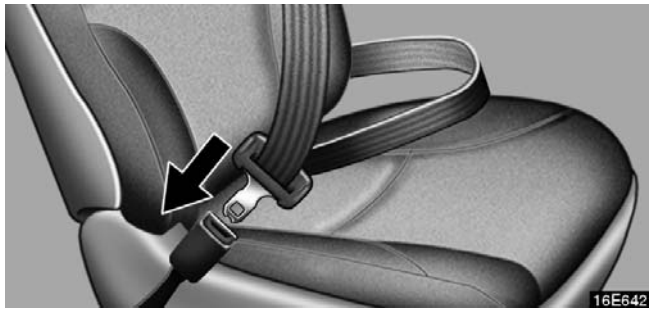
CAUTION

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 belts — they may severely weaken the belts. (See “Cleaning the interior” on page cdxviii 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.

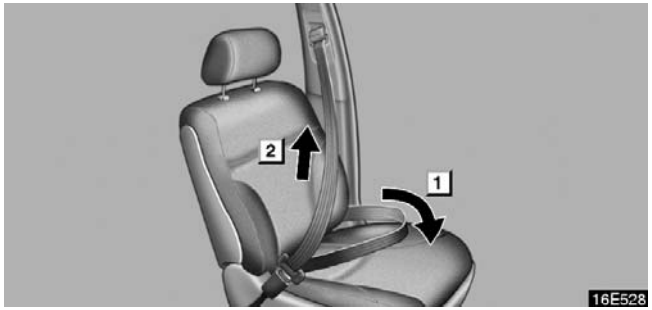
The retractor will lock the belt during a sudden stop or on impact. It also may lock if you lean forward too quickly. A slow, easy motion will allow the belt to extend, and you can move around freely.

When a passenger's shoulder 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 cxlvii.) 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 death or serious injury.**



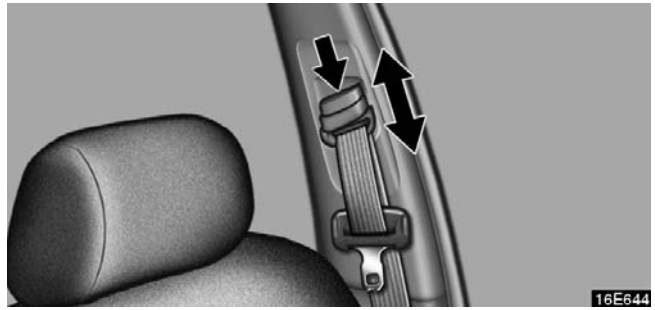
Adjust the position of the lap and shoulder belts.

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 hip as possible.**
- **Do not place the shoulder belt under your arm.**



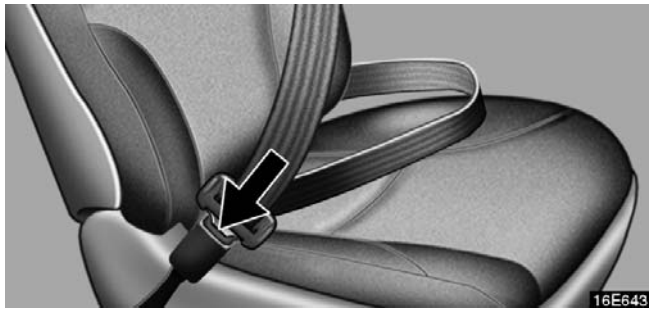
▶ ***Front seat belts only***

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 the adjustment, make sure the anchor is locked in position.

⚠ CAUTION

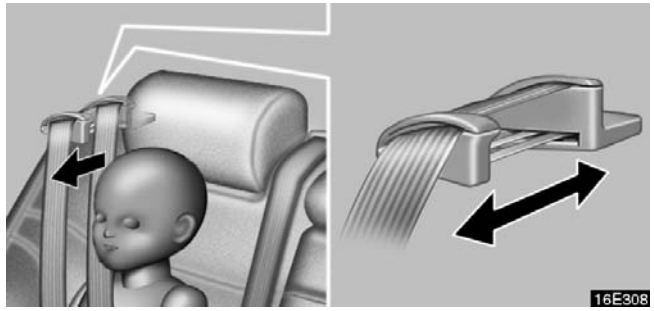
Always make sure the shoulder belt is positioned across the center of your shoulder. The belt should be kept away from your neck, but not falling off your shoulder. Failure to do so could reduce the amount of protection in an accident and cause serious injuries in a collision.



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

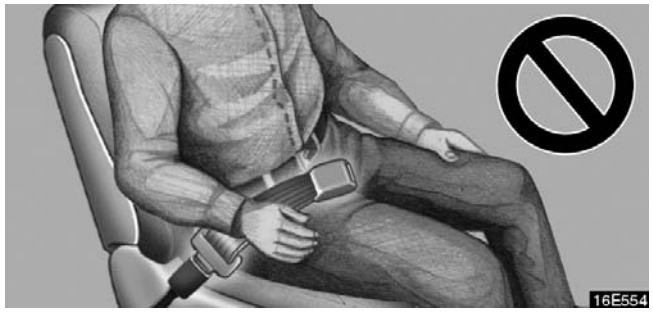
If your seat belts cannot be fastened securely because it is not long enough, a personalized seat belt extender is available from your Lexus dealer free of charge.

Please contact your local Lexus dealer to 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 result in less 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, or for another person or at a different seating position than the one originally intended for.**



- **If the seat belt extender has been connected to the driver's seat belt buckle without wearing the seat belt when using the extender in the driver's seat, the SRS driver's airbag system will judge that the driver wears the seat belt even if not wearing it. In this case, the driver's airbag may not activate correctly, causing death or serious injury in the event of collision. Be sure to wear the seat belt with the seat belt extender.**

- **Make sure the "AIRBAG ON" indicator light is illuminated when using the seat belt extender for the front passenger seat. If the "AIRBAG OFF" indicator light is illuminated, disconnect the extender tongue from the seat belt buckle, then reconnect the seat belt. Reconnect the seat belt extender after making sure the "AIRBAG ON" indicator light is illuminated. If you use the seat belt extender while the "AIRBAG OFF" indicator light is illuminated, the front passenger airbag and side airbag on the front passenger side may not activate correctly, which could cause death or serious injury in the event of collision.**
- **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.

As far as the seat belt extender on the front passenger side is concerned, do not fail to disconnect the extender from the seat belt after the above operation in order to activate the front passenger airbag correctly when getting into the vehicle next time.

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

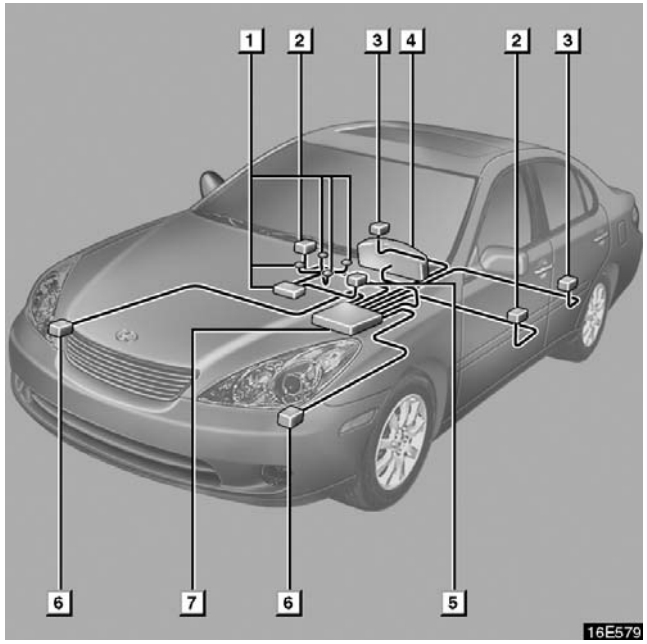
Both front seats and the two outboard rear seats are equipped with seat belt pretensioners and are designed to be activated in response to a severe frontal impact.

When the sensor detects a severe frontal impact, the seat belts are quickly drawn back by the retractors so that the belts snugly restrain the occupants.

The front passenger's seat belt pretensioner will not activate if no passenger is detected in the front passenger seat by the front passenger occupant classification system. However, the front passenger's seat belt pretensioner may activate if luggage is put on the seat, or the seat belt is buckled up regardless of the presence of an occupant in the seat. (As for the front passenger occupant classification system, see page cxliii.)

The outboard rear seat belt pretensioners are activated even with no passenger in the outboard rear seats.

The seat belt pretensioners and SRS airbags may not operate together in all collisions.



▶ 1 ***Front passenger occupant classification system (ECU and sensors)***
2 ***Front seat belt pretensioner assemblies***
3 ***Rear seat belt pretensioner assemblies***
4 ***SRS warning light***
5 ***Front passenger's seat belt buckle switch***
6 ***Front airbag sensors***
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.

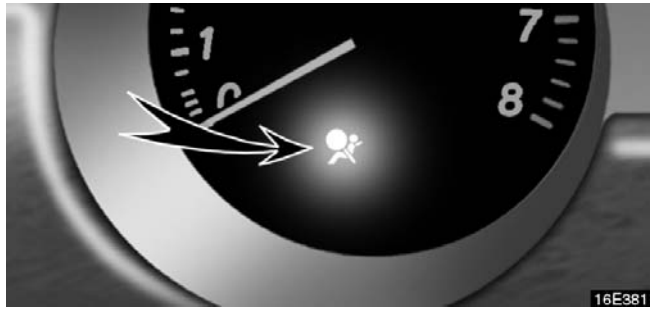
⚠ CAUTION

Do not modify, remove, strike or open the seat belt pretensioner assemblies, airbag sensor or surrounding area or wiring. Failure to follow these instruction 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***
- ***Repair made on or near the front fenders, front end structure or console***

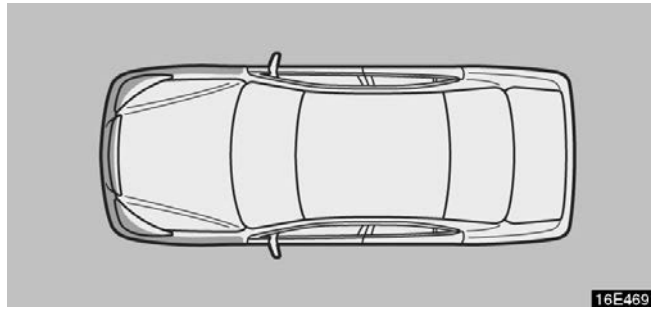


This indicator comes on when the ignition key is turned to the “ON” position. It goes off after about 6 seconds. This means the seat belt pretensioners are operating properly.

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, front passenger occupant classification system, “AIRBAG OFF” indicator light, “AIRBAG ON” indicator light, 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 lviii for instructions.)

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.

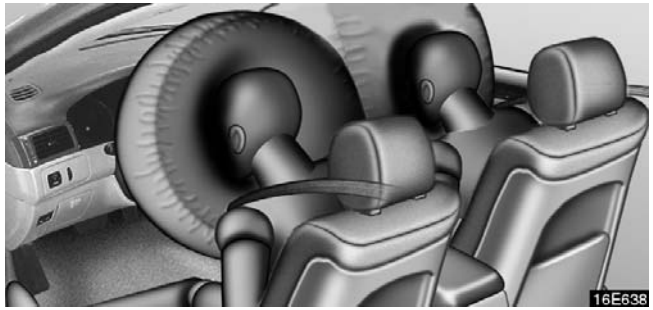
- The light does not come on when the ignition key is turned to the “ON” position or remains on for more than 6 seconds.
- The light comes on while driving.
- If any seat belt does not retract or cannot be pulled out due to a malfunction or activation of the relevant seat belt pretensioner.
- The seat belt pretensioner assembly or surrounding area has bees 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



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.

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

In response to a severe frontal impact, the SRS front airbags work 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 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. (As for the front passenger occupant classification system, see “Front passenger occupant classification system” on page cxliii.)

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 cxi.**

- **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 cxlvii.**

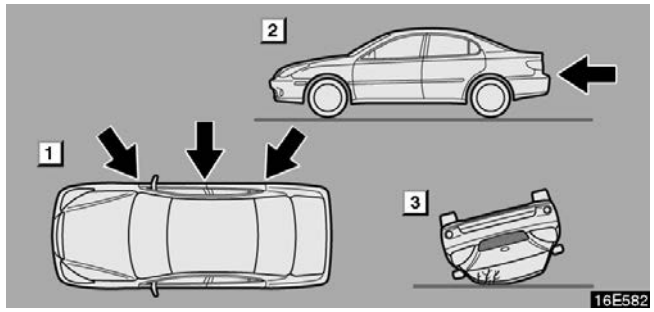
The SRS front airbags are designed to deploy in severe (usually frontal) collisions where the magnitude and duration of the forward deceleration of the vehicle exceeds the designed threshold level.

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 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.).

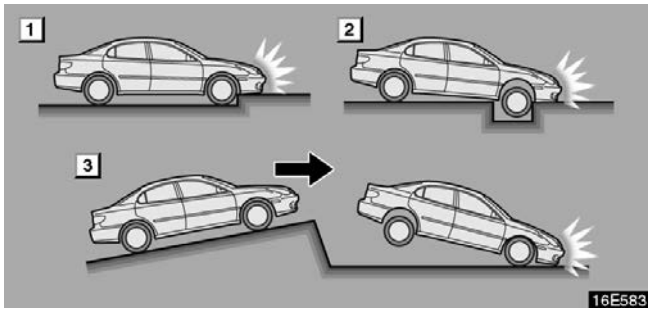
It is possible that in some collisions where the forward deceleration of the vehicle is very close to the designed threshold level, the SRS front airbags and the seat belt pretensioners may not activate together.

Always wear your seat belts properly.



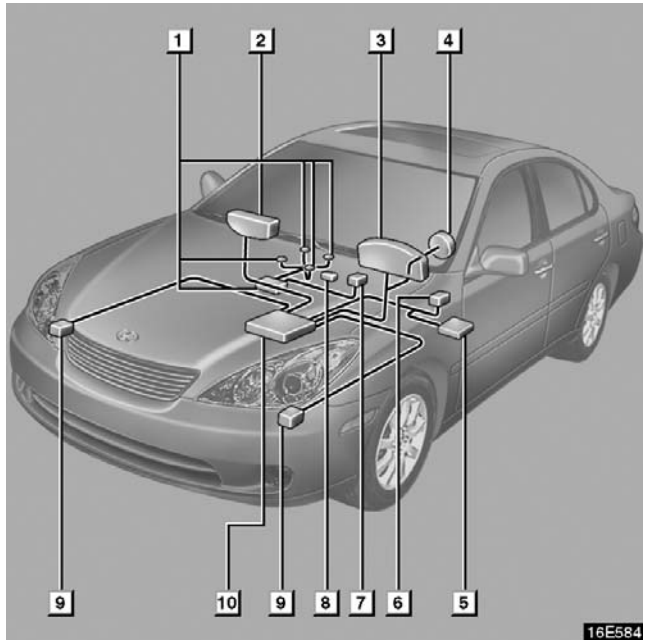
▶ 1 *Collision from the side*
2 *Collision from the rear*
3 *Vehicle rollover*

The SRS front airbags are not generally 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 ***Front passenger occupant classification system (ECU and sensors)***
2 ***Airbag module for front passenger (airbag and inflator)***
3 ***SRS warning light***
4 ***Airbag module for driver (airbag and inflator)***
5 ***Driver's seat position sensor***
6 ***Driver's seat belt buckle switch***
7 ***Front passenger's seat belt buckle switch***
8 ***"AIRBAG OFF" and "AIRBAG ON" indicator lights***
9 ***Front airbag sensors***
10 ***Airbag sensor assembly***

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 sensor.

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 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 are 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, airbag cover 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

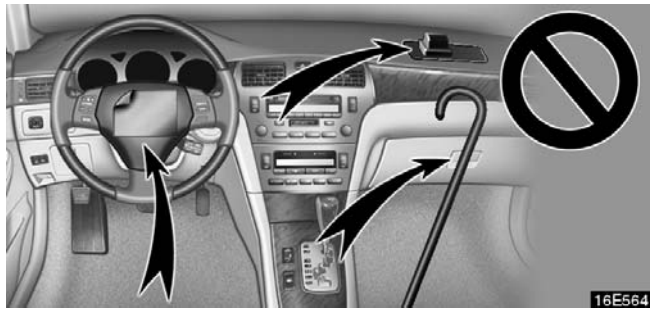
The driver or front passenger who is too close to the steering wheel or dashboard during airbag deployment can be killed or seriously injured. Lexus strongly recommends that:

- **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.**

For instructions and precautions concerning the seating position, see “Front seat precautions” on page cv.

- **Do not sit on the edge of the seat or lean over the dashboard when the vehicle is in use, since the front passenger airbag could inflates 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 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 cxlvii.**



- **Do not put anything or any part of your body on or in front of the dashboard or steering wheel pad that houses the front airbag system. 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.**

- **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, front passenger airbag cover, front passenger airbag 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.**

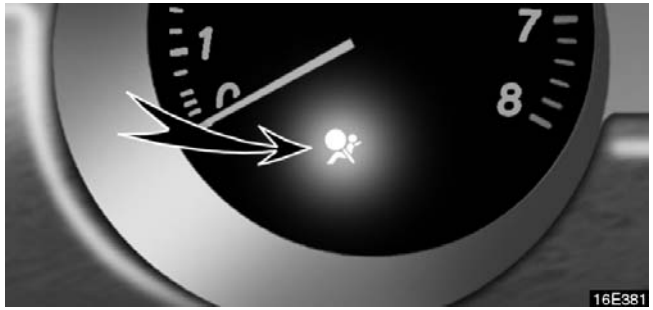
Failure to follow these instructions can result in death or serious injury. Consult your Lexus dealer about any repair and modification.

If you wish to modify your vehicle for a person with a physical disability, consult your Lexus dealer. It may dangerously interfere with the SRS front airbags operation.

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 or dashboard near the front passenger airbag***



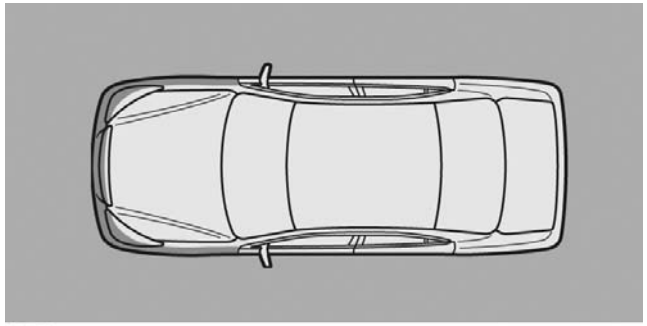
This indicator comes on when the ignition key is turned to the “ON” position. It goes off after about 6 seconds. This means the SRS front airbags are operating properly.

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, front passenger occupant classification system, “AIRBAG OFF” indicator light, “AIRBAG ON” indicator light, 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 lviii for instructions.)

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.

- The light does not come on when the ignition key is turned to the “ON” position or remains on for more than 6 seconds.
- The light comes on while driving.

The SRS warning light and “AIRBAG OFF” indicator light will be illuminated if there is a malfunction in the front passenger occupant classification system.



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 or front passenger airbag cover (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

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 side airbags help reduce injuries mainly to the driver's or front passenger's torso and the SRS curtain shield airbags help reduce injuries mainly to the driver's, front passenger's or rear outboard passenger's head.

The SRS side airbag on the passenger seat will not activate if there is no passenger sitting in the front passenger seat. However, the 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 the occupant in the seat. (As for the front passenger occupant classification system, see "Front passenger occupant classification system" on page cxliii.)

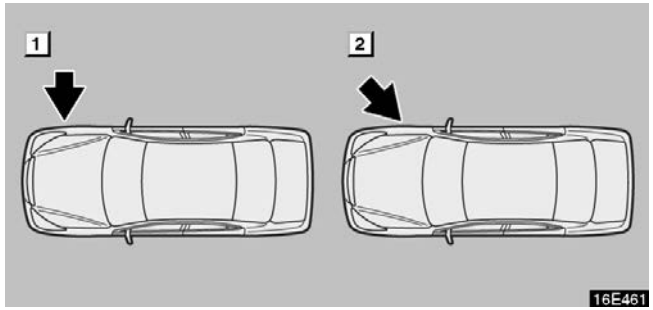
The SRS curtain shield airbag on the passenger side are activated even with no passenger in the front seat or rear outboard seat.

The SRS curtain shield airbags may activate even when the side airbags are not activated.

Always wear your seat belt properly.

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 cxi.**
- **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 airbag 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 cxlvii.**

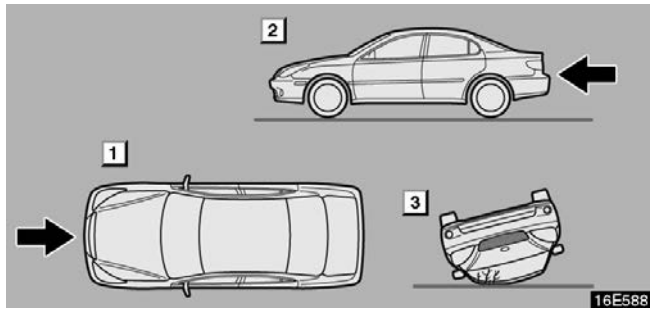


▶ 1 *Collision from the side to the vehicle body other than the passenger compartment*
2 *Collision from the side at an angle*

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.

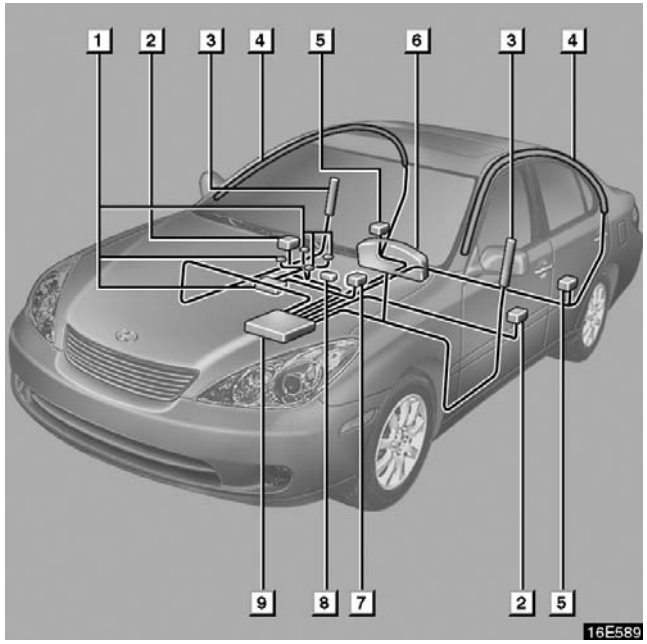
The SRS side airbags and curtain shield airbags are designed to inflate when the passenger compartment are suffers a severe impact from the side.

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 ***Front passenger occupant classification system (ECU and sensors)***
2 ***Side and curtain shield airbag sensor assemblies***
3 ***Side airbag modules (airbag and inflator)***
4 ***Curtain shield airbag modules (airbag and inflater)***
5 ***Curtain shield airbag sensor assemblies***
6 ***SRS warning light***
7 ***Front passenger's seat belt buckle switch***
8 ***"AIRBAG OFF" and "AIRBAG ON" indicator lights***
9 ***Airbag sensor assembly***

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 seats as well as parts of the front and rear pillars, and roof side rail may be hot for several minutes, but the airbags themselves will not be hot. The airbags are designed to inflate only once.

⚠ CAUTION

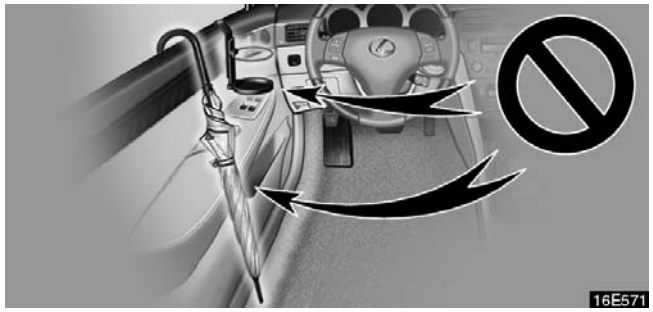
SRS side airbags and curtain shield airbags inflate with considerable force. To reduce the possibility of death or serious injury when they inflate, the driver, front passenger and rear outboard passengers must:

- **Wear their seat belts properly.**
- **Remain properly seated with their backs upright and against the seats at all times.**

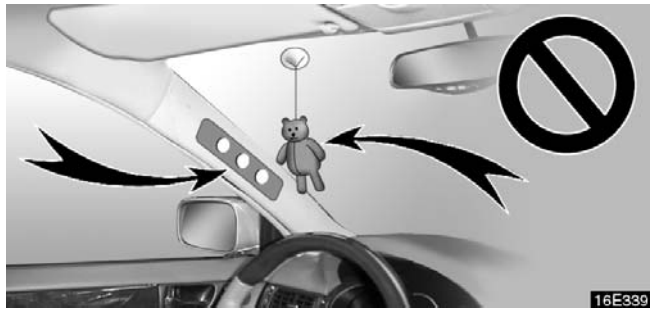
- **Do not allow anyone to lean against the door when the vehicle is in use, since the side airbag and curtain shield airbag could inflate with considerable speed and force. Otherwise, he/she may be killed or seriously injured. Special care should be taken especially when you have a small child in the 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 closer 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 passenger seat, facing the 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 door. When the side airbag inflates, 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 seats or upholstery of the seats with 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 rail 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.**

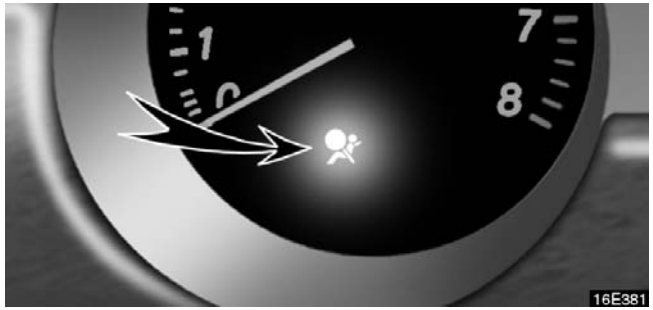
Failure to follow these instructions can result in death or serious injury. Consult your Lexus dealer about any repair and modification.

If you wish to modify your vehicle for a person with a physical disability, consult your Lexus dealer. It may dangerously interfere with the SRS side airbags and curtain shield airbags operation.

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 or front seat***



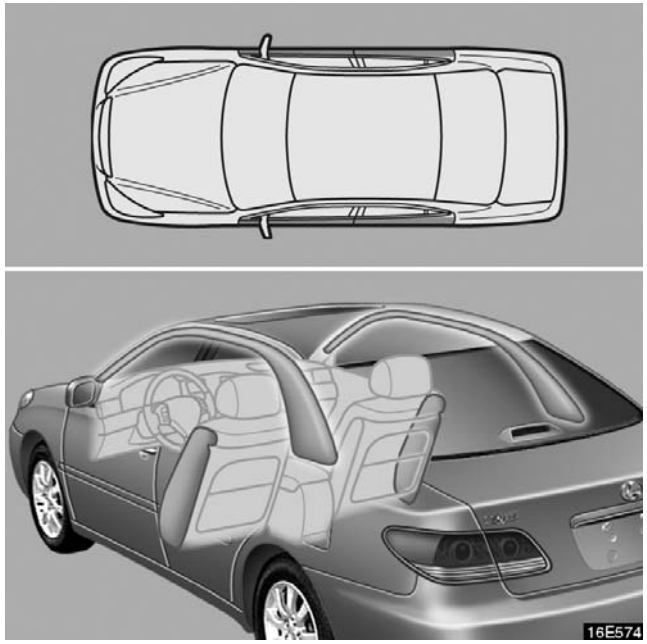
This indicator comes on when the ignition key is turned to the “ON” position. It goes off after about 6 seconds. This means the SRS side airbags and curtain shield airbags are operating properly.

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, front passenger occupant classification system, “AIRBAG OFF” indicator light, “AIRBAG ON” indicator light, 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 lviii for instructions.)

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.

- The light does not come on when the ignition key is turned to the “ON” position or remains on for more than 6 seconds.
- The light comes on while driving.

The SRS warning light and “AIRBAG OFF” indicator light will be illuminated if there is a malfunction in the front passenger occupant classification system.



In the following cases, contact your Lexus dealer as soon as possible:

- Any of the SRS 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.

FRONT PASSENGER OCCUPANT CLASSIFICATION SYSTEM

Your vehicle is equipped with a front passenger occupant classification system. This system detects the conditions 1 — 4 in the table shown below, and based on these conditions activates or deactivates the following systems;

- Front passenger airbag
- Side airbag on the front passenger seat
- Front passenger's seat belt pretensioner

The system monitors the weight and load on the front passenger seat, and the seat belt buckle switch in determining conditions correctly, do not do any of the following:

- Apply a heavy load to the front passenger seat or equipment (e.g. seatback pocket).
- Attach a commercial seatback table, etc. to the front passenger seat seatback.
- Put weight on the front passenger seat by putting your hands or feet on the seatback from the rear passenger seat.

The "AIRBAG OFF" indicator light will be illuminated when the ignition switch is in the "ON" position and a child restraint system is in the front passenger seat (see table−condition 2). This indicates that in the event of a severe frontal or passenger's side impact, the front passenger airbag and side airbag on the front passenger seat are deactivated and will not deploy.

If the front passenger occupant classification system determines that a person of adult size sits in the front passenger seat but the "AIRBAG OFF" indicator light is illuminated, one of the following is likely to have occurred:

- A rear passenger lifts the front passenger seat cushion with their legs.
- Objects are placed under the front passenger seat.
- The front passenger seat seatback is in contact with the rear seat.

To ensure the system correctly detects an adult sitting in the front passenger seat, make sure the above do not occur.

Make sure the “AIRBAG ON” indicator light is illuminated when an adult is seated in the front passenger seat. If the “AIRBAG OFF” indicator light is illuminated, ask the passenger to sit up straight, well back in the seat, and with the seat belt worn correctly. If the “AIRBAG OFF” indicator light still remains illuminated, either ask the passenger to move to the rear seat, or if that is not possible, move the front passenger seat fully rearward.

The “AIRBAG OFF” and “AIRBAG ON” indicator lights will be initially illuminated when the ignition switch is turned to the “ON” position. It will remain for about four seconds and then go off. After the two seconds, the front passenger occupant classification system operates and judges which indicator light to turn on.

The SRS warning light and “AIRBAG OFF” indicator light will be illuminated if there is a malfunction in the front passenger occupant classification system.

Condition and operation in the front passenger occupant classification system

<table>
<tr><th rowspan="2">Condition detected by the front passenger occupant classification system</th><th colspan="3">Indicator/warning light</th><th colspan="4">Devices</th></tr>
<tr><th>“AIRBAG OFF” and “AIRBAG ON” indicator lights</th><th>SRS warning light</th><th>Front passenger’s seat belt reminder light</th><th>Front passenger airbag</th><th>Side airbag on the front passenger seat</th><th>Curtain shield airbag in the front passenger side</th><th>Front passenger’s seat belt pretensioner</th></tr>
<tr><td>1 Adult*1</td><td>“AIRBAG ON”</td><td>OFF</td><td>Flashing*4</td><td colspan="4">Activated</td></tr>
<tr><td>2 Child *2 or child restraint system*3</td><td>“AIRBAG OFF”</td><td>OFF</td><td>Flashing*4</td><td colspan="2">Deactivated</td><td rowspan="3">Activated</td><td>Activated</td></tr>
<tr><td>3 Unoccupied</td><td>Not illuminated</td><td>OFF</td><td>OFF</td><td colspan="2">Deactivated</td><td>Deactivated</td></tr>
<tr><td>4 There is a malfunction in the system</td><td>“AIRBAG OFF”</td><td>ON</td><td>OFF</td><td colspan="2">Deactivated</td><td>Activated</td></tr>
</table>

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

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

*3: Never install a rear−facing child restraint system on the front passenger seat. A forward−facing child restraint system should only be installed on the front passenger seat when it is unavoidable. (See “Child restraint system” on page cxlix as for installing the child restraint system.)

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

⚠ CAUTION

To avoid potential death or serious injury when the front passenger occupant classification system does not detect the conditions correctly, observe the following.

- **Wear the seat belt properly.**
- **Make sure the front passenger's seat belt tab has not been left inserted into the buckle before someone sits in the front passenger seat.**
- **Make sure the "AIRBAG ON" indicator light is illuminated when using the seat belt extender for the front passenger seat. If the "AIRBAG OFF" indicator light is illuminated, disconnect the extender tongue from the seat belt buckle, then reconnect the seat belt. Reconnect the seat belt extender after making sure the "AIRBAG ON" indicator light is illuminated. If you use the seat belt extender while the indicator light is illuminated, the front passenger airbag and side airbag on the front passenger side may not activate correctly, which could cause death or serious injury in the event of collision.**
- **Do not apply a heavy load to the front passenger seat or equipment (e.g. seatback pocket).**
- **Do not put weight on the front passenger seat by putting your hands or feet on the front passenger seat seatback from the rear passenger seat.**
- **Do not let a rear passenger lift the front passenger seat cushion with his/her leg.**
- **Do not put objects under the front passenger seat.**
- **Do not recline the front passenger seat seatback so far that it touches a rear seat. This may cause the "AIRBAG OFF" indicator light to be illuminated, which indicates that the passenger's airbags will not deploy in the event of a severe accident. If the seatback touches the rear seat, return the seatback to a position where it does not touch the rear seat.**

  Keep the front passenger seatback as upright as possible when the vehicle is moving. Reclining the seatback excessively may lessen the effectiveness of the seat belt system.
- **If an adult sits in the front passenger seat, the "AIRBAG ON" indicator light should be illuminated. If the "AIRBAG OFF" indicator light is illuminated, ask the passenger to sit up straight, well back in the seat, feet on the floor, and with the seat belt worn correctly. If the "AIRBAG OFF" indicator light still remains illuminated, either ask the passenger to move to the rear seat, or if that is not possible, move the front passenger seat fully rearward.**

- **When it is unavoidable to install the forward−facing child restraint system on the front passenger seat, install the child restraint system on the front passenger seat in the proper order. (As for the installation order, see "Child restraint system" on page cxlix.)**
- **Do not remove the seats.**
- **Do not kick the front passenger seat or subject it to severe impact. Otherwise, the SRS warning light may come on to indicate a malfunction of the detection system. In this case, contact your Lexus dealer immediately.**

In addition to the precautions outlined above, the "AIRBAG ON" indicator light may be illuminated when a child sits in the front passenger seat or a forward−facing child restraint system is installed on the front passenger seat. If the "AIRBAG OFF" indicator light is not illuminated in these circumstances, the front passenger airbag and side airbag on the front passenger side are in activated condition — the airbags will deploy if an impact meets the deployment criteria. Refer to all the cautions in this Section and "Child restraint" on page cxlvii.

CHILD RESTRAINT

Child restraint precautions

Lexus strongly urges the use of appropriate child restraint systems for children.

The laws of all fifty 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 cxi 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 even if the “AIRBAG OFF” indicator light is illuminated. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear−facing child restraint system is installed on the front passenger seat.**
- **A forward−facing child restraint system 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 even if the “AIRBAG OFF” indicator light is illuminated, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.**
- **On vehicles with side airbags and curtain shield airbags, 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 the child restraint system. It is dangerous if the side airbags and/or curtain shield airbags inflate, and the impact could cause death or serious injury to the child.**

- **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.**
- **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

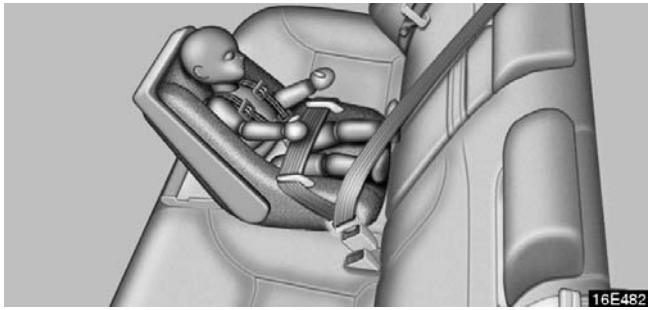
Install the child restraint system following the instructions provided by its manufacturer.

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 clxiii.

The child restraint lower anchorages approved for your vehicle may also be used. See "Installation with child restraint lower anchorages" on page clxv.

(A) Infant seat

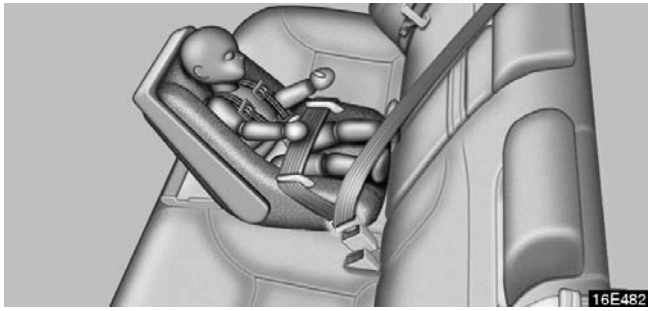


(B) Convertible seat

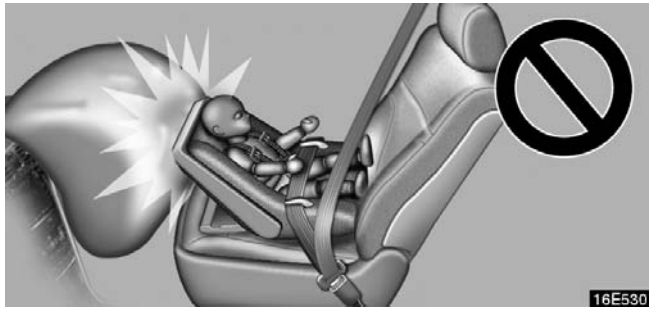
(C) Booster seat

INSTALLATION WITH 3−POINT TYPE SEAT BELT

(A) Infant seat installation



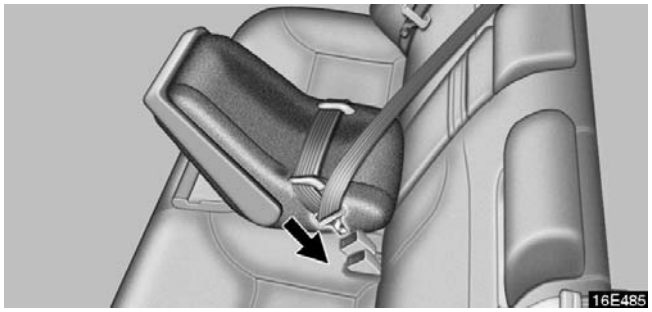
An infant seat must be used in rear−facing position only.



CAUTION

- **Never install a rear−facing child restraint system on the front passenger seat even if the “AIRBAG OFF” indicator light is illuminated. In the event of an accident the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear−facing child restraint system is installed on the front passenger seat.**

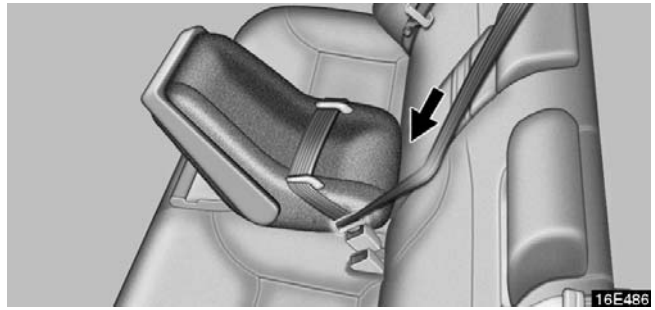
- **If the driver’s seat position does not allow sufficient space for safe installation, install the child restraint system on the rear right seat.**



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.

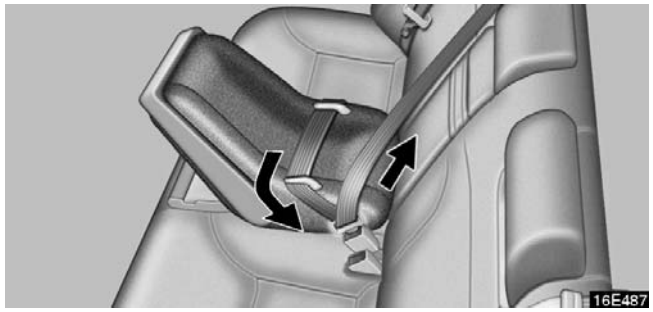
⚠ CAUTION

- **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.**

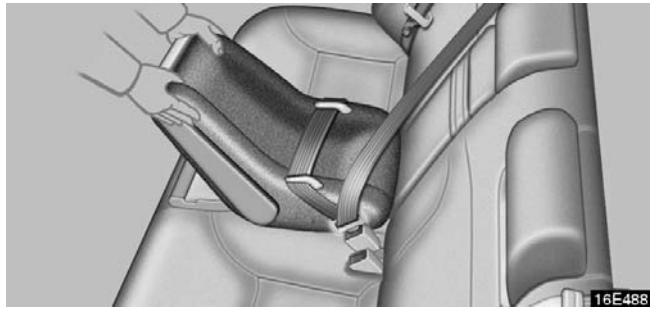


2. Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted even slightly, it cannot be extended.

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 applicable child's age and size as well as directions for installing the child restraint system.

Install the child restraint system on the front passenger seat only when it is unavoidable. Your vehicle is equipped with a front passenger occupant classification system. In order to activate the occupant classification system correctly, install the forward−facing child restraint system on the front passenger seat in the following order:

1. Turn the ignition key to the "ON" position.

2. Move the front passenger seat to the rearward position.

3. Put the child restraint system on the front passenger seat without putting your weight on the front passenger seat.

4. Insert the seat belt tab into the seat belt buckle.

5. 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 seat securely, make sure the belt is in the lock mode before letting the belt retract.

6. 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.

7. Put a child on the child restraint system and secure the child, complying with the instructions provided by the child restraint system manufacturer.

The “AIRBAG OFF” indicator light should be illuminated when the ignition key is “ON” and the child is in the child restraint system after following these procedures. The “AIRBAG OFF” indicator light indicates the SRS front passenger airbag and side airbag on the passenger side will not deploy. If the “AIRBAG ON” indicator light is illuminated, remove the child restraint system and reinstall it with the ignition key in the “ACC” or “LOCK” position. If the “AIRBAG OFF” indicator light still remains illuminated when the ignition key is turned to the “ON” position, then the SRS front passenger airbag and side airbag on the passenger side may deploy in an accident. Do not drive the vehicle in this condition. Remove the child restraint system and contact your Lexus dealer.

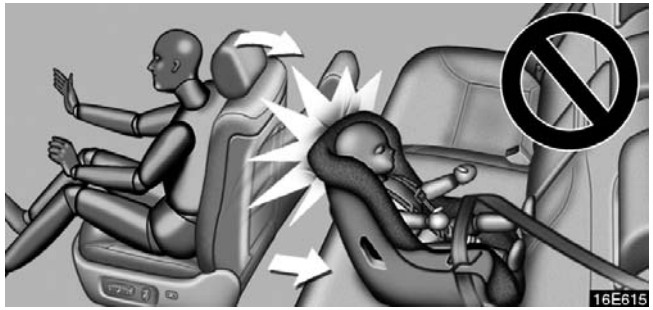
CAUTION

- **When it is unavoidable to install the forward−facing child restraint system on the front passenger seat, install the child restraint system on the front passenger seat in the proper order. Otherwise, the front passenger occupant classification system can not detect the presence of the child restraint system and the front passenger airbag and side airbag on the front passenger seat could deploy.**

- **Never install a rear−facing child restraint system on the front passenger seat even if the “AIRBAG OFF” indicator light is illuminated. In the event of an accident the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear−facing child restraint system is installed on the front passenger seat.**

▶ ***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 even if the “AIRBAG OFF” indicator light is illuminated, because the front passenger airbag inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.**
- **On vehicles with side airbags and curtain shield airbags, 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 the child restraint system. It is dangerous if the side airbags and/or curtain shield airbags inflate, and the impact could cause death or serious injury to the child.**

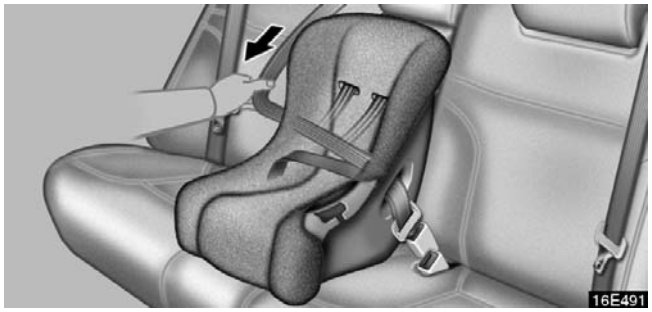


- **If the driver's seat position does not allow sufficient space for safe installation, install the child restraint system on the rear right seat.**

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

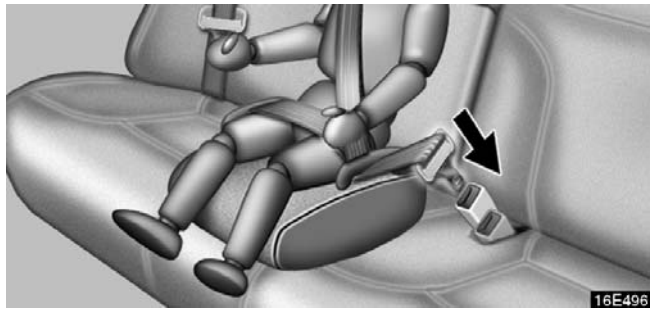
A booster seat must be used in forward−facing position only.

▶ ***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 even if the "AIRBAG OFF" indicator light is illuminated, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.**

- **On vehicles with side airbags and curtain shield airbags, 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 the child restraint system. It is dangerous if the side airbags and/or 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 cxi for details.

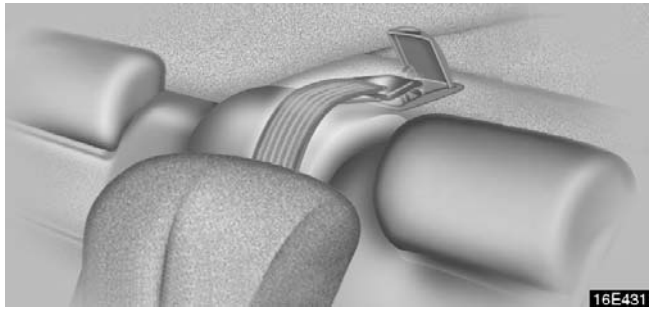
CAUTION

- **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.**

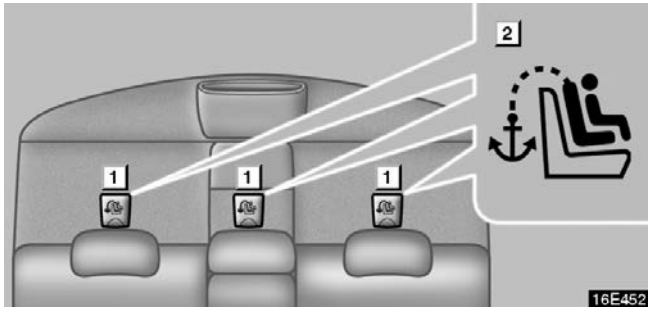
- **Both high−positioned lap belts and loose−fitting belts could cause death or serious injuries due to sliding under the lap belt during a collision or other unintended event. Keep the lap belt positioned as low on a child's hips as possible.**
- **For child's safety, do not place the shoulder belt 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.

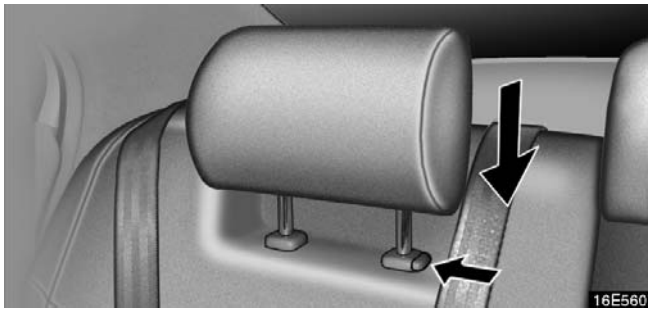


▶ 1 ***Anchor brackets*** 2 ***Symbol mark***

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 brackets.



TO USE THE ANCHOR BRACKET

1. Lower the head restraint to the lowest position.

2. Pull up the lid of the anchor bracket.

3. Fix the child restraint system with the seat belt.

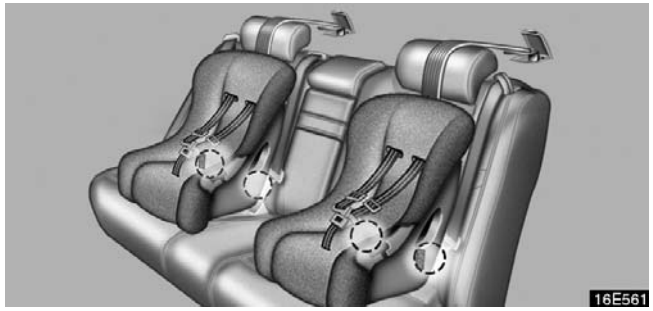
4. Latch the hook onto the anchor bracket and tighten the top strap.

For instructions to install the child restraint system, see “Child restraint system” on page cxlix.

⚠ CAUTION

Make sure the top strap is securely latched, and check that the child restraint system is securely by pushing and pulling it in different directions. Follow all the installation instructions provided by its manufacturer.

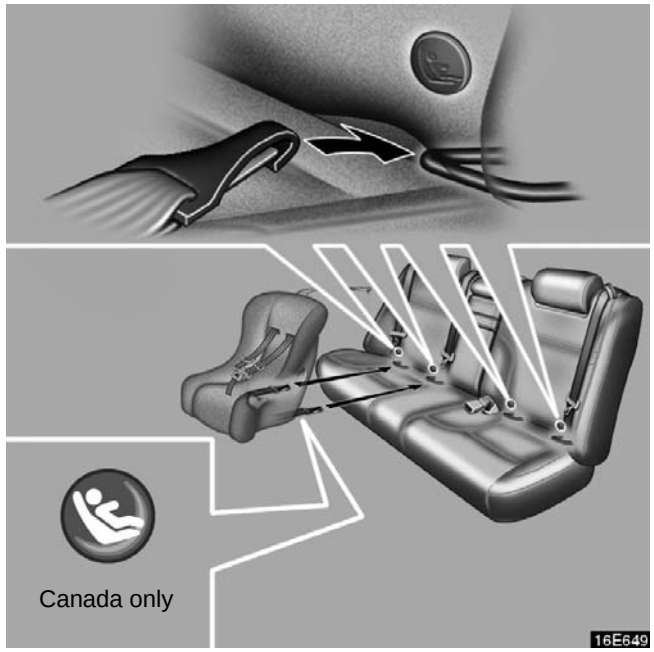
Installation with child restraint lower anchorages



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 systems 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.



▶ ***Type A***

▶ *Type B*

CHILD RESTRAINT SYSTEM INSTALLATION

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.

2. Type A — Latch the hooks of lower straps onto the anchorages and tighten the lower straps.

2. Type B — 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 clxiii.)

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.**
- **Do not install a child restraint system on the rear seat if it interferes with the lock mechanism of the front seats. This can cause death or serious injury to the child and front passenger in case of sudden braking or a collision.**

DRIVING POSITION MEMORY SYSTEM

The microcomputer can memorize the positions of the driver's seat, accelerator and brake pedals, and outside rear view mirrors. Two 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 ignition key is in the "ON" position and the selector lever is in the "P" position.

Setting the driving position

1. Adjust the driver's seat, accelerator and brake pedals, and outside rear view mirrors to the desired position.

2. While pushing the "SET" button, push button "1" or "2" 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” or “2”, the driving position will be automatically adjusted to the position recorded for that button.

Conditions for memorized position activation

- Ignition key “ON” and selector lever in “P” position
- Ignition switch off and within 30 seconds of opening driver’s door

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” or “2”) 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

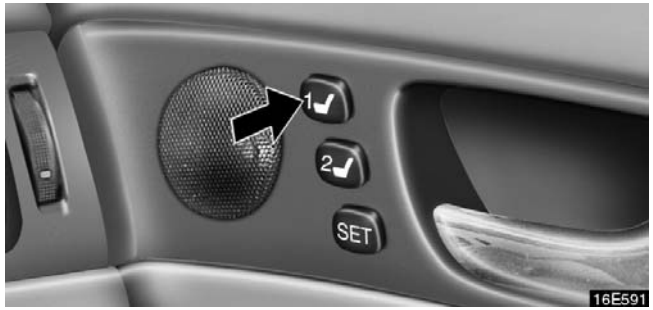
- **Do not start the vehicle while the adjustments are being made.**
- **Take care not to select the wrong button, or the seat could strike the rear passenger or hit your body against the steering wheel. If this happens, you can stop the movement by pressing another driving position memory switch.**

FRONT PASSENGER SEAT POSITION MEMORY SYSTEM

The microcomputer can memorize the position of the front passenger seat. Two 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 ignition key is in the "ON" position 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" or "2" until the signal beeps.

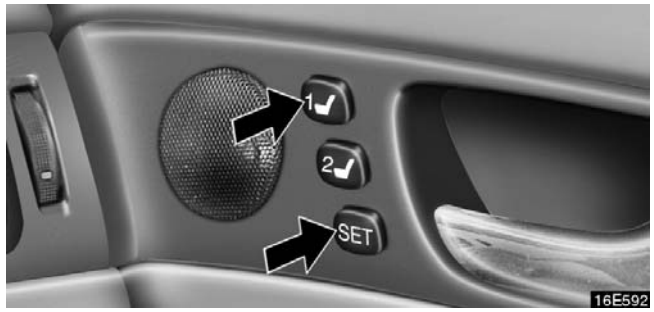
The beep sound means that the positions are recorded in the computer's memory.

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" or "2", the seat position will be automatically adjusted to the position recorded for that button.

Conditions for memorized position activation

- Ignition key “ON” and selector lever in “P” position
- Ignition switch off 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” or “2”) 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 seat position memory switch.**

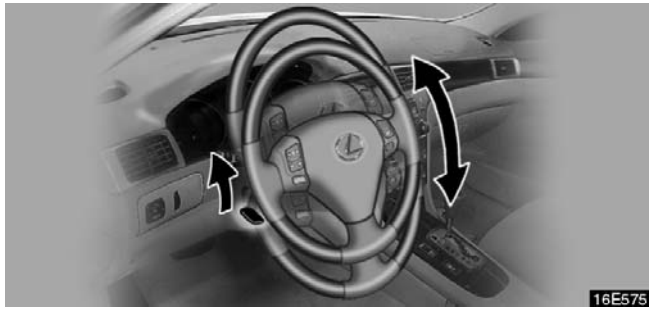
SECTION 1 – 7

INSTRUMENTS AND CONTROLS

Steering wheel and mirrors

Tilt steering column clxxiii
Power adjustable pedals clxxiii
Outside rear view mirrors clxxiv
Inside rear view mirror clxxvii
Vanity mirrors clxxxii

TILT STEERING COLUMN



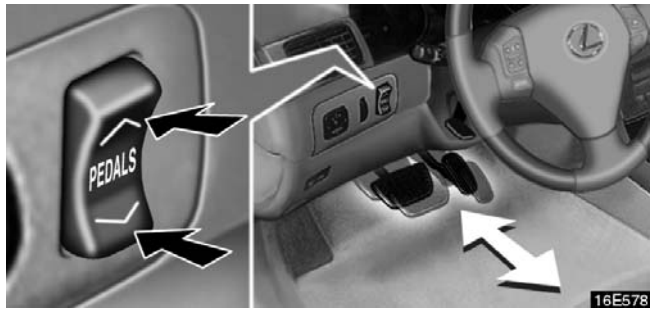
To change the steering wheel angle, hold the steering wheel, pull up the lock release lever, tilt the steering wheel to the desired angle and release the lever.

When the steering wheel is in a low position, it will spring up as you release the lock release lever.

CAUTION

- **Do not adjust the steering wheel 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.**
- **After adjusting the steering wheel, try moving it up and down to make sure it is locked in position.**

POWER ADJUSTABLE PEDALS



To adjust the position of the accelerator and brake pedals, push the switch.

The ignition key must be in the “ON” position with the automatic transmission selector lever in the “P” position.

To move the pedals toward the front of the vehicle: Push the “∧” side of the switch.
To move the pedals back toward you: Push the “∨” side of the switch.

The accelerator and brake pedals will move simultaneously.

When you set your driving position:

1. Set the parking brake firmly.

2. Move the accelerator and brake pedals to the front most position.

3. Adjust the seat position and steering wheel angle properly. (See pages cviii and clxxiii.)

4. Move the pedals toward you until you can fully depress the brake pedal.

5. After adjusting, depress the pedals a few times to get used to the feel.

⚠ CAUTION

- **Never put your foot on the accelerator pedal while the pedals are moving. It may cause racing of the engine or sudden acceleration.**
- **Make sure that you can fully depress the brake pedal before driving. Otherwise, you may not be able to hold down the brake pedal firmly in an emergency stop.**

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 clxxvii.

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 xliv.)

⚠ 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

▶ 1 *Control switch* 2 *Master switch*

To adjust the power rear view mirror, first place the master switch at “L” (left) or “R” (right), and push the control switch on the desired side.

The power rear view mirror can be adjusted when the key is in the “ACC” or “ON” position.

Vehicles with driving position memory system —

When the automatic transmission selector lever is shifted into the “R” position with the master switch in the “L” or “R” position, the rear view mirrors automatically down to help backing up.

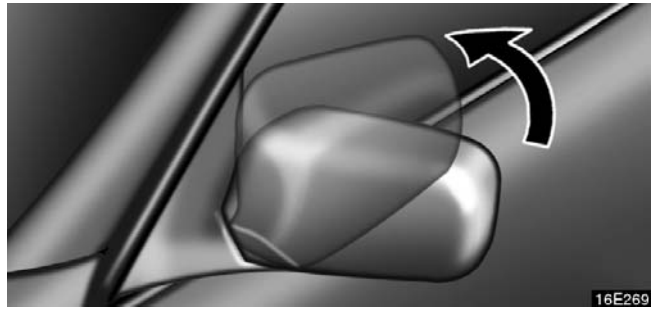
The mirrors return to the previous position in the following operations.

- Shift the transmission lever out of the “R” position.
- Place the master switch in the neutral position.

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



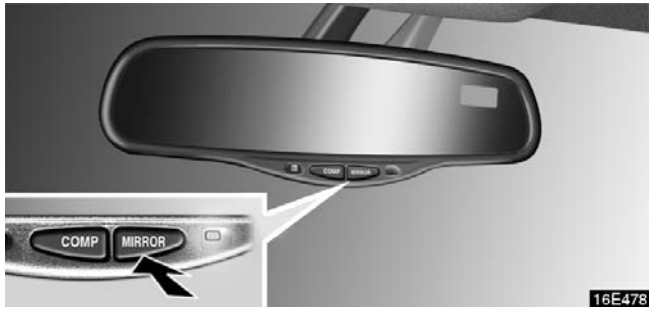
To fold the rear view mirror, push backward.

The rear view mirrors can be folded backward for parking in compact areas.

⚠ CAUTION

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.

INSIDE REAR VIEW MIRROR



Adjust the mirror so that you can just see the rear of your vehicle in the mirror.

Pushing the "MIRROR" switch 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 ignition key is inserted and turned on, 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.

Push the "COMP" switch to turn the compass system on and off.

If the ignition switch was turned off with the system on, the system will automatically turn back on when the ignition switch is turned on.

Displays	Directions
N	North
NE	Northeast
E	East
SE	Southeast
S	South
SW	Southwest
W	West
NW	Northwest

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 ignition 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 on or near the inside rear view mirror.)
- The battery has been disconnected.

If your vehicle is out of the set zone, refer to “Calibrating the compass” in this Section to set the zone number.

If the deviation is small, the compass works to calibrate the direction automatically while the vehicle is in motion.

For additional precision or for complete calibrating, see “Calibrating the compass” below.

If the direction is not indicated or the system does not operate properly, contact your Lexus dealer.

▶ ***Compass sensor***

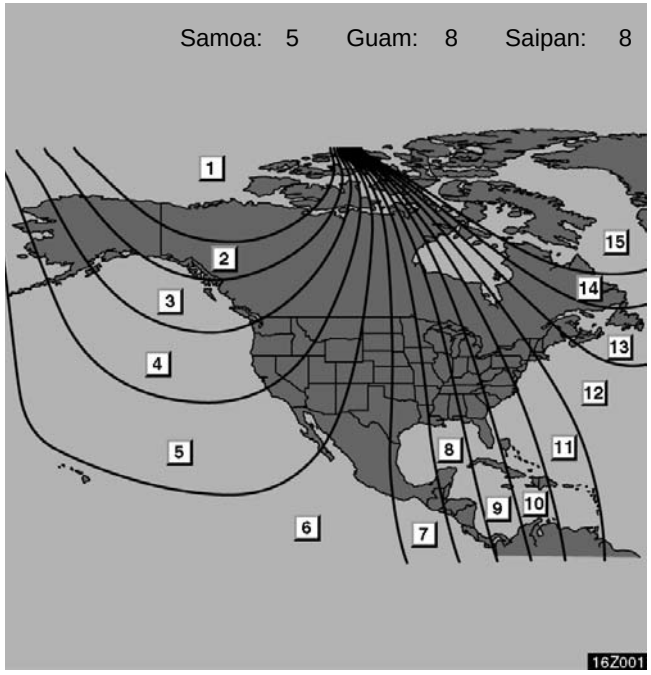
NOTICE

Do not put magnets or a metal object on or near the inside rear view mirror of the vehicle. Doing so may cause malfunction of the compass sensor in the mirror.

Calibrating the compass (deviation calibration)

The direction display on the compass deviates from the true direction determined by the earth’s magnetic field. The angle of deviation varies according to the geographic position of the vehicle.

To adjust this deviation, stop the vehicle, then push and hold the “COMP” switch until the zone number appears on the display. Then push the “COMP” switch, referring to the following map to select the number of the zone where the vehicle is.



▶ ***Zone number***

Leaving the system after the calibration for several seconds, the direction will appear on the display. It shows the zone number is set.

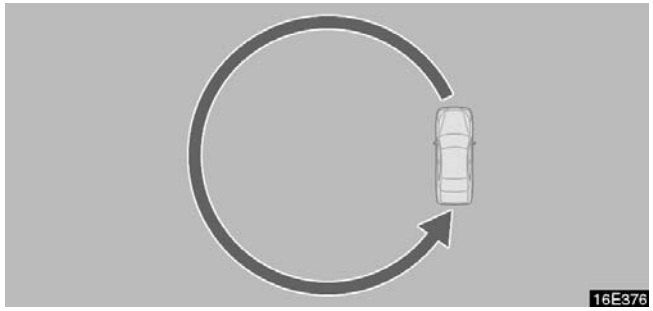
⚠ CAUTION

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)

To rectify the compass, stop the vehicle and push and hold the “COMP” switch until “C” appears on the display.

There is also a case that “C” appears on the display in case of the drastic change of the magnetic field.



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 direction shown on the display.

Perform circling calibration just after you have purchased your Lexus. And then always perform circling calibration after the battery has been removed, replaced or disconnected.

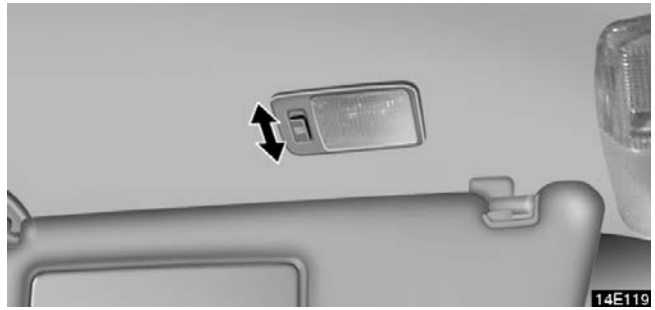
- Do not perform circling calibration of the compass in a place where the earth's magnetic field is subject to interference by artificial magnetic fields (underground parking, under a steel tower, between buildings, roof parking, near a crossing, near a large vehicle, etc.).
- During calibration, do not operate electric systems (moonroof, 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 open the cover.



To turn on the vanity light, slide the switch.

The vanity light switch has the following positions:

“ON” — Turns the light on when you swing down the sun visor. However, if the visor has been slid out, the light may not come on. Return the visor to its lock position.

“OFF” — Turns the light off.

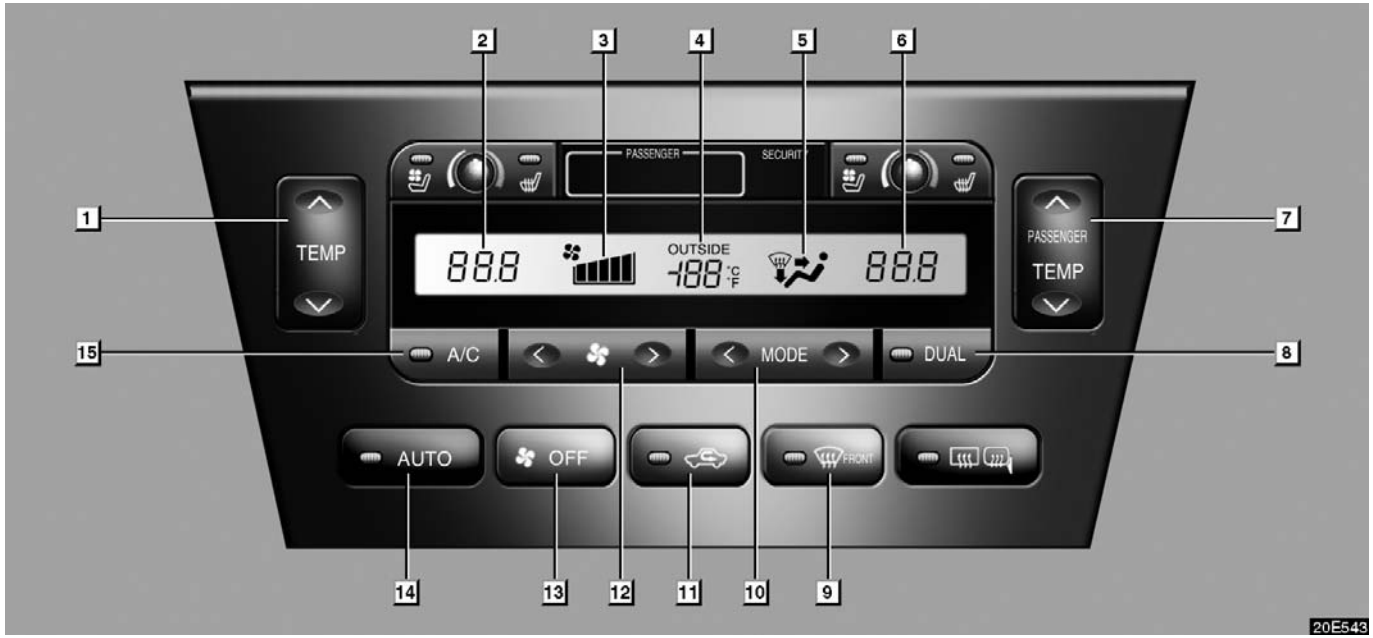
SECTION 2 – 1

AIR CONDITIONING AND AUDIO

Air conditioning

Automatic air conditioning controls clxxxv

AUTOMATIC AIR CONDITIONING CONTROLS



The automatic air conditioning automatically maintains the set temperature.

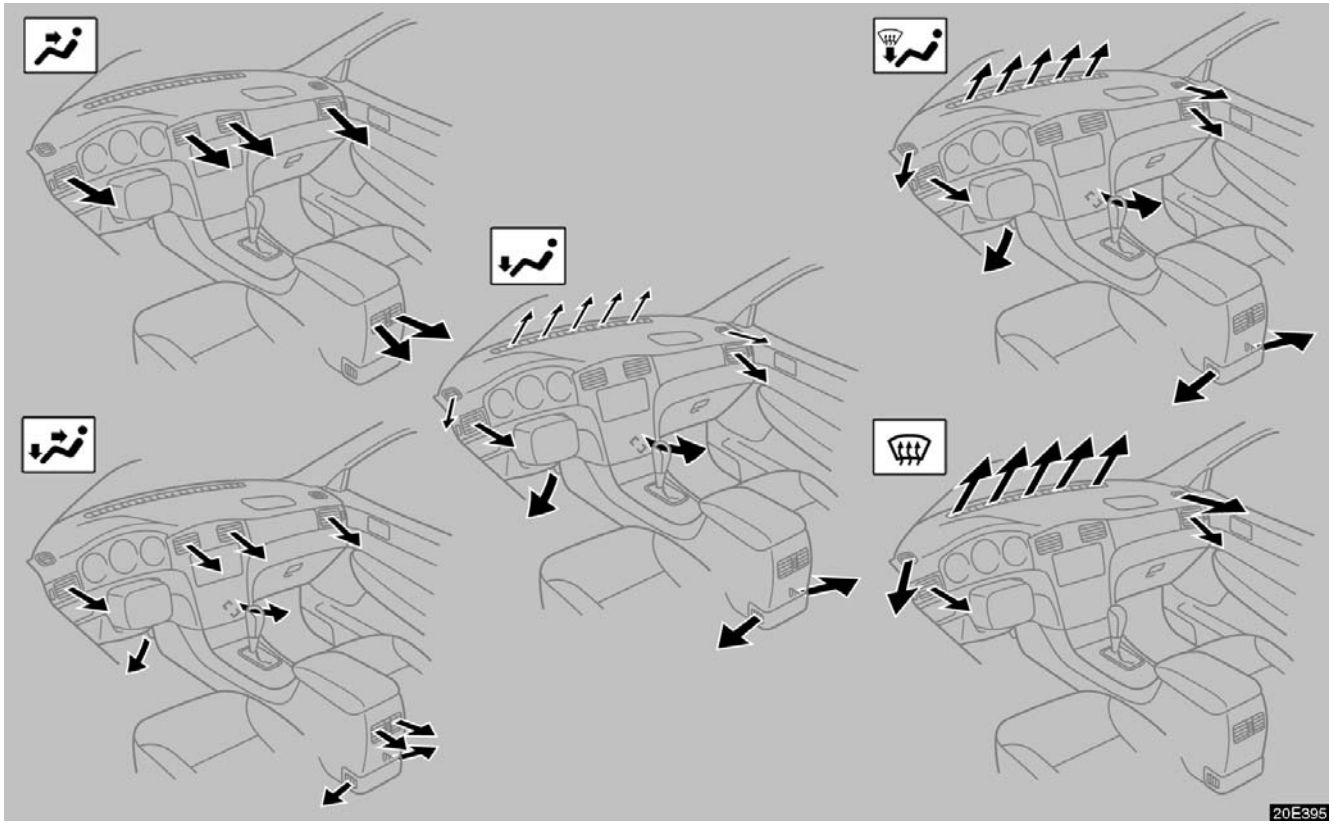
In the automatic operation mode, the air conditioning selects the most suitable fan speed, air flow, air intake and on–off the air conditioning according to the temperature.

The ignition key must be in the “ON” position.

NOTICE

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

1. ***“TEMP” (driver side temperature control) button***
2. ***Driver side temperature display (in degrees Fahrenheit or Centigrade)***
3. ***Fan speed display***
4. ***Outside temperature display***
5. ***Air flow display***
6. ***Passenger side temperature display (in degrees Fahrenheit or Centigrade)***
7. ***“PASSENGER TEMP” (passenger side temperature control) button***
8. ***“DUAL” (temperature setting mode change) button***
9. ***Windshield air flow button***
10. ***“MODE”(air flow control) button***
11. ***Air intake control button***
12. ***Fan speed control button***
13. ***“OFF” button***
14. ***“AUTO” button***
15. ***“A/C” button***



▶ ***Air flow selection***

(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 operation corresponding to the button depressed is set. Other conditions continue to be adjusted automatically.

Push the "OFF" button to turn the air conditioning system off.

2. Use the "TEMP" or "PASSENGER TEMP" button to set the desired temperature.

The "TEMP" or "PASSENGER TEMP" button is used to set the desired temperature. The temperature will be controlled on the driver and passenger sides simultaneously or individually.

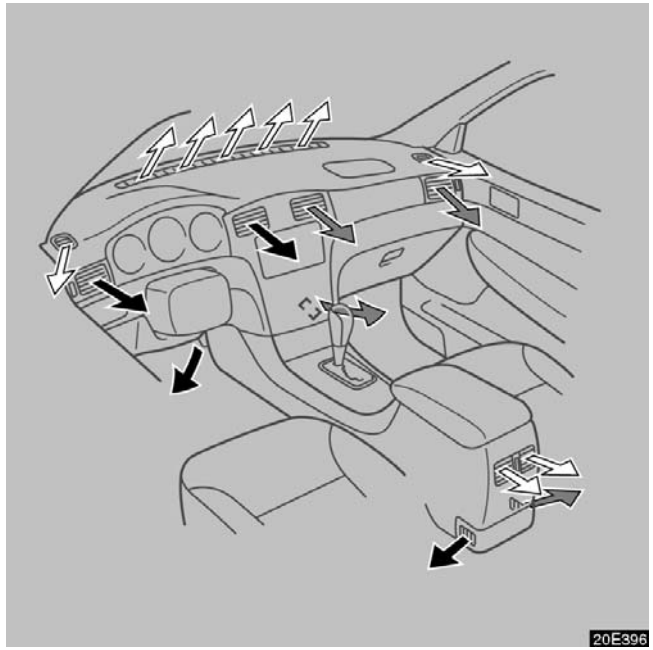
"TEMP" button — Changes the temperature on the driver and passenger sides simultaneously or the driver side only.

"PASSENGER TEMP" button — Changes the temperature settings separate from the driver side.

"DUAL" button — Changes the mode of the temperature setting.

The indicator on the "DUAL" button has two modes:

- **With the indicator on —** For individual temperature setting
- **With the indicator off —** For simultaneous temperature setting



➡ Driver side setting

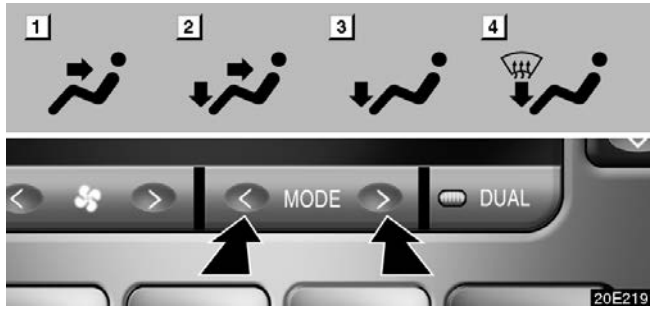
➡ Passenger side setting

⇨ Mixed setting

SETTING OPERATION — manual control

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.

If manual air flow selection is desired —



The outlets from which air is delivered can be selected manually by pushing the button. The function of each mode is as follows:

1 **Panel —** Air flows mainly from the instrument panel vents.

2 **Bi−level —** Air flows from both the floor vents and the instrument panel vents.

3 **Floor —** Air flows mainly from the floor vents.

4 **Floor/Windshield —** Air flows mainly from the floor vents and windshield vents.

This position allows the air intake to select OUTSIDE AIR mode automatically. This is to clean up the front view more quickly.

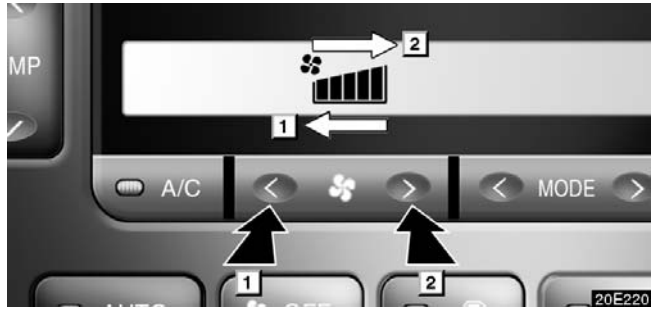
If you want to return the setting to RECIRCULATED AIR mode, push the air intake control button once again.

Push the “A/C” button for dehumidified heating or cooling. This setting clears the front view more quickly.

If quick heating or cooling is desired —

Push the “TEMP” or “PASSENGER TEMP” button on either side and hold it until “MAX. HOT” or “MAX. COLD” appears on the display.

If manual fan speed control is desired —

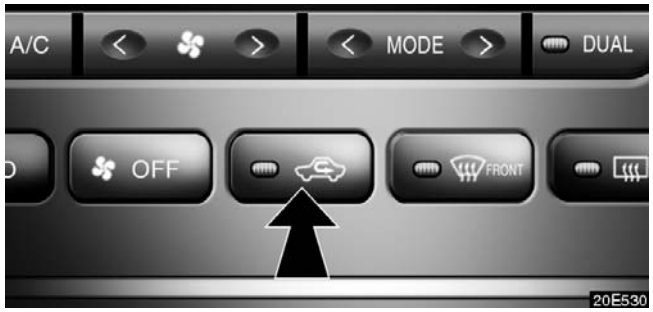


▶ 1 ***Fan speed at low*** 2 ***Fan speed at high***

The fan speed can be set to your desired speed by pushing the appropriate side of fan speed control button. The higher the fan speed is, the more air is delivered. Pushing the “OFF” button turns off the fan.

To remove exterior windshield frost, use the high speed setting.

If manual switching of air intake is desired —



The air intake control button is used to switch the air intake between the OUTSIDE AIR mode and RECIRCULATED AIR mode.

To turn the air source to the RECIRCULATED AIR mode, press the button. The indicator will come on. To turn the air source to OUTSIDE AIR mode, press the button again. The indicator will go off.

To prevent fogging up of the windshield, the air intake mode may change automatically to the OUTSIDE AIR mode depending on the condition of the air conditioning system.

For example, when the ambient temperature is low, the air intake mode may change automatically to the OUTSIDE AIR mode. This is not a malfunction.

If quick circulation of cooled air is desired, push the air intake control button for RECIRCULATED AIR. The indicator light will come on.

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.

If manual on−off of the air conditioning is desired —

Push the “A/C” button to turn the air conditioning on and push it again to turn the air conditioning off.

The air conditioning does not work if the outside temperature is lowered down to around 0°C (32°F).

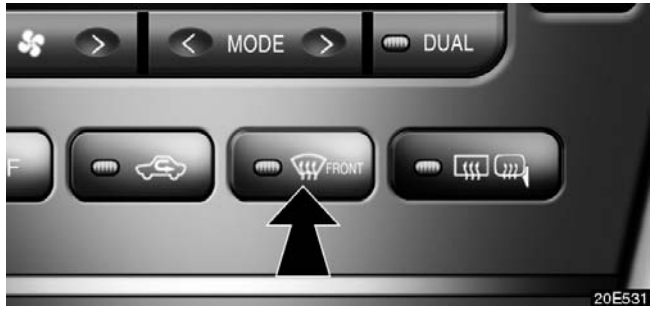
If the system is used for ventilation, heating in dry weather or removing frost or exterior fog on the windshield, turn the air conditioning off once it is no longer required. This will improve fuel economy. The air conditioning can be used for year−round automatic temperature control including cooling and dehumidifying operation.

If the air conditioning compressor does not operate, the indicator of the “A/C” button will blink. If the indicator of the “A/C” button blinks even when the “A/C” button is pushed again, have the compressor checked by your nearest Lexus dealer.

Displaying the outside temperature —

The temperature display ranges from −30°C (−22°F) up to 50°C (122°F).

(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 maximum temperature.
2. Push the windshield air flow button.
3. Push the fan speed control button on the right side to obtain a maximum air flow.
4. Leave the “A/C” button off.

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. It is not possible to return to RECIRCULATED AIR mode in the windshield air flow mode.

Push the “A/C” button for dehumidified heating or cooling. This setting clears the front view more quickly.

⚠ 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) 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 side vents and rear vents. (See “(d) Side vents and rear vents”.)
- On 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 be set to the OUTSIDE AIR mode and the fan speed 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 be temporarily set 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 for a few minutes. To keep the windows from fogging, select OUTSIDE AIR after the vehicle interior has been warmed.
- Push the “A/C” button 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 — ON

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 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. It is not possible to return to RECIRCULATED AIR mode in the windshield air flow mode.

Push the “A/C” button for dehumidified heating or cooling. This setting clears the front view more quickly.

- On 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. It is not possible to return to RECIRCULATED AIR mode in the windshield air flow mode.

Push the “A/C” button 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.

(d) Side vents and rear vents

▶ *Side vents*

▶ *Rear vents*

If air flow control is not satisfactory, check the side vents and rear vents. The side vents and rear vents may be opened or closed as shown.

(e) Checking and replacing the air conditioning filter

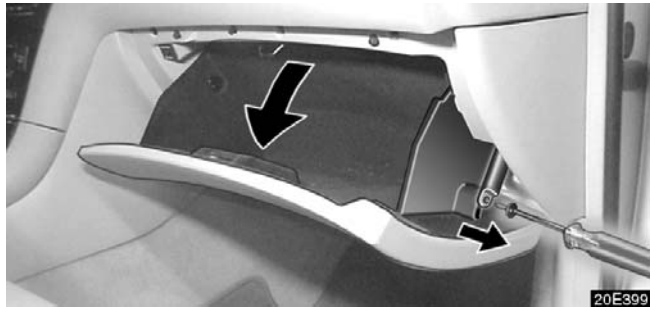
The air conditioning filter information label is placed in the glove box as shown and indicates that a filter has been installed.

The air conditioning filter prevents dust from entering the vehicle through the air conditioning vent.

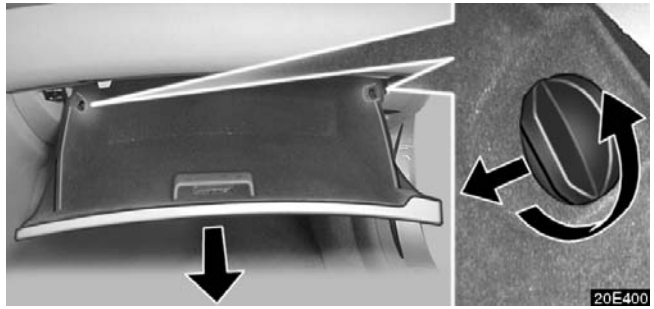
The air conditioning filter is behind the glove box.

The air conditioning filter may clog after long use. The filter may need to be replaced if the air flow of the air conditioner and heater experiences extreme reductions in operating efficiency, or if the windows begin to fog up easily.

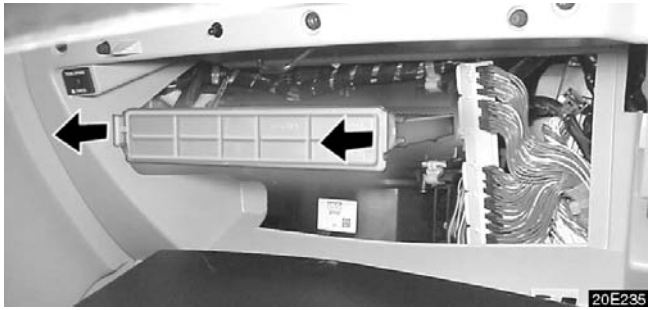
To maintain the air conditioning efficiency, inspect and replace the air conditioning filter according to the maintenance schedule. In dusty areas or areas with heavy traffic flow, such as inner city or desert areas, early replacement may be required. (For scheduled maintenance information, please refer to the “Owner’s Manual Supplement/Scheduled Maintenance”.)



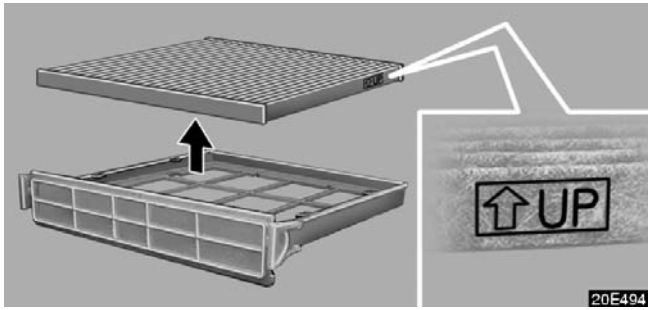
1. Open the glove box. Remove the screw with a Phillips−head screwdriver.



2. Remove the 2 pins installed on the upper part of the glove box and lower the glove box.



3. Take out the filter case.



4. Remove the filter from the filter case.

5. Inspect the filter on the surface.

If it is dirty, it should be replaced.

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 (with single–CD player) cci
Audio system (with six–CD changer) ccxxv

For vehicles equipped with Navigation System, please refer to the separate "Navigation System Owner's Manual".

AUDIO SYSTEM (with single−CD player)

Quick reference for your audio system

▶ *You can adjust the brightness of the display. See “Instrument panel light control” on page lxxi for details.*

1 **Ejecting a CD**
(See page ccxii for details.)

2 **Function buttons**

1 — 6: Station selector buttons
(See page ccviii for details.)

SCAN: Scan tuning
(See page ccix for details.)

P.SCAN: Preset scan tuning
(See page ccix for details.)

3 **Display of functions in TAPE or CD mode**

DD: DOLBY NR
(See page ccx for details.)

◀◀: Rewinding or reversing
(See page ccx or ccxvi for details.)

▶▶: Fast forwarding
(See page ccx or ccxvi for details.)

RPT: Automatic repeat
(See page ccxi or ccxvi for details.)

∨ ∧: CD selection
(See page ccxiv for details.)

RAND: Random access
(See page ccxvii for details.)

SCAN: Scan selection
(See page ccxv for details.)

4 **CD slot**
(See page ccxii for details.)

5 **Automatic Sound Levelizer (ASL)/Mute**
(See page cciv or ccvi for details.)

6 **TUNE/AUDIO CONTROL knob**
(See page ccv for details.)

7 **◀I▶ : Side change**
(See page ccx for details.)

8 **Mode selectors**
(See page cciv for details.)

9 **Stopping and ejecting a cassette tape**
(See page ccix for details.)

10 **Turning the system on and adjusting the volume**
(See page cciii for details.)

11 **Cassette tape slot**
(See page ccix for details.)

12 **Radio mode:** Seek tuning
(See page ccviii for details.)

TAPE mode: Direct access to a desired program
(See page ccxi for details.)

CD mode: Direct access to a desired program
(See page ccxvi 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 ignition switch is in the “ACC” or “ON” position.

NOTICE

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

(a) Turning the system on and off

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 “MUTE” button to decrease the volume momentarily.

To return to its original volume, push the same button again.

When the audio system is turned on, the mute is always off regardless of the previous mode.

Push the “AM”, “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 CD is not set, the cassette player or CD player does not turn on.

You can turn off each player by ejecting the cassette tape or CD. If the audio system was previously off, then the entire audio system will be turned off when you eject the cassette tape or CD. If another function was previously playing, it will come on again.

In the "TAPE" or "CD" mode, the applicable functions are shown in the lowest part of the display. Push the switch just below to turn on each function.

(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.

Each time you push the "AUDIO CONTROL" knob, the display changes as in the following. To adjust the tone and balance, turn the knob.

BAS: Adjusts low–pitched tones.

MID: Adjusts mid–pitched tones.

TRE: Adjusts high–pitched tones.

FAD: Adjusts the sound balance between the front and rear speakers.

BAL: Adjusts the sound balance between the right and left speakers.

(c) Automatic Sound Levelizer (ASL)

When the audio sound becomes difficult to be heard due to road noise, wind noise, etc. during driving, the system adjusts to the optimum volume and tone quality according to the noise level. While the Automatic Sound Levelizer is on, “ASL” appears on the display.

(d) Your radio antennas

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 film (especially, a conductive or metallic film) 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 face to the right.

NOTICE

Never try to disassemble or oil any part of the cassette player. Do not insert anything other than cassette tapes into the slot.

(f) Your CD player

When you insert a CD, gently push it in with the label face up. The player will play from track 1 through to the end of the CD. Then it will play from track 1 again. On models with the CD changer, next CD will be played from track 1.

NOTICE

- ***Never try to disassemble or oil any part of the CD player. Do not insert anything other than CDs into the slot.***
- ***Do not insert a CD upon another one.***

The player is intended for use with 12 cm (4.7 in.) CDs only.

Radio operation

(a) Listening to the radio

Push the “AM” or “FM” button to choose either an AM or FM station.

“AM”, “FM1” or “FM2” appears on the display.

Turn this knob to the right to step up the station band or to the left to step down.

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. Push one of the station selector buttons (1 — 6) and hold it until a beep is heard. This sets the station to the button and the button number (1 — 6) appears on the display.

Each button can store one AM station and two FM stations. 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

Tune in the desired station using one of the following methods.

Seek tuning: Push the “SEEK” 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 automatically one after another.

Preset tuning: Push the button (1 — 6) for the station you want. The button number (1 — 6) and station frequency appear on the display.

Manual tuning: Turn the “TUNE” knob. The radio will step up or down to another frequency.

To scan all the frequencies: Push the “SCAN” button briefly. “SCAN” appears on the display. The radio will find the next station up the band, stay there for a few seconds, and then scan again. To select a station, push the “SCAN” button a second time.

To scan the preset stations: Push the “P.SCAN” button. “P.SCAN” appears on the display. The radio will tune in the next preset station up the band, stay there for a few seconds, and then move to the next preset station. To select a station, push the “P.SCAN” button a second time.

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, “TAPE” 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 “METAL” appears on the display.

To stop or eject the cassette tape, push the “EJECT” button.

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.

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, push the "DD" button. The display will indicate that the Dolby noise reduction system is on.

The Dolby NR mode reduces tape noise by about 10 dB. For best sound reproduction, play your tapes with the Dolby NR on or off according to the mode used for recording the tape.

To play a tape recorded without Dolby NR, push the button 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

"Program" button: Push the "◀I▶" button to select the other side of a cassette tape. The display indicates which side is currently selected ("▲" indicates top side, "▼" indicates bottom side).

"Rewind" button: Push the "◀◀" button to rewind a tape. "REW" appears on the display.

To stop rewinding, push the same button or "TAPE" button.

"Fast forward" button: Push the "▶▶" button to fast forward a cassette tape. "FF" appears on the display.

To stop fast forwarding, push the same button or "TAPE" button.

(c) Automatic program selection

"RPT" button: The repeat feature automatically replays the current program.

Push the "RPT" button while the program is playing. When the program ends, it will automatically be rewound and replayed. Push the button 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.

"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 this button on the upper side 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 this 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 a tape is reached, the player automatically resumes normal play.

There must be at least 3 seconds of blank space between programs for this feature to work correctly.

“RPT” and “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 ignition switch must be in the “ACC” or “ON” position.

- **Setting a CD:**

Gently push a CD in with the label faces up. (The player will automatically eject a CD if the label faces down.)

- **Ejecting a CD:**

Push the "EJECT" button for the CD.

(b) Playing a CD

Push the "DISC" button if the CD is already loaded in the player.

"CD" appears on the display.

The CDs set in the player are played continuously. The track number and the time from the beginning of the program appear on the display.

When play of CD ends, the first track starts.

WIth a CD changer only —

Push the "DISC" button twice if the magazine is already loaded in the player.

"CD1" appears on the display.

The CDs set in the magazine are played continuously. The CD number of the CD currently being played, the track number and the time from the beginning of the program appear on the display.

When play of one CD ends, the first track of the following CD starts. When play of the final CD ends, play of the first CD starts again.

The player will skip any empty CD trays.

Pushing the “DISC” button while playing a CD in the changer will switch from the CD in the changer to the CD in the CD player.

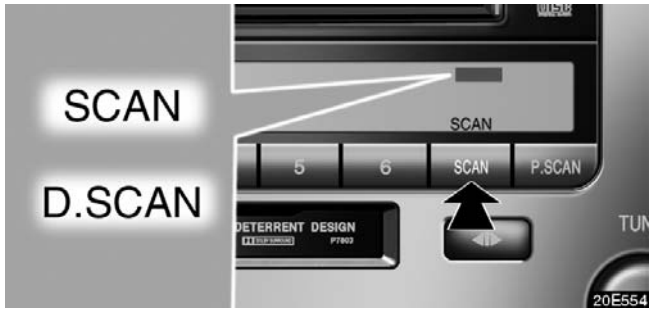
If you push the “DISC” button when the source is other than the CD, a CD in the CD player or changer, whichever was previously used, will play.

(c) Selecting a desired CD (with a CD changer only)

Push the “∨” or “∧” button to select the CD number.

Push the button several times until the desired CD number appears on the display. When you release the button, the player will start playing the selected CD from the first track.

(d) Searching for a desired track or CD



Searching for a desired track:

Push the “SCAN” button briefly. “SCAN” will appear on the display. The CD player will play the next track for 10 seconds, then scan again. To select a track, push the “SCAN” button a second time. If the player reaches the end of the CD, it will continue scanning at track 1.

After all the tracks are scanned in one pass, normal play resumes.

Searching for a desired CD (with a CD changer only):

Push the “SCAN” button until you hear a beep. With “D.SCAN” on the display, the program at the beginning of each CD will be played for 10 seconds. To continue listening to the program of your choice, push the button a second time.

After all the CDs in the changer are scanned in one pass, the scan function is cancelled.

(e) Selecting a desired track

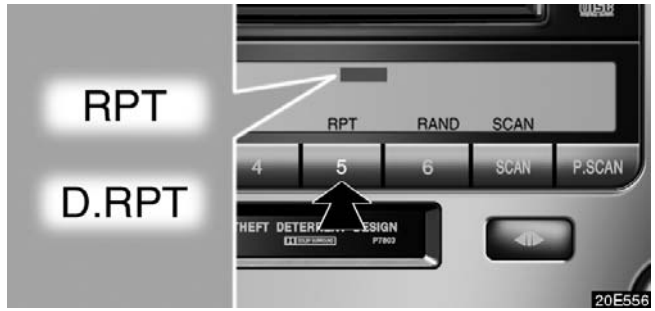
"TRACK" button: Use for direct access to a desired track.

Push either side of the "TRACK" button several times 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" button: Push the "▶▶" button and hold it to fast forward the CD. When you release the button, the CD player will resume playing from that position.

"Reverse" button: Push the "◀◀" button and hold it to reverse the CD. When you release the button, the CD player will resume playing.

(f) Repeating a track or a CD

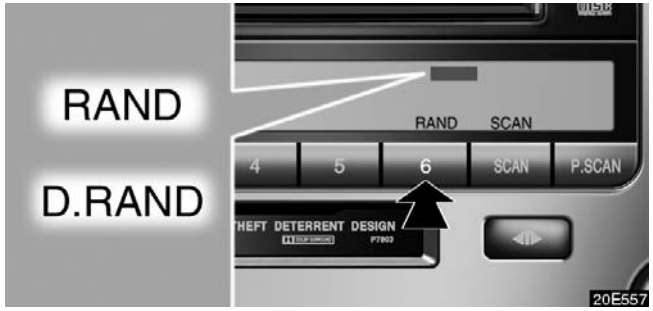


"RPT" button: There are 2 repeat features — you can either replay a CD track or a whole CD.

Repeating a track: Push the "RPT" button briefly while the track is playing. "RPT" will appear on the display. When the track ends, it will automatically be replayed. This process will be continued until you push the button again to turn off the repeat feature.

Repeating a CD (with a CD changer only): Push the "RPT" button and hold it until you hear a beep. "D.RPT" will appear on the display. The player will repeat all the tracks on the CD you are listening to. When the CD ends, the player will automatically go back to the first track on the CD and replay. This process will be continued until you push the button again to turn off the repeat feature.

(g) Random playing



"RAND" button: There are 2 random features — you can either listen to the tracks on all the CDs in the player in random order, or only listen to the tracks on a specific CD in random order.

Random playing for the tracks on a CD: Push the "RAND" button briefly. "RAND" will appear on the display and play the CD you are listening to in random order.

Random playing for all the tracks in the CD changer (with a CD changer only): Push the "RAND" button and hold it until you hear a beep. "D.RAND" will appear on the display and the player will perform all the tracks on all the CDs in the changer in random order. To turn off the random feature, push "RAND" a second time.

When a track is skipped or the system is inoperative, push the button to reset.

(h) If the player malfunctions

If the player or another unit equipped with the player malfunctions, your audio system will display following error messages.

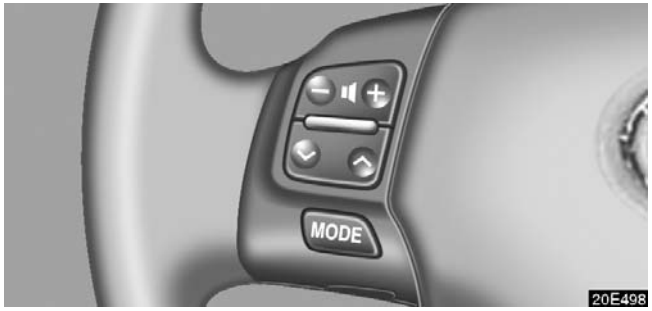
If "WAIT" appears on the display: It indicates that the inside of the player unit may be too hot due to the very high ambient temperature. Remove the CD from the player and allow the player to cool down.

If "ERROR 1" appears on the display: It indicates that the CD is dirty, damaged, or it was inserted up−side down. Clean the CD or insert it correctly.

If "ERROR 3" or "ERROR 4" appears on the display: It indicates there is a trouble inside the system. Eject the CD.

If the malfunction is not rectified: Take your vehicle to your Lexus dealer.

Audio remote controls



The switches are installed on the left side of the steering wheel.

"MODE" switch: Use this switch to turn on or off the audio system, or change the audio mode.

- To turn on the system, push the switch briefly. To turn off the system, push and hold the switch until you hear a beep.
- To change the audio mode, turn on the system and push the switch briefly. If a tape or CD is not inserted, the "TAPE" or "CD" mode is skipped.

"– 🔈 +" switch: Use this switch to adjust the volume.

To increase the volume, push the "+" side. To decrease the volume, push the "–" side. The volume continues to increase or decrease while the switch is being pressed.

(a) When the radio mode is selected

"∨ ∧" switch: Use this switch for seek tuning or to select a preset station.

- To select a preset station, push this switch briefly. The station you assigned to a switch on the audio system will be selected.
- To seek a station, push and hold this switch 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

"∨ ∧" switch: Use this switch to fast forward or rewind the tape or for automatic program selection.

- To skip forward or reward for automatic program selection, push this switch briefly. When automatically selecting a program, you can skip up to 9 programs at a time. See page ccxi for details.
- To fast forward or rewind the tape, push this switch until you hear a beep. To stop fast forwarding or rewinding, push the same side on the switch briefly.

(c) When the "CD" mode is selected

"∨ ∧" switch: Use this switch to select a desired track or CD.

- To select a desired track, push this switch briefly.
- To select a desired CD, push and hold this switch until the desired number of the CD appears and you hear a beep.

⚠ CAUTION

Operate the 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 CD into the cassette tape slot or CD 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

Usually, a problem with radio reception does not mean there is a problem with your radio — it is just the normal result of conditions outside the vehicle.

For example, nearby buildings and terrain can interfere with FM reception. Power lines or telephone wires can interfere with AM signals. And of course, radio signals have a limited range. The farther you are from a station, the weaker its signal will be. In addition, reception conditions change constantly as your vehicle moves.

Here are some common reception problems that probably do not indicate a problem with your radio:

FM

Fading and drifting stations — Generally, the effective range of FM is about 40 km (25 miles). Once outside this range, you may notice fading and drifting, which increase with the distance from the radio transmitter. They are often accompanied by distortion.

Multi−path — FM signals are reflective, making it possible for two signals to reach your antenna at the same time. If this happens, the signals will cancel each other out, causing a momentary flutter or loss of reception.

Static and fluttering — These occur when signals are blocked by buildings, trees, or other large objects. Increasing the bass level may reduce static and fluttering.

Station swapping — If the FM signal you are listening to is interrupted or weakened, and there is another strong station nearby on the FM band, your radio may tune in the second station until the original signal can be picked up again.

AM

Fading — AM broadcasts are reflected by the upper atmosphere — especially at night. These reflected signals can interfere with those received directly from the radio station, causing the radio station to sound alternately strong and weak.

Station interference — When a reflected signal and a signal received directly from a radio station are very nearly the same frequency, they can interfere with each other, making it difficult to hear the broadcast.

Static — AM is easily affected by external sources of electrical noise, such as high tension power lines, lightening, or electrical motors. This results in static.

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 and CDs

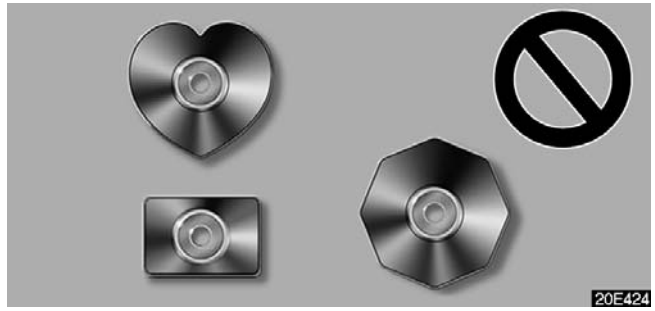
- Your CD player is intended for use with 12 cm (4.7 in.) CDs only.
- Extremely high temperature can keep your CD player from working. On hot days, use air conditioning to cool the vehicle interior before you listen to a CD.
- Bumpy roads or other vibrations may make your CD player skip.
- If moisture gets into your CD player, you may not hear any sound even though your CD player appears to be working. Eject all CDs from the player and wait until the player dries.

⚠ CAUTION

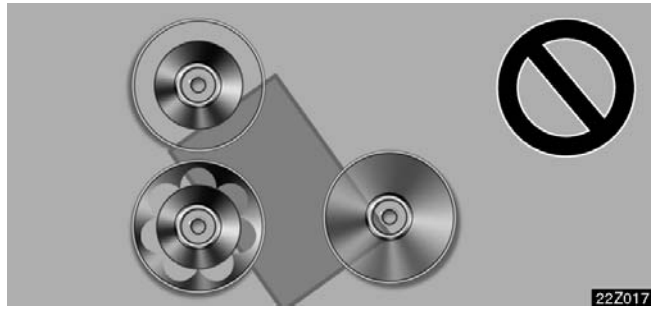
CD players use an invisible laser beam which could cause hazardous radiation exposure if directed outside the unit. Be sure to operate the player correctly.

- Use only CDs marked as shown above. The following products may not be playable on your CD player.

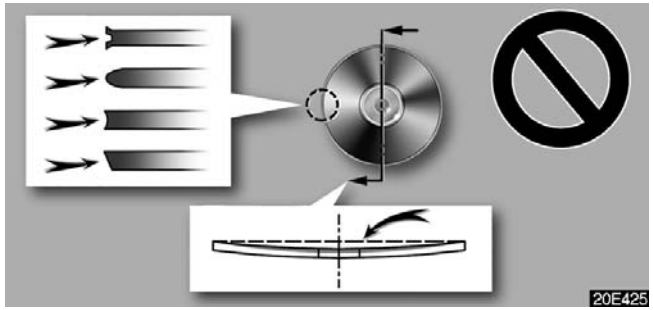
  Copy−protected CDs
  CD−Rs (CD−Recordable)
  CD−RWs (CD−Re−writable)
  CD−ROMs



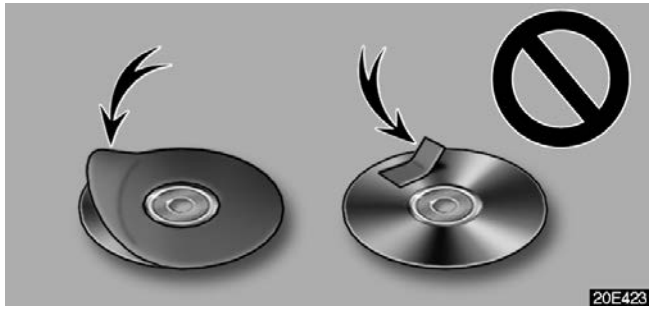
▶ ***Special shaped CDs***



▶ ***Transparent/translucent CDs***



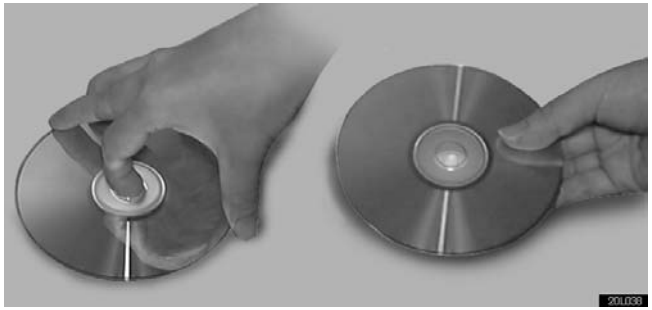
▶ *Low quality CDs*



▶ *Labeled CDs*

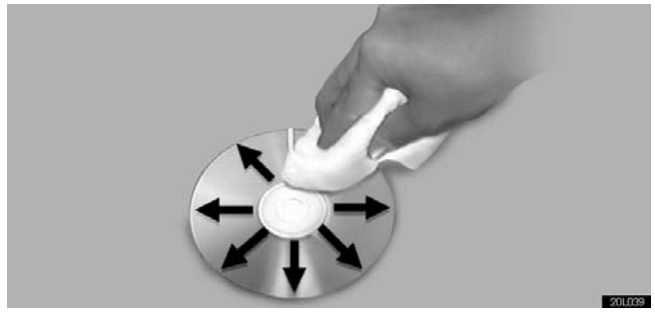
NOTICE

Do not use special shaped, transparent/translucent, low quality or labeled CDs such as those shown in the illustrations. The use of such CDs may damage the player or changer, or it may be impossible to eject the CD.



▶ ***Correct*** ▶ ***Wrong***

- Handle CDs 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 CD damage could cause the player to skip or to repeat a section of a track. (To see a pin hole, hold the CD up to the light.)



To clean a CD: 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 CD (not in a circle). Do not use a conventional record cleaner or anti–static device.

AUDIO SYSTEM (with six−CD changer)

Quick reference for your audio system

▶ ***You can adjust the brightness of the display. See "Instrument panel light control" on page lxxi for details.***
If a Mark Levinson brand audio system is installed, the "Mark Levinson" logo is shown on the panel.

1 **Ejecting a CD**
(See page ccxliv for details.)

2 **Function buttons**

1 — 6: Station selector buttons
(See page ccxxxii for details.)

SCAN: Scan tuning
(See page ccxxxii for details.)

TEXT: Radio text message
(See page ccxxxiv for details.)

3 **Display of functions in TAPE or CD mode**

◀I▶: Side change
(See page ccxlii for details.)

DD: DOLBY NR
(See page ccxli for details.)

◀◀: Rewinding or reversing
(See page ccxlii or ccxlvii for details.)

▶▶: Fast forwarding
(See page ccxlii or ccxlvii for details.)

RPT: Automatic repeat
(See page ccxlii or ccxlvii for details.)

∨ ∧: CD selection
(See page ccxlvi for details.)

RAND: Random access
(See page ccxlviii for details.)

SCAN: Scan selection
(See page ccxlvi for details.)

4 **CD slot**
(See page ccxliv for details.)

5 **CD load button**
(See page ccxliv for details.)

6 **Program type**
(See page ccxxxiii for details.)

7 **TUNE/AUDIO CONTROL knob**
(See page ccxxix for details.)

8 **Traffic announcement**
(See page ccxxxiii for details.)

9 **Mode selectors**
(See page ccxxviii for details.)

10 **Stopping and ejecting a cassette tape**
(See page ccxli for details.)

11 **Turning the system on and adjusting the volume**
(See page ccxxvii for details.)

12 **Cassette tape slot**
(See page ccxli for details.)

13 **Radio mode:** Seek tuning
(See page ccxxxii for details.)
TAPE mode: Direct access to a desired program
(See page ccxliii for details.)
CD mode: Direct access to a desired program
(See page ccxlvii 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 ignition switch is in the “ACC” or “ON” position.

NOTICE

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

(a) Turning the system on and off

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·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 CD is not set, the cassette player or CD player does not turn on.

You can turn off each player by ejecting the cassette tape or CD. If the audio system was previously off, then the entire audio system will be turned off when you eject the cassette tape or CD. If another function was previously playing, it will come on again.

In the “TAPE” or “CD” mode, the applicable functions are shown in the lowest part of the display. Push the switch just below to turn on each function.

(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.

Each time you push the "AUDIO CONTROL" knob, the display changes as in the following. To adjust the tone and balance or turn on or off the Automatic Sound Levelizer, turn the knob.

BAS: Adjusts low–pitched tones.

MID: Adjusts mid–pitched tones.

TRE: Adjusts high–pitched tones.

FAD: Adjusts the sound balance between the front and rear speakers.

BAL: Adjusts the sound balance between the right and left speakers.

ASL: Turns on or off the Automatic Sound Levelizer.

Automatic Sound Levelizer (ASL): When the audio sound becomes difficult to be heard due to road noise, wind noise, etc. during driving, the system adjusts to the optimum volume and tone quality according to the noise level. While the Automatic Sound Levelizer is on, "ASL" appears on the display.

(c) Your radio antennas

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 film (especially, a conductive or metallic film) 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.***

(d) Your cassette player

When you insert a cassette, the exposed tape should face to the right.

NOTICE

Never try to disassemble or oil any part of the cassette player. Do not insert anything other than cassette tapes into the slot.

(e) Your CD player with changer

Your CD player with changer can store up to 6 CDs and play selected CDs or continuously play all the CDs set in the player.

When you set CDs into the player, make sure their labels face up. If not, the player will display “ERROR 1” and the CD number.

NOTICE

- ***Do not stack up two CDs for insertion, or it will cause damage to the CD changer. Insert only one CD into slot at a time.***
- ***Never try to disassemble or oil any part of the CD player. Do not insert anything other than CDs into the slot.***

The player is intended for use with 12 cm (4.7 in.) CDs only.

Radio operation

(a) Listening to the radio

Push these buttons to choose either an AM or FM station.

“AM”, “FM1” or “FM2” appears on the display.

Turn this knob to the right to step up the station band or to the left to step down.

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. Push one of the station selector buttons (1 — 6) and hold it until a beep is heard. This sets the station to the button and the button number (1 — 6) appears on the display.

Each button can store one AM station and two FM stations. 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.

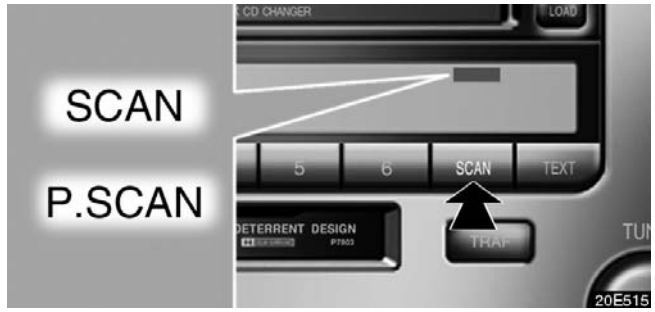
(c) Selecting a station

Tune in the desired station using one of the following methods.

Seek tuning: Push the “SEEK” 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 automatically one after another.

Preset tuning: Push the button (1 — 6) for the station you want. The button number (1 — 6) and station frequency appear on the display.

Manual tuning: Turn the “TUNE” knob. The radio will step up or down to another frequency.

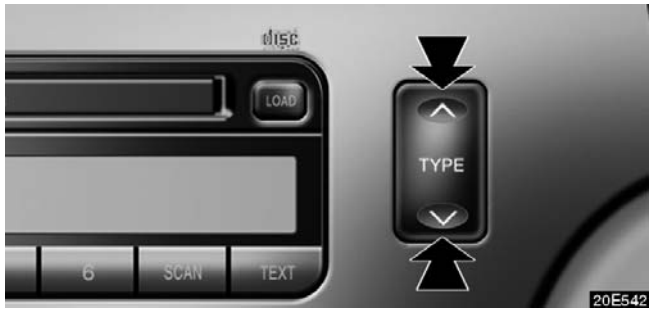


To scan all the frequencies: Push the “SCAN” button briefly. “SCAN” appears on the display. The radio will find the next station up the band, stay there for a few seconds, and then scan again. To select a station, push the “SCAN” button a second time.

To scan the preset stations: Push the “SCAN” button until you hear a beep. “P.SCAN” appears on the display. The radio will tune in the next preset station up 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)

TYPE (Program type):



When you push the “TYPE” button while tuned to FM broadcasts, the current program type appears on the display.

Each time you push the “TYPE” button, the program type changes as follows:

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

With the program type displayed, push the “SEEK” or “SCAN” button. You can seek or scan for stations broadcasting the same type of program. (See page ccxxxii for details.)

If no RDS stations can be found, “NOTHING” appears and the display returns to the previous mode.

TRAF (Traffic) function: A station that regularly broadcasts traffic information is automatically located.

When you push the “TRAF” button, “TRAF SEEK” appears on the display and the radio will start seeking any traffic program station.

If no traffic program station is found, “NO TRAF INFO” appears on the display for a few seconds and the display returns to the previous mode.

Radio text message:

If the radio receives a radio text from RDS station, “MSG” appears on the display. Push the “TEXT” button, and a text message is displayed.

If the entire message is not displayed, “▶” will appear on the display. To display the rest of the message, push and hold the “TEXT” button until you hear a beep.

After the entire message has been displayed, it will disappear after a few seconds.

When the system can show the station name, “RDS” appears on the display. Each time you push the “TEXT” button, the indication on the display changes from the band to the station name, and then to radio text in this order. After 6 seconds passes, the indication returns to the band.

Radio operation (XM satellite radio broadcast)

To listen to a satellite radio broadcast in your vehicle, an additional genuine Toyota satellite receiver and antenna (or equivalents) must be purchased and installed. A subscription to the XM satellite radio service is also 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 tuning to “channel 000” on the radio. For details, see “Displaying the radio ID” below.

All fees and programming are the responsibility of the XM satellite radio and are subject to change.

Satellite tuner technology notice:

Toyota's satellite radio tuners are awarded Type Approval Certificates from XM Satellite Radio Inc. on "May 7, 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 "CH 000" by turning the "TUNE" knob, the ID code of 8 alphanumeric characters appears. If you select another channel, display of the ID code is canceled. 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 station.

Besides "AM", "SAT1", "SAT2" or "SAT3" appears on the display.

Turn the "TUNE" knob clockwise to step up the channel. Turn the knob counterclockwise to step down the channel.

(d) Presetting a channel

1. Turn in the desired channel.

2. Push one of the channel selector buttons (1—6) and hold it until a beep is heard. This sets the channel to the button and the button number (1—6) appears on the display.

Each button 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.

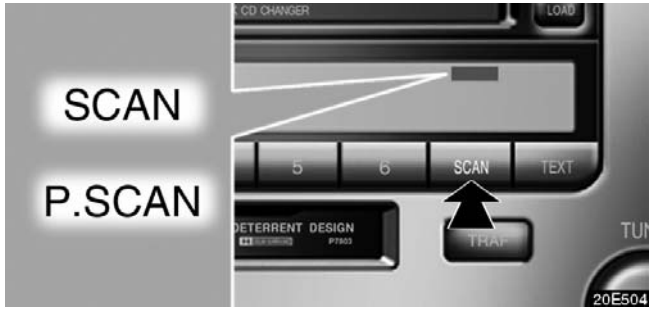
(e) Selecting a channel

Tune in the desired channel using one of the following methods.

Seek tuning: To select the next channel within the current channel category, push the "∧" or "∨" side of the "SEEK/TRACK" button. Repeat until a desired channel is found.

Preset tuning: Push the button (1—6) for the channel you want. The button number (1—6) and channel number appear on the display.

Manual tuning: Turn the "TUNE" knob clockwise to step up the channel. Turn the knob counterclockwise to step down the channel.



To scan the currently selected channel category: Quickly push and release the “SCAN” button. “SCAN” appears on the display. The radio will find the next channel in the same channel category up the band, stay there for 5 seconds, and then scan again. To stop scanning, push this button again.

To scan the preset channels: Push and hold the “SCAN” button until you hear a beep. “P.SCAN” appears on the display. The radio will tune in the next preset channel up the band, stay there for 5 seconds, and then move to the next preset channel. To stop scanning, push this button again.

(f) Channel category

When you push the “∧” or “∨” side of the “TYPE” button while receiving a XM channel.

When the channel category appears, push either “∧” or “∨” side of the “TYPE” button to switch to the next or previous category.

(g) Displaying the title and name

When you push the “TEXT” button, the display changes as follows:

CH NAME → TITLE (SONG/PROGRAM TITLE) → NAME (ARTIST NAME/FEATURE) → CH NUMBER → CH NAME

Up to 10 alphanumeric characters can be displayed. (Some information will not be fully displayed.)

If there is no song/program title or artist name/feature associated with the channel at that time, “– – – – –” will appear on the display.

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, Channel Name, (Artist) Name, (Song) Title and Category Name.

(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.
− − −	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

Alternation or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

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, “TAPE” appears on the display.

To stop or eject the cassette tape, push the “EJECT” button.

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.

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, push the “DD” button. The display will indicate that the Dolby noise reduction system is on.

The Dolby NR mode reduces tape noise by about 10 dB. For best sound reproduction, play your tapes with the Dolby NR on or off according to the mode used for recording the tape.

To play a tape recorded without Dolby NR, push the button 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

"Program" button: Push the " ◀I▶ " button to select the other side of a cassette tape. The display indicates which side is currently selected ("▲" indicates top side, "▼" indicates bottom side).

"Rewind" button: Push the "◀◀" button to rewind a tape. "REW" appears on the display.

To stop rewinding, push the same button or "TAPE" button.

"Fast forward" button: Push the "▶▶" button to fast forward a cassette tape. "FF" appears on the display.

To stop fast forwarding, push the same button or "TAPE" button.

(c) Automatic program selection

"RPT" button: The repeat feature automatically replays the current program.

Push the "RPT" button while the program is playing. When the program ends, it will automatically be rewound and replayed. Push the button 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.

"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 this button on the upper side 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 this 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 a tape is reached, the player automatically resumes normal play.

There must be at least 3 seconds of blank space between programs for this feature to work correctly.

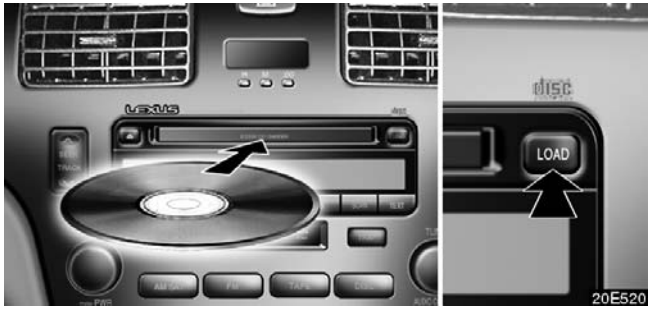
"RPT" and "Automatic program selection" features: These features may not work well with some spoken word, live or classical recordings.

CD player operation

(a) Inserting or ejecting CDs

The ignition switch must be in the “ACC” or “ON” position.

Your CD player with changer can store up to 6 CDs.



- **Setting a single CD:**

1. Push the “LOAD” button briefly.

The amber indicators at either side of the slot start blinking and “WAIT” appears on the display. After the blinking indicators change to green, stay on and “WAIT” changes to “LOAD”, the CD door opens.

2. Insert only one CD while the CD door is open.

You can set a CD at the lowest empty CD number.

After insertion, the set CD is automatically loaded.

If the label faces down, the CD cannot be played. In this case, “ERROR 1” and CD number appear on the display.

If you need to insert the next CD, repeat the same procedure to insert another CD.

- **Setting all the CDs:**

1. Push the “LOAD” button until you hear a beep.

The amber indicators at either side of the slot start blinking and “WAIT” appears on the display. After the blinking indicators change to green, stay on and “WAIT” changes to “LOAD”, the CD door opens.

2. Insert only one CD while the CD door is open.

The CD door closes and “WAIT” appears again.

3. Insert the next CD after “WAIT” changes to “LOAD” and the CD door opens.

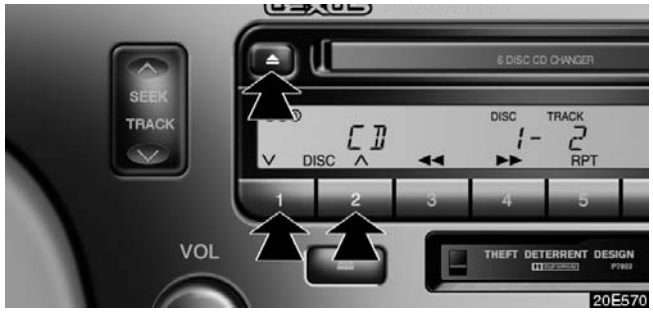
4. Repeat this procedure until you insert all the CDs.

To cancel the operation, push the “LOAD” or “DISC” button.

If you do not insert CDs within 15 seconds after pushing the “LOAD” button and “LOAD” is displayed, the operation will be canceled automatically.

NOTICE

Do not insert one CD stacked on top of another one or feed them in continuously, to prevent CDs from getting stuck in the player.



- **Ejecting a single CD alone:**

1. Push the "∨" or "∧" button to display the disc number you want to eject.

2. Push the "EJECT" button for the CD briefly.

At this time, the display shows "EJECT" and the indicators at both ends of the slot as well as CD number light up.

- **Ejecting all the CDs:**

Push the "EJECT" button for the CD until you hear a beep.

(b) Playing a CD

Push the "DISC" button if the CDs are already loaded in the player.

"CD" appears on the display.

The CDs set in the player are played continuously, starting with the last CD you inserted. The CD number of the CD currently being played, the track number and the time from the beginning of the program appear on the display.

When play of one CD ends, the first track of the following CD starts. When play of the final CD ends, play of the first CD starts again.

The player will skip any empty CD trays.

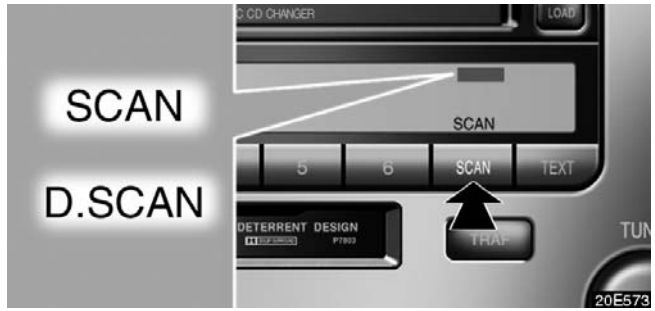
(c) Selecting a desired CD

Searching for a desired CD:

Push the "∨" or "∧" button to select the CD number.

Push the button several times until the desired CD number appears on the display. When you release the button, the player will start playing the selected CD from the first track.

(d) Searching for a desired track or CD



Searching for a desired track:

Push the "SCAN" button briefly. "SCAN" will appear on the display. The CD player will play the next track for 10 seconds, then scan again. To select a track, push the "SCAN" button a second time. If the player reaches the end of the CD, it will continue scanning at track 1.

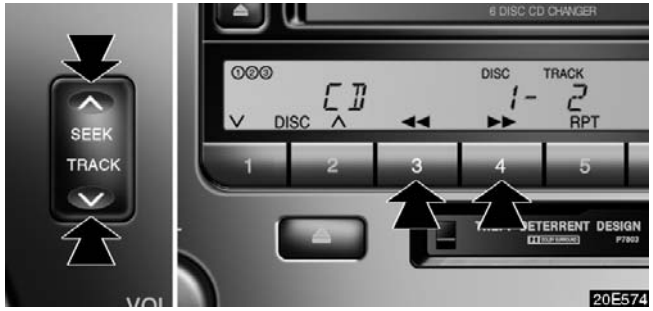
After all the tracks are scanned in one pass, normal play resumes.

Searching for a desired CD:

Push the "SCAN" button until you hear a beep. With "D.SCAN" on the display, the program at the beginning of each CD will be played for 10 seconds. To continue listening to the program of your choice, push the button a second time.

After all the CDs in the changer are scanned in one pass, the scan function is cancelled.

(e) Selecting a desired track



"TRACK" button: Use for direct access to a desired track.

Push either side of the "TRACK" button several times 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.

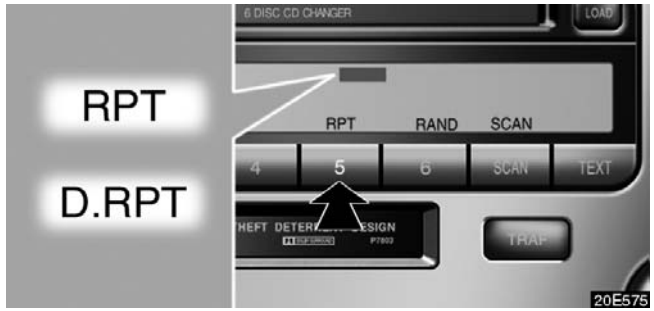
"Fast forward" button:

Push the "▶▶" button and hold it to fast forward the CD. When you release the button, the CD player will resume playing from that position.

"Reverse" button:

Push the "◀◀" button and hold it to reverse the CD. When you release the button, the CD player will resume playing.

(f) Repeating a track or a CD

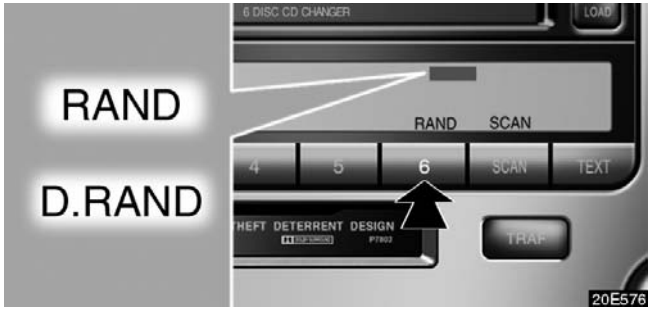


"RPT" button: There are 2 repeat features — you can either replay a CD track or a whole CD.

Repeating a track: Push the "RPT" button briefly while the track is playing. "RPT" will appear on the display. When the track ends, it will automatically be replayed. This process will be continued until you push the button again to turn off the repeat feature.

Repeating a CD: Push the "RPT" button and hold it until you hear a beep. "D.RPT" will appear on the display. The player will repeat all the tracks on the CD you are listening to. When the CD ends, the player will automatically go back to the first track on the CD and replay. This process will be continued until you push the button again to turn off the repeat feature.

(g) Random playing



“RAND” button: There are 2 random features — you can either listen to the tracks on all the CDs in the player in random order, or only listen to the tracks on a specific CD in random order.

Random playing for the tracks on a CD: Push the “RAND” button briefly. “RAND” will appear on the display and play the CD you are listening to in random order.

Random playing for all the tracks in the changer: Push the “RAND” button and hold it until you hear a beep. “D.RAND” will appear on the display and the player will perform all the tracks on all the CDs in the changer in random order. To turn off the random feature, push “RAND” a second time.

When a track is skipped or the system is inoperative, push the button to reset.

(h) If the player malfunctions

If the player or another unit equipped with the player malfunctions, your audio system will display following error messages.

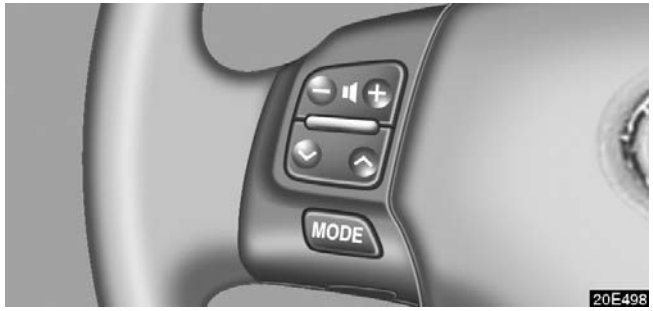
If “WAIT” appears on the display: It indicates that the inside of the player unit may be too hot due to the very high ambient temperature. Remove the CD from the player and allow the player to cool down.

If “ERROR 1” appears on the display: It indicates that the CD is dirty, damaged, or it was inserted up–side down. Clean the CD or insert it correctly.

If “ERROR 3” or “ERROR 4” appears on the display: It indicates there is a trouble inside the system. Eject the CD.

If the malfunction is not rectified: Take your vehicle to your Lexus dealer.

Audio remote controls



The switches are installed on the left side of the steering wheel.

"MODE" switch: Use this switch to turn on or off the audio system, or change the audio mode.

- To turn on the system, push the switch briefly. To turn off the system, push and hold the switch until you hear a beep.
- To change the audio mode, turn on the system and push the switch briefly. If a tape or CD is not inserted, the "TAPE" or "CD" mode is skipped.

"– 🔈 +" switch: Use this switch to adjust the volume.

To increase the volume, push the "+" side. To decrease the volume, push the "–" side. The volume continues to increase or decrease while the switch is being pressed.

(a) When the radio mode is selected

"∨ ∧" switch: Use this switch for seek tuning or to select a preset station.

- To select a preset station, push this switch briefly. The station you assigned to a switch on the audio system will be selected.
- To seek a station, push and hold this switch until you hear a beep. The radio will begin seeking up or down for a station, and will stop on reception.

(b) When the radio mode is selected (XM satellite radio broadcast)

"∨ ∧" switch: Use this switch to select a preset channel.

Push the "∧" or "∨" side of the switch. Repeat until a desired channel is found.

(c) When the "TAPE" mode is selected

"∨ ∧" switch: Use this switch to fast forward or rewind the tape or for automatic program selection.

- To skip forward or reward for automatic program selection, push this switch briefly. When automatically selecting a program, you can skip up to 9 programs at a time. See page ccxliii for details.
- To fast forward or rewind the tape, push this switch until you hear a beep. To stop fast forwarding or rewinding, push the same side on the switch briefly.

(d) When the "CD" mode is selected

"∨ ∧" switch: Use this switch to select a desired track or CD.

- To select a desired track, push this switch briefly.
- To select a desired CD, push and hold this switch until the desired number of the CD appears and you hear a beep.

⚠ CAUTION

Operate the 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 CD into the cassette tape slot or CD 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

Usually, a problem with radio reception does not mean there is a problem with your radio — it is just the normal result of conditions outside the vehicle.

For example, nearby buildings and terrain can interfere with FM reception. Power lines or telephone wires can interfere with AM signals. And of course, radio signals have a limited range. The farther you are from a station, the weaker its signal will be. In addition, reception conditions change constantly as your vehicle moves.

Here are some common reception problems that probably do not indicate a problem with your radio:

FM

Fading and drifting stations — Generally, the effective range of FM is about 40 km (25 miles). Once outside this range, you may notice fading and drifting, which increase with the distance from the radio transmitter. They are often accompanied by distortion.

Multi−path — FM signals are reflective, making it possible for two signals to reach your antenna at the same time. If this happens, the signals will cancel each other out, causing a momentary flutter or loss of reception.

Static and fluttering — These occur when signals are blocked by buildings, trees, or other large objects. Increasing the bass level may reduce static and fluttering.

Station swapping — If the FM signal you are listening to is interrupted or weakened, and there is another strong station nearby on the FM band, your radio may tune in the second station until the original signal can be picked up again.

AM

Fading — AM broadcasts are reflected by the upper atmosphere — especially at night. These reflected signals can interfere with those received directly from the radio station, causing the radio station to sound alternately strong and weak.

Station interference — When a reflected signal and a signal received directly from a radio station are very nearly the same frequency, they can interfere with each other, making it difficult to hear the broadcast.

Static — AM is easily affected by external sources of electrical noise, such as high tension power lines, lightening, or electrical motors. This results in static.

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 and CDs

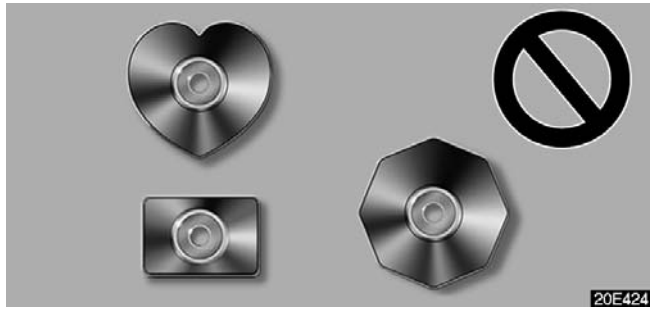
- Your CD player is intended for use with 12 cm (4.7 in.) CDs only.
- Extremely high temperature can keep your CD player from working. On hot days, use air conditioning to cool the vehicle interior before you listen to a CD.
- Bumpy roads or other vibrations may make your CD player skip.
- If moisture gets into your CD player, you may not hear any sound even though your CD player appears to be working. Eject all CDs from the player and wait until the player dries.

⚠ CAUTION

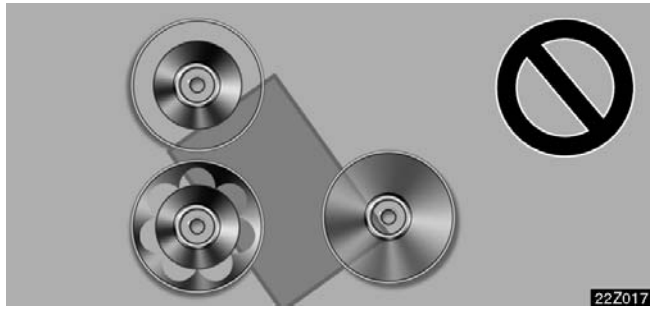
CD players use an invisible laser beam which could cause hazardous radiation exposure if directed outside the unit. Be sure to operate the player correctly.

- Use only CDs marked as shown above. The following products may not be playable on your CD player.

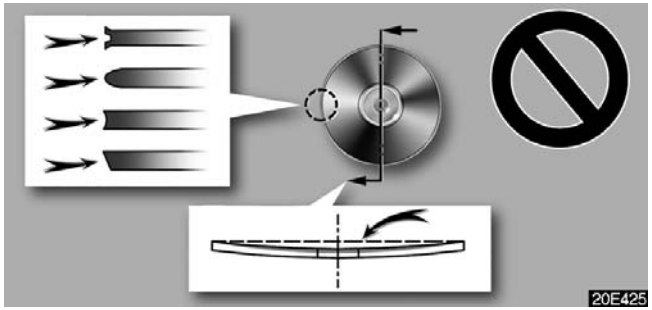
  Copy−protected CDs
  CD−Rs (CD−Recordable)
  CD−RWs (CD−Re−writable)
  CD−ROMs



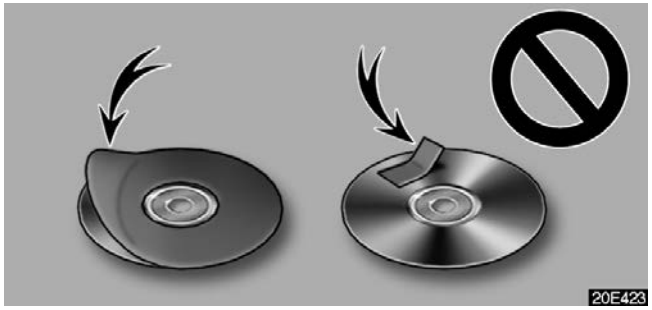
▶ ***Special shaped CDs***



▶ ***Transparent/translucent CDs***



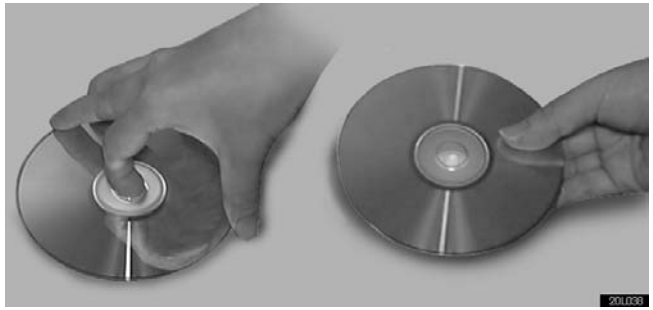
▶ *Low quality CDs*



▶ *Labeled CDs*

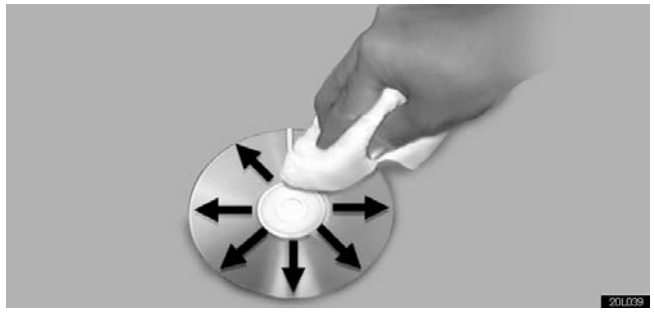
NOTICE

Do not use special shaped, transparent/translucent, low quality or labeled CDs such as those shown in the illustrations. The use of such CDs may damage the player or changer, or it may be impossible to eject the CD.



▶ ***Correct*** ▶ ***Wrong***

- Handle CDs 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 CD damage could cause the player to skip or to repeat a section of a track. (To see a pin hole, hold the CD up to the light.)



To clean a CD: 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 CD (not in a circle). Do not use a conventional record cleaner or anti–static device.

SECTION 3 – 1

STARTING AND DRIVING

Starting and driving

Three–way catalytic converter cclvii
Engine exhaust caution cclviii
Before starting the engine cclix
Ignition switch cclx
Parking brake cclxi
How to start the engine cclxii
Automatic transmission cclxiii
Cruise control cclxix
Electronic modulated suspension cclxxii
Traction control system cclxxiii
Vehicle stability control system cclxxvi
Brake system cclxxviii
Brake pad wear limit indicators cclxxxii

THREE−WAY CATALYTIC CONVERTER

The three−way catalytic converters are emission control devices installed in the exhaust system.

It looks somewhat like a muffler, but its 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 ignition while the vehicle is moving.***
- ***Keep your engine in good running order. Malfunctions in the engine electrical system, electronic ignition system/distributor 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.**

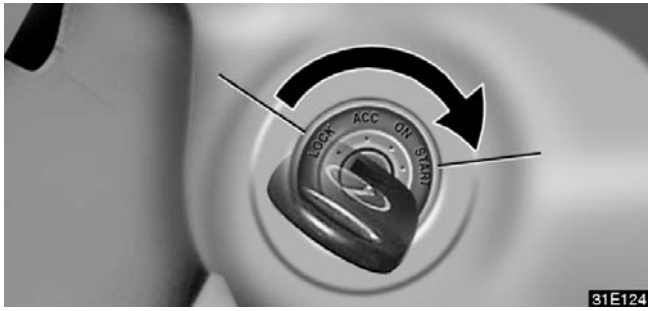
- **To allow proper operation of your vehicle's ventilation system, keep the inlet grilles in front of the windshield clear of snow, leaves, or other obstructions.**
- **If you smell exhaust fumes in the vehicle, drive with the windows open and the trunk lid closed. Have the cause immediately located and corrected.**

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. Vehicles with power adjustable pedals — Adjust the position of the accelerator and brake pedals.
4. Adjust the inside and outside rear view mirrors.
5. Lock all doors.
6. Fasten seat belts.

Remember to check that the service reminder indicators function when turning the key to "ON", and check the fuel gauge to see that you have sufficient fuel.

IGNITION SWITCH



“START” — Starter motor on. The key will return to the “ON” position when released.

For starting tips, see page cclxii.

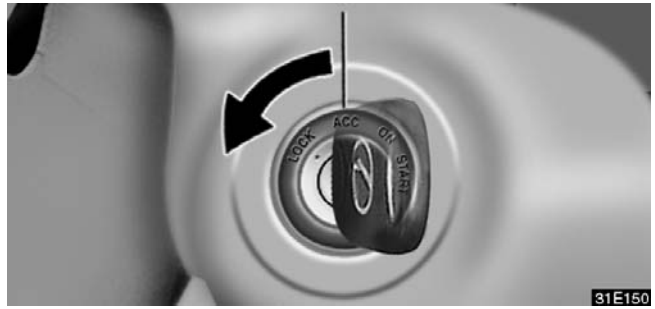
“ON” — Engine on and all accessories on.

This is the normal driving position.

NOTICE
Do not leave the key in the “ON” position if the engine is not running. The battery will discharge and the electronic ignition system could be damaged.

“ACC” — Accessories such as the radio operate, but the engine is off.

If you leave the key in the “ACC” or “LOCK” position and open the driver’s door, a buzzer will remind you to remove the key.



“LOCK” — Engine is off and the steering wheel is locked. The ignition key can be removed only at this position.

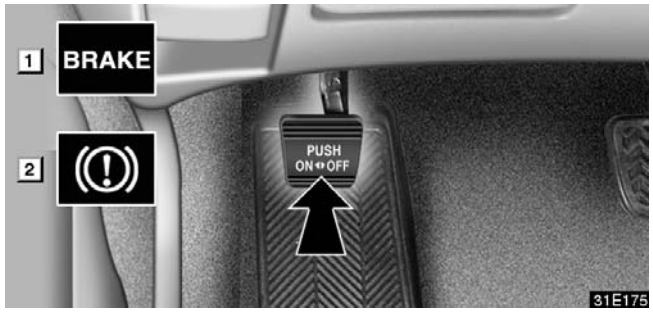
To turn the ignition switch from “ACC” to the “LOCK” position, you must put the transmission selector lever in the “P” position.

Once you remove the key, the engine immobilizer system is automatically set. See “Engine immobilizer system” on page xv.

When starting the engine, the key may seem stuck at the “LOCK” position. To free it, first be sure the key is pushed all the way in, and then rock the steering wheel slightly while turning the key gently.

If, in an emergency, you must turn the engine off while the vehicle is moving, turn the key only to “ACC”.

PARKING BRAKE



▶ 1 *U.S.A.* 2 *Canada*

To set: Hold the brake pedal down with your right foot. Push down the parking brake pedal with your left foot.

To release: Hold the 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 panel remains on until you release the parking brake.

⚠ CAUTION

Before driving, make sure the parking brake is fully released and that the parking brake reminder light is off.

HOW TO START THE ENGINE

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.

Starting the engine

Before starting the engine, be sure to follow the instructions in “Before cranking”.

Normal starting procedure

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:

With your foot off the accelerator pedal, crank the engine by turning the key to “START”. Release it when the engine starts.

Engine should be warmed up by driving, not in idle. For warming up, drive with smoothly turning engine until engine coolant temperature is within normal range.

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 ccciii.

NOTICE

- ***Do not crank for more than 30 seconds at a time. This may overheat the starter and wiring systems.***
- ***Do not race a cold engine.***
- ***If the engine becomes difficult to start or stalls frequently, have the engine checked immediately.***

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 ignition switch in "ON" position. (★)

▶ ***The shift position is displayed on the instrument cluster.***

P: Parking, engine starting and key removal position

R: Reverse position

N: Neutral position

D: Normal driving position (shifting into overdrive possible)

4: Position for engine braking (shifting into overdrive not possible)

When the cruise control is being used, even if you downshift from "D" to "4", engine braking will not be enabled because the cruise control is not cancelled. For the operation to decrease the vehicle speed, see page cclxxi.

3, 2: Position for more powerful engine braking

L: Position for maximum engine braking

Correct use of the automatic transmission is explained in the following parts.

(a) Normal driving

(b) Using engine braking

(c) Using the “3”, “2” and “L” positions

(d) Backing up

(e) Parking

(f) Good driving practice

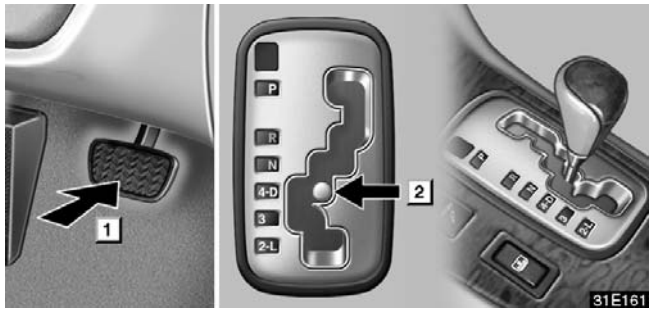
(g) If you cannot shift the selector lever

(a) Normal driving

▶ 1 ***“P” (Park) position*** 2 ***“N” (Neutral) position***

1. Start the engine as instructed in “How to start the engine” on page cclxii.

The transmission must be in “P” or “N”. The engine will not start in any drive position even if the ignition key is turned to “START”.



▶ 1 *Brake pedal* 2 *"D" (Drive) position*

2. 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 "(b) Using engine braking" and "(f) Good driving practice" for exceptions.)

⚠ CAUTION

Never put your foot on the accelerator pedal while shifting.

3. Release the parking brake and brake pedal. Depress the accelerator pedal slowly for smooth starting.

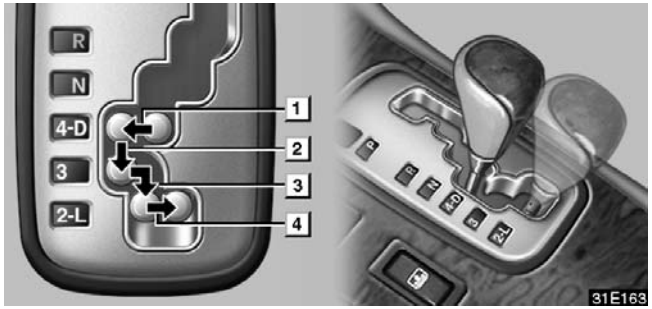
In normal cruising, the vehicle will start in first gear and automatically shift up to the most suitable gear. On inclines, declines or winding roads, etc., the vehicle shifts up and down automatically according to the running conditions to obtain the suitable driving power and engine braking.

When the lever is in the "4" position, the automatic transmission system will select the most suitable gear for the running conditions such as hill climbing, hard towing, etc.

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 "(b) Using engine braking".

(b) Using engine braking



To use the braking power of the engine, downshift the transmission in the way described below:

1 Shift into the “4” position. The transmission will downshift to fourth gear and engine braking will be enabled.

When the cruise control is being used, even if you downshift from “D” to “4”, engine braking will not be enabled because the cruise control is not cancelled. If you need to decrease the vehicle speed, see page cclxxi.

2 Shift into the “3” position. The transmission will downshift to third gear when the vehicle speed is or becomes lower than 129 km/h (80 mph) and more powerful engine braking will be enabled.

3 Shift into the “2” position. The transmission will downshift to second gear when the vehicle speed is or becomes lower than 83 km/h (51 mph) and more powerful engine braking than that of “3” position will be enabled.

4 Shift into the “L” position. The transmission will downshift to first gear when the vehicle speed is or becomes lower than 39 km/h (24 mph) and maximum engine braking will be enabled.

⚠ CAUTION

Be careful when downshifting on a slippery surface. The abrupt change in engine speed could cause the vehicle to skid or spin.

(c) Using the “3”, “2” and “L” positions

The “3”, “2” and “L” positions are used for strong engine braking as described previously.

With the selector lever in “3”, “2” or “L”, you can start the vehicle in motion as with the lever in “D”.

With the selector lever in “3” or “2”, the vehicle will start in first gear and automatically shift to second gear or third gear.

With the selector lever in “L”, the transmission is engaged in first gear.

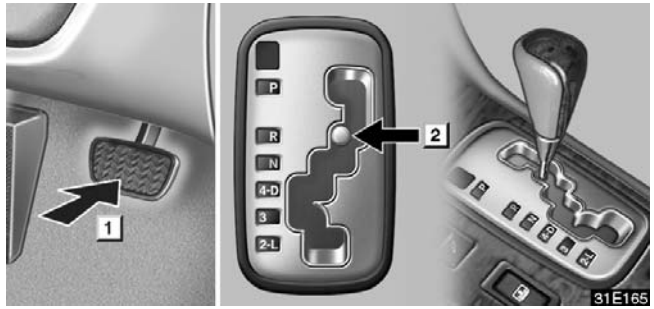
NOTICE

- ***Be careful not to over−rev the engine. Watch the tachometer to keep engine rpm from going into the red zone. The approximate maximum allowable speed for each position is given above for your reference.***

  “3” . . . . . 133 km/h (82 mph)
  “2” . . . . . 85 km/h (53 mph)
  “L” . . . . . 47 km/h (29 mph)

- ***Do not continue hill climbing or hard towing for a long time in the “3”, “2” or “L” position. This may cause severe automatic transmission damage from overheating. To prevent such damage, “4” position should be used in hill climbing or hard towing.***

(d) Backing up



▶ 1 ***Brake pedal*** 2 ***“R” (Reverse) position***

1. Bring the vehicle to a complete stop.

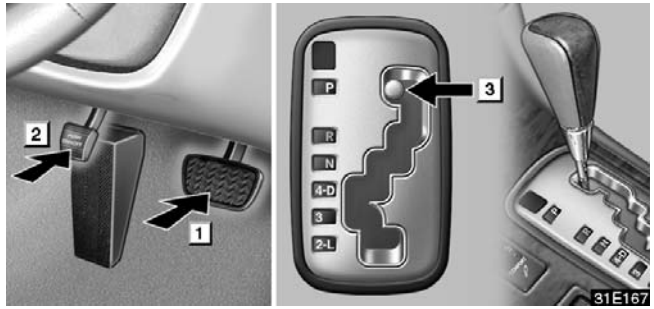
2. With the brake pedal held down with your foot, shift the selector lever to the “R” position.

NOTICE

Never shift into reverse while the vehicle is moving.

Vehicles with driving position memory system —
When the selector lever is shifted into the “R” position, the outside rear view mirrors automatically down to help backing up. For details, see page clxxv.

(e) Parking



▶ 1 *Brake pedal* 2 *Parking brake pedal*
3 *"P" (Park) position*

1. Bring the vehicle to a complete stop.

2. Depress the parking brake 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.
- When towing a trailer, in order to maintain efficient engine braking and electrical charging performance, do not use overdrive.

⚠ 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 cccxxvii.

CRUISE CONTROL

The cruise control is designed to maintain a set cruising speed without requiring the driver to operate the accelerator. Cruising speed can be set to any speed above 40 km/h (25 mph).

Within the limits of the engine's capabilities, cruising speed can be maintained up or down grades. However, changes in vehicle speed may occur on steeper grades.

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 and off

To turn the cruise control on, press the "ON−OFF" button. The "CRUISE" indicator light in the instrument cluster will come on to indicate that the cruise control is operational. Pressing the "ON−OFF" button again turns the system off.

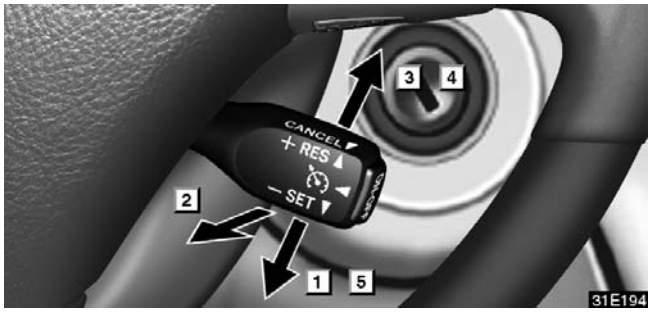
When the system is turned off, cruising speed must be reset when the cruise control is turned on again.

When the ignition key is turned off, the main switch is also automatically turned off. To use the cruise control again, press the "ON−OFF" button again to turn it on.

CAUTION

To avoid accidentally engaging the cruise control, turn the system off when it is not in use. Make sure the "CRUISE" indicator light is off.

Setting operation



▶ ***Each function is described below.***

1 Setting the cruising speed

The transmission must be in “D” or “4” before you set the cruising speed.

Bring the vehicle to the desired speed, push 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 cruise control

The cruise control may be temporarily cancelled by the driver or by the system itself under certain circumstances. Temporary cancellation allows the set cruising speed to remain in memory.

The cruise control can be temporarily cancelled by doing the following:

- Pulling the lever in the “CANCEL” direction and releasing it
- Depressing the brake pedal

Under certain circumstances, the cruise control is temporarily cancelled:

- When vehicle speed falls below 40 km/h (25 mph)
- When vehicle stability control is activated

When vehicle speed drops 16 km/h (10 mph) below the set speed, the cruise control is cancelled and the set speed is erased from memory.

The “CRUISE” indicator light remains on to indicate that the system is still in operation.

To turn the cruise control off, press the “ON–OFF” button. Make sure the “CRUISE” indicator light is off.

If the cruise control automatically cancels out other than for the above cases, have your vehicle checked by your Lexus dealer at the earliest opportunity.

3 Resuming the cruise control

If the cruise control is temporarily cancelled, the cruising speed can be resumed by pushing the lever up in the “+RES” direction.

Vehicle speed must be above 40 km/h (25 mph).

4 Resetting to a faster speed

Push 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 pushing the control lever upward in the “+ RES” direction quickly.

However, a quicker way to reset is to accelerate the vehicle and then push the control lever downward in the “– SET” direction.

5 Resetting to a slower speed

Push 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 pushing the control lever downward in the “– SET” direction quickly.

However, a quicker way to reset is to depress the brake pedal and then push the control lever downward in the “– SET” direction.

Even if you downshift the transmission from the “D” position to “4” with the cruise control on, 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.

Cruise control failure warning

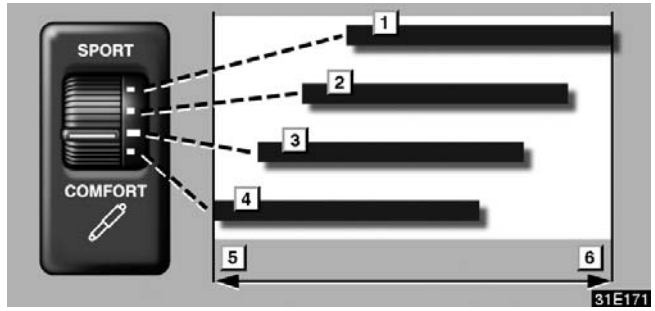
If the “CRUISE” indicator light in the instrument cluster flashes when using the cruise control, press the ”ON–OFF” button to turn the system off and then press it again to turn it on.

If any of the following conditions then occurs, there is some trouble in the cruise control system. Contact your Lexus dealer and have your Lexus inspected.

- The indicator light does not come on.
- The indicator light flashes again.
- The indicator light goes out after it comes on.

ELECTRONIC MODULATED SUSPENSION

This electronic modulated suspension adjusts the damping effect on the shock absorbers with the control switch. Select one of the 4 modes which is suited to the driving conditions with the control switch to provide good riding comfort and stability.



1 ***For sporty type driving such as on winding mountain roads and high speed driving***
2 ***For moderate high speed driving***
3 ***For ordinary driving such as in the city traffic***
4 ***For driving on a bumpy road***
5 ***Soft***
6 ***Firm***

TRACTION CONTROL SYSTEM

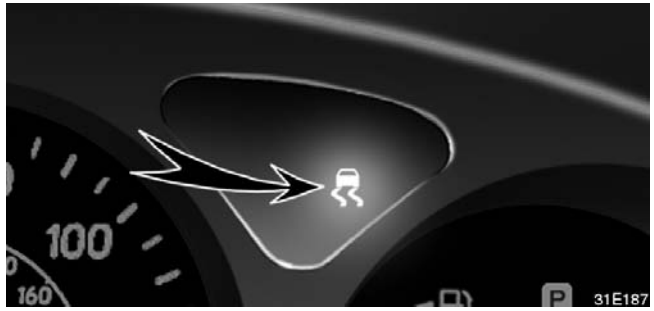
The traction control system automatically helps prevent the spinning of front wheels when the vehicle is started or accelerated on slippery road surfaces.

When the ignition key is turned to “ON”, the system automatically turns on.

⚠ CAUTION

Under certain slippery road conditions, full traction of the vehicle and power against front 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.

Normal driving mode



▶ *Slip indicator light*

Leave the system on during the ordinary driving so that it can operate when needed.

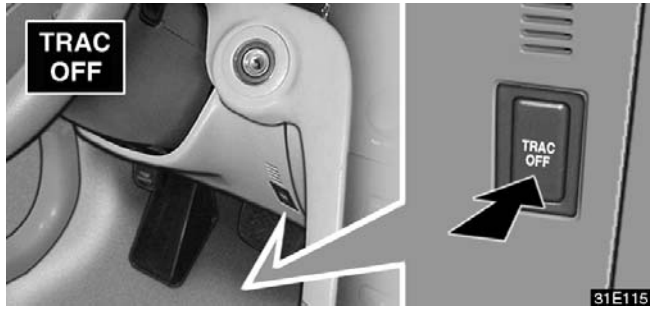
You may hear a sound in the engine compartment for a few seconds when the engine is started or just after the vehicle begins to move. This means that the traction control system is in the self–check mode, but does not indicate a malfunction.

When the traction control system is operating, the following conditions occur:

- The system controls the spinning of the front 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.

The slip indicator light comes on for a few seconds when the ignition key is turned to “ON”. If the indicator light does not come on when the ignition is turned on, contact your Lexus dealer.

Traction control off mode



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 “TRAC OFF” indicator light will come on.

The vehicle stability control system is always activated, even if the traction control system is turned off.

To turn on: Push “TRAC OFF” switch once again.

The “TRAC OFF” indicator light will go off.

“TRAC OFF” indicator light comes on for a few seconds when the ignition key is turned to “ON”. It will come on again when you push the “TRAC OFF” switch to turn off the system.

In the following cases, contact your Lexus dealer:

- The indicator light does not come on when the ignition key is turned to “ON”.
- The indicator light remains on after the ignition is turned on.
- The indicator light comes on with the normal driving mode while driving.

“VSC” warning light

▶ ***U.S.A.***

▶ ***Canada***

This light warns that there is a problem somewhere in the traction control system or the vehicle stability control system.

The light will come on when the ignition key is turned to “ON” and will go off after a few seconds.

If the light comes on while driving, the system does not work. However, as conventional braking operates when applied, there is no problem to continue your driving.

In the following cases, contact your Lexus dealer:

- The warning light does not come on after the ignition key is turned to “ON”.
- The warning light remains on after the ignition key is turned to “ON”.
- The warning light comes on while driving.

The “TRAC OFF” indicator light will come on when the “VSC” warning light comes on even if the “TRAC OFF” switch is not pushed.

VEHICLE STABILITY CONTROL SYSTEM

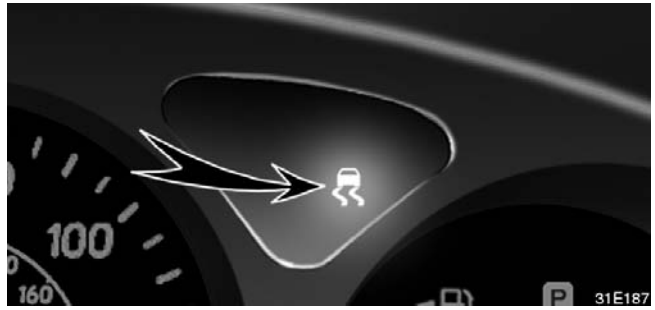
The vehicle stability control system helps provide integrated control of the systems such as anti−lock brake system, traction control, engine control, etc. This system automatically controls the brakes and engine to help prevent the vehicle from skidding when cornering on a slippery road surface or operating steering wheel abruptly.

This system will activate when your vehicle speed reaches or exceeds 15 km/h (9 mph), and will deactivate when the vehicle speed reduces to below 15 km/h (9 mph).

You may hear a 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 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 skid control system is operating, you must always drive carefully and attentively to avoid serious injury. Reckless driving will result in an unexpected 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, manufacture, 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.

The slip indicator light comes on for a few seconds when the ignition key is turned to “ON”. If the indicator light does not come on when the ignition is turned on, contact your Lexus dealer.

“VSC” warning light

▶ ***U.S.A.***

▶ ***Canada***

This light warns that there is a problem somewhere in the vehicle stability control system or the traction control system.

The light will come on when the ignition key is turned to “ON” and will go off after a few seconds.

If the light comes on while driving, the system does not work. However, as conventional braking operates when applied, there is no problem to continue your driving.

In the following cases, contact your Lexus dealer:

- The warning light does not come on after the ignition key is turned to “ON”.
- The warning light remains on after the ignition key is turned to “ON”.
- The warning light comes on while driving.

The “TRAC OFF” indicator light will come on when the “VSC” warning light comes on even if the “TRAC OFF” switch is not pushed.

BRAKE SYSTEM

The tandem master cylinder brake system is a hydraulic system with two separate sub−systems. If either sub−system 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 engine vacuum to power−assist the brakes. If the engine should quit 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 reserved vacuum.**
- **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 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.

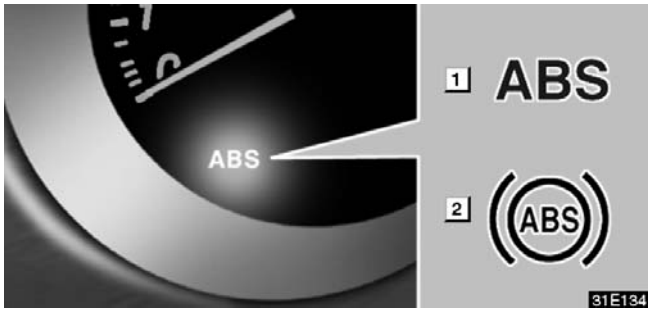
If tire grip performance exceeds its capability, or if hydroplaning occurs during high speed driving in the rain, the anti−lock brake system does not provide vehicle control.

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 inflation 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*

Vehicles without vehicle stability control system —

The light comes on when the ignition key is turned to the “ON” position. If the anti–lock brake system works properly, the light turns off after a few seconds. Thereafter, if either of the systems malfunctions, the light comes on again.

When the “ABS” warning light is on (and the brake system warning light is off), the anti–lock brake system does not operate, but the brake system still operates conventionally.

When the “ABS” warning light is on (and the brake system warning light is off), the anti–lock brake system does not operate so that the wheels could lock up during a sudden braking or braking on slippery road surfaces.

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

- The light does not come on when the ignition key is turned to the “ON” position, or remains on.
- 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, 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.

Vehicles with vehicle stability control system —

The light comes on when the ignition key is turned to the “ON” position. If the anti–lock brake system and the brake assist system work properly, the light turns off after a few seconds. Thereafter, if either of the systems malfunctions, the light comes on again.

When the “ABS” warning light is on (and the brake system warning light is off), the anti−lock brake system, the brake assist system, the traction control system and the vehicle stability control system do not operate, but the brake system still operates conventionally.

When the “ABS” warning light is on (and the brake system warning light is off), the anti−lock brake system does not operate so that the wheels could lock up during a sudden braking or braking on slippery road surfaces.

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

- The light does not come on when the ignition key is turned to the “ON” position, or remains on.
- 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, 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.

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 (vehicles with vehicle stability control 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).

For an explanation of this system’s warning light, see “ABS warning light” on page lxv.

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.

SECTION 3 – 2

STARTING AND DRIVING

Driving tips

Break–in period cclxxxv
Operation in foreign countries cclxxxv
Tips for driving in various conditions cclxxxvi
Winter driving tips cclxxxvii
Dinghy towing cclxxxix
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How to save fuel and make your vehicle last longer ccxcv
Vehicle load limits ccxcvii
Cargo and luggage ccxcviii

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.
- Do not tow a trailer during the first 800 km (500 miles).

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 cclxvi.**
- **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.**
- **Do not drive in excess of the speed limit. 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 ccclix 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 cccxcix 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 ccclviii 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 rear 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.

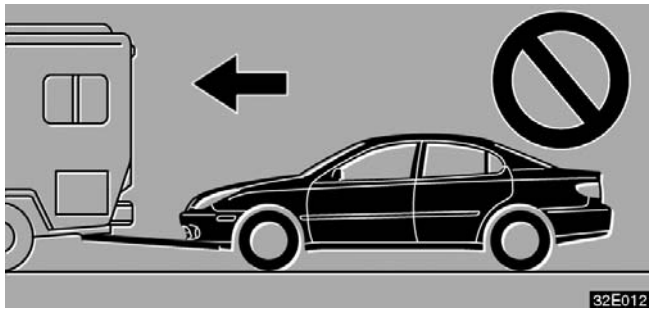
Keep ice and snow from accumulating under the fenders.

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

Your vehicle is designed primarily as a passenger−carrying vehicle. Towing a trailer will have an adverse effect on handling, performance, braking, durability and driving economy (fuel consumption etc.). Your safety and satisfaction depend on the proper use of correct equipment and cautious driving habits. For your safety and the safety of others, you must not overload your vehicle or trailer. Lexus warranties do not apply to damage or malfunction caused by towing a trailer for commercial purposes. Ask your local Lexus dealer for further details before towing.

We recommend you to use a weight carrying hitch when towing a trailer.

NOTICE

When towing a trailer, be sure to consult your Lexus dealer for further information on additional requirements such as a towing kit etc.

Weight limits

Before towing, make sure the total trailer weight, gross vehicle weight, gross axle weight and trailer tongue load are all within the limits.

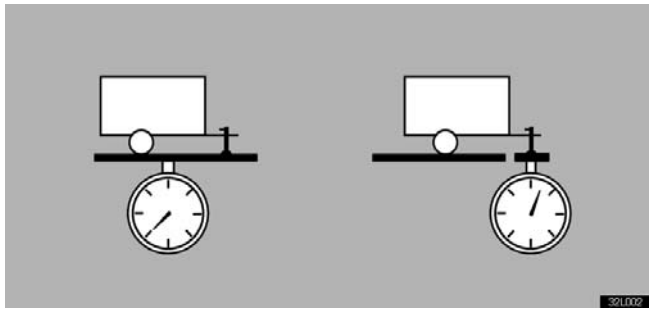
The total trailer weight and tongue load can be measured with platform scales found at a highway weighing station, building supply company, trucking company, junk yard, etc.

▶ *Certification label*

⚠ CAUTION

- **The total trailer weight (trailer weight plus its cargo load) must not exceed 907 kg (2000 lb.). Exceeding this weight is dangerous.**

- **Trailer hitch assemblies have different weight capacities established by the hitch manufacturer. Even though the vehicle may be physically capable of towing a higher weight, the operator must determine the maximum weight rating of the particular hitch assembly and never exceed the maximum weight rating specified for the trailer hitch. Exceeding the maximum weight rating set by the trailer hitch manufacturer can cause an accident resulting in serious personal injuries.**
- **The gross vehicle weight must not exceed the Gross Vehicle Weight Rating (GVWR) indicated on the Certification Label. The gross vehicle weight is the sum weight of the unloaded vehicle, driver, passengers, luggage, hitch and trailer tongue load. It also includes the weight of any special equipment installed on your vehicle.**
- **The load on either the front or rear axle resulting from distribution of the gross vehicle weight on both axles must not exceed the Gross Axle Weight Rating (GAWR) listed on the Certification Label.**



▶ *Total trailer weight* ▶ *Tongue load*

- **The trailer cargo load should be distributed so that the tongue load is 9 to 11% of the total trailer weight, not exceeding the maximum of 90 kg (200 lb.).**
- **Never load the trailer with more weight in the back than in the front. About 60% of the trailer load should be in the front half of the trailer and the remaining 40% in the rear.**

Hitches

- If you wish to install a trailer hitch, your Lexus dealer should be consulted.
- Use only a hitch which is recommended by Lexus dealer and conforms to the total trailer weight requirement.
- Follow the directions supplied by the hitch manufacturer. Lubricate the hitch ball with a light coat of grease.
- Lexus recommends removing the trailer hitch whenever you are not towing a trailer to reduce the possibility of additional damage caused by the hitch if your vehicle is struck from behind. After removing the hitch, seal any mounting holes in the vehicle body to prevent entry of pollutants such as exhaust fumes, dirt, water, etc.

NOTICE

- ***Install the trailer hitch using only the position recommended by your Lexus dealer. Do not install the trailer hitch on the bumper; this may cause body damage.***
- ***Do not use axle−mounted hitches as they can cause damage to the axle housing, wheel bearings, wheels or tires.***

Brakes and safety chains

- **Lexus recommends trailers with brakes that conform to any applicable federal and state/provincial regulations.**
- **A safety chain must always be used between the towing vehicle and the trailer. Leave sufficient slack in the chain for turns. The chain should cross under the trailer tongue to prevent the tongue from dropping to the ground in case it becomes damaged or separated. For correct safety chain procedures, follow the hitch or trailer manufacturer's recommendations.**

CAUTION

- **If the total trailer weight exceeds 500 kg (1102 lb.), trailer brakes are required.**
- **Never tap into your vehicle's hydraulic system as it will lower its braking effectiveness.**
- **Never tow a trailer without using a safety chain securely attached to both the trailer and the vehicle. If damage occurs to the coupling unit or hitch ball, there is possible danger of the trailer wandering over into another lane.**

Tires

- Ensure that your vehicle's tires are properly inflated. Adjust the tire inflation pressure to the recommended cold tire inflation pressure indicated below:

  Tire inflation pressure, kPa (kgf/cm^2 or bar, psi)

P215/60R16 94V	Front	200 (2.0, 29)
	Rear	200 (2.0, 29)
	Spare	200 (2.0, 29)
P215/55R17 93V	Front	220 (2.2, 32)
	Rear	220 (2.2, 32)
	Spare	220 (2.2, 32)

- The trailer tires should be inflated to the pressure recommended by the trailer manufacturer in respect to the total trailer weight.

Trailer lights

- Trailer lights must comply with federal, state/provincial and local regulations. See your local recreational vehicle dealer or rental agency for the correct type of wiring and relays for your trailer. Check for correct operation of the turn signals and stop lights each time you hitch up. Direct splicing may damage your vehicle's electrical system and cause a malfunction of your lights.

Break−in schedule

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

Maintenance

- If you tow a trailer, your vehicle will require more frequent maintenance due to the additional load. For this information, please refer to the scheduled maintenance information in the “Owner’s Manual Supplement/ Scheduled Maintenance”.
- Retighten all fixing bolts of the towing ball and bracket after approximately 1000 km (600 miles) of trailer driving.

Pre−towing safety check

- Check that your vehicle remains level when a loaded or unloaded trailer is hitched. Do not drive if the vehicle has an abnormal nose−up or nose−down condition, and check for improper tongue load, overload, worn suspension or other possible causes.
- Make sure the trailer cargo is securely loaded so that it cannot shift.
- Check that your rear view mirrors conform to any federal, state/provincial or local regulations. If they do not, install required rear view mirrors appropriate for towing purposes.

Trailer towing tips

When towing a trailer, your vehicle will handle differently than when not towing. The three main causes of vehicle−trailer accidents are driver error, excessive speed and improper trailer loading. Keep these in mind when towing:

- Before starting out, check the operation of the lights and all vehicle−trailer connections. After driving a short distance, stop and recheck the lights and connections. Practice turning, stopping and backing with a trailer in an area away from traffic until you learn the feel.
- Backing with a trailer is difficult and requires practice. Grip the bottom of the steering wheel and move your hand to the left to move the trailer to the left. Move your hand to the right to move the trailer to the right. (This procedure is generally opposite to that when backing without a trailer.) Also, just turn the steering wheel a little at a time, avoiding sharp or prolonged turning. Have someone guide you when backing to reduce the risk of an accident.
- Because stopping distance may be increased, vehicle−to−vehicle distance should be increased when towing a trailer. For each 16 km/h (10 mph) of speed, allow at least one vehicle and trailer length between you and the vehicle ahead. Avoid sudden braking as you may skid, resulting in jackknifing and loss of control. This is especially true on wet or slippery surfaces.

- Avoid jerky starts or sudden acceleration.
- Avoid jerky steering and sharp turns. The trailer could hit your vehicle in a tight turn. Slow down before making a turn to avoid the need of sudden braking.
- Remember that when making a turn, the trailer wheels will be closer than the vehicle wheels to the inside of the turn. Therefore, compensate for this by making a larger than normal turning radius with your vehicle.
- Crosswinds and rough roads will adversely affect handling of your vehicle and trailer, causing sway. Pay attention to the rear from time to time to prepare yourself for being passed by large trucks or buses, which may cause your vehicle and trailer to sway. If swaying happens, firmly grip the steering wheel and reduce speed immediately but gradually. Never increase speed. If it is necessary to reduce speed, brake slowly. Steer straight ahead. If you make no extreme correction with the steering or brakes, your vehicle and trailer will stabilize.
- Be careful when passing other vehicles. Passing requires considerable distance. After passing a vehicle, do not forget the length of your trailer and be sure you have plenty of room before changing lanes.
- In order to maintain efficient engine braking and electrical charging performance, do not use overdrive.
- Because of the added load of the trailer, your vehicle's engine may overheat on hot days (at temperatures over 30°C [85°F]) when going up a long or steep grade with a trailer. If the engine coolant temperature gauge indicates overheating, immediately turn off the air conditioning (if in use), pull your vehicle off the road and stop in a safe spot. See "If your vehicle overheats" on page cccviii.
- Always place wheel blocks under both the vehicle and trailer wheels when parking. Apply the parking brake firmly. Put the transmission in "P". Avoid parking on a slope with a trailer, but if it cannot be avoided, do so only after performing the following:

1. Apply the brakes and keep them applied.

2. Have someone place wheel blocks under both the vehicle and trailer wheels.

3. When the wheel blocks are in place, release your brakes slowly until the blocks absorb the load.

4. Apply the parking brake firmly.

5. Shift into "P" and turn off the engine.

When restarting out after parking on a slope:

1. With the transmission in "P" position, start the engine. Be sure to keep the brake pedal depressed.

2. Shift into the "3", "2", "L" or "R" position.

3. Release the parking brake and brake pedal and slowly pull or back away from the wheel blocks. Stop and apply your brakes.

4. Have someone retrieve the blocks.

CAUTION

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

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 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 drive with 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 cclxiii.)
- **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 ccclxix.

Total load capacity: 410 kg (900 lb.)

Total load capacity means combined weight of occupants, cargo and luggage. Tongue load is included when trailer towing.

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 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: 907 kg (2000 lb.)

Towing capacity means the maximum gross trailer weight (trailer weight plus its cargo weight) that your vehicle is able to tow.

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.**

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.

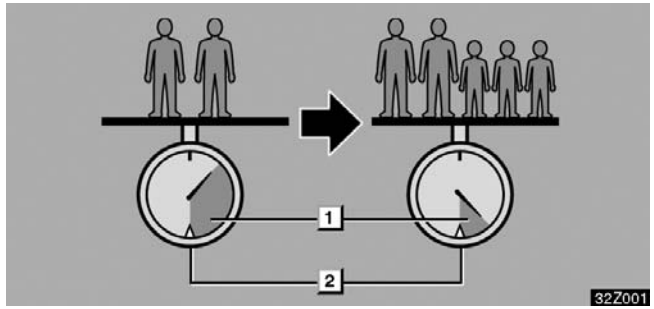
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the “XXX” amount equals 1400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400 – 750 (5 x 150) = 650 lbs).

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.

For details about trailer towing, see page cclxxxix.

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 410 kg (900 lb.), the available amount of cargo and luggage load capacity will be as follows:

410 kg – 166 kg = 244 kg.
(900 lb. – 366 lb. = 534 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:

244 kg – 176 kg = 68 kg.
(534 lb. – 388 lb. = 146 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 ccxcvii.

⚠ 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.

ccci

SECTION 4

IN CASE OF AN EMERGENCY

In case of an emergency

If your engine stalls while driving cccciii
If your vehicle will not start cccciii
If you cannot increase engine speed cccviii
If your vehicle overheats cccviii
If you have a flat tire cccix
If your vehicle becomes stuck cccxix
If your vehicle needs to be towed cccxx
If you cannot shift automatic transmission selector lever cccxxvii
If you lose your keys or lock yourself out cccxxviii

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 ignition key to “ACC” or “LOCK”, 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 “How to start the engine” on page cclxii and that you have sufficient fuel. Since your vehicle is equipped with the engine immobilizer system, also check whether the other keys will start the engine. If they work, your 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 immobilizer system. Call your Lexus dealer. See “Keys” on page xi.

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. Turn the ignition key to “ACC” or “LOCK” and try starting the engine again.

2. If the engine will not start, the engine may be flooded because of repeated cranking. See “(b) Starting a flooded engine” for further instructions.

3. 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, turn the key to “START” with the accelerator pedal fully depressed. Continue this operation for 30 seconds and then stop cranking. Then try starting the engine with your foot off the accelerator pedal.

If the engine does not start after 30 seconds of cranking, release the key, 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”.)

NOTICE

Do not crank for more than 30 seconds at a time. This may overheat the starter and wiring systems.

(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.

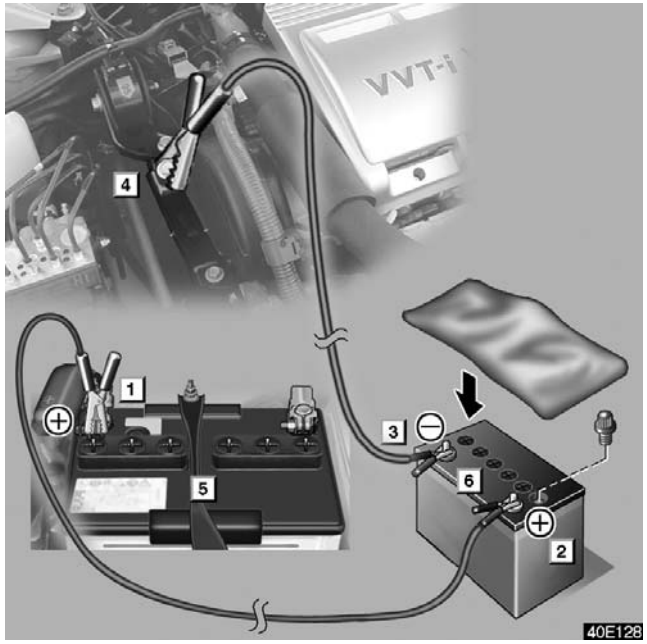
If you are unsure about how to follow this procedure, we strongly recommend that you seek help from your Lexus dealer, Roadside Assistance or Customer Service Assistance. (See “Foreword”.)

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.



▶ 5 *Discharged battery* ▶ 6 *Booster battery*

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 (e.g. cylinder head) 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. Start your engine in the normal way. After starting, run it at about 2000 rpm for several minutes with the accelerator pedal lightly depressed.

6. Carefully disconnect the cables in the exact reverse order: the negative cable and then the positive cable.

7. Carefully dispose of the battery cover cloths which may now contain sulfuric acid.

8. 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 the 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.

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 ignition key is turned to the “ACC” or “LOCK” position.

CAUTION

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?

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

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 place any objects on top of or underneath the jack.**
- **Raise the vehicle only high enough to remove and change the tire.**

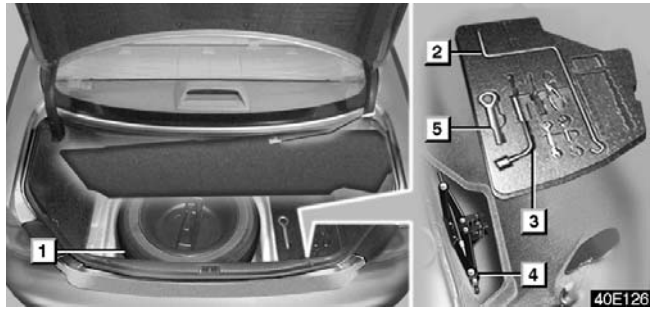
NOTICE

Do not continue driving with a deflated tire. Driving even a short distance can damage a tire and wheel beyond repair.

1. Lift up the deck board and hang the deck board hook on the right hinge of the trunk lid.

Make sure the board does not fall down.

When closing the board, replace the hook in its original position.



▶ 1 ***Spare tire*** 2 ***Jack handle*** 3 ***Wrench*** 4 ***Jack*** 5 ***Towing eyelet***

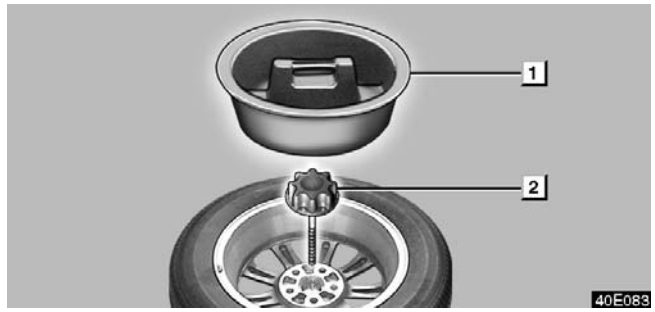
2. Get the jack, wrench and spare tire.

To prepare yourself for an emergency, you should familiarize yourself with the use of the jack and each tool, and their storage locations. The jack handle and wrench are attached at the reverse side of the cover.

▶ 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 spare tire cover.

2 Loosen the bolt and remove it.

When storing the spare tire, place it with the inner side of the wheel facing up. Then bolt the tire in place and install the spare tire cover to prevent the tire from flying forward during a collision or sudden braking.

3. 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.

4. Loosen all the wheel nuts.

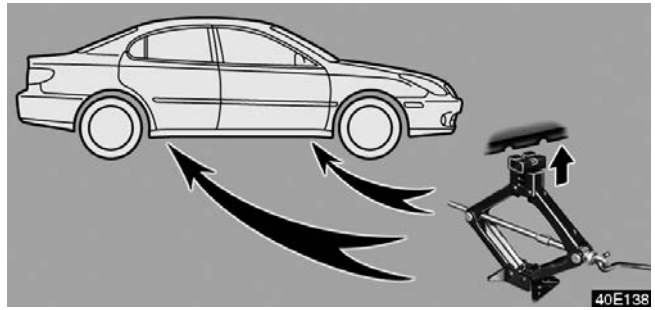
Always loosen the wheel nuts before raising the vehicle.

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.

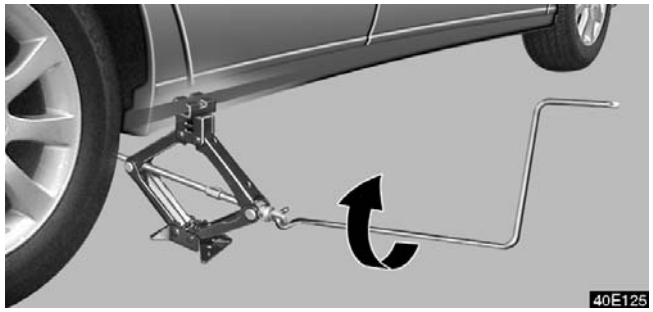
⚠ CAUTION

Never use oil or grease on the bolts or nuts. The nuts may loose and the wheels may fall off, which could cause a serious accident.



5. Position the jack at the jack points as shown. Rotate the load rest 90° from storage position to lifting position.

Make sure the jack is positioned on a level and solid surface.



6. 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.

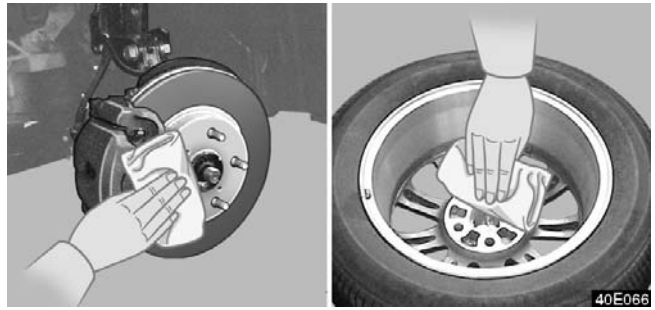
To raise the vehicle, insert the jack handle into the jack (it is a loose fit) and turn it clockwise. As the jack touches the vehicle and begins to lift, double–check that it is properly positioned.

⚠ CAUTION

Never get under the vehicle when the vehicle is supported by the jack alone.

7. 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.

8. 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 loose 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.

9. 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.**

10. After changing the wheel, check the air pressure of the replaced tire. Stow all the tools, jack and flat tire securely.

If the 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.

Vehicles with traction control system — 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 cclxxiii.)

⚠ 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 cccxxiv.

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.

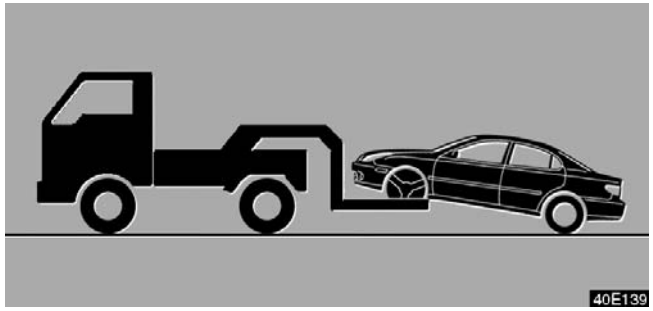
Your vehicle can be damaged if it is towed incorrectly. Although most operators know the correct procedure, it is possible to make a mistake. To avoid damage to your vehicle, make sure the following precautions are observed. If necessary, show this page to the tow truck driver.

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**

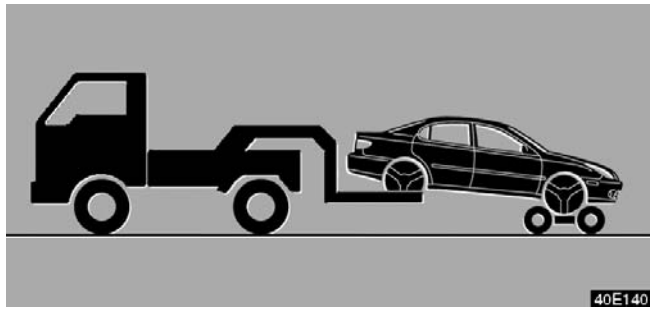


Release the parking brake.

NOTICE

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.

- **From rear**

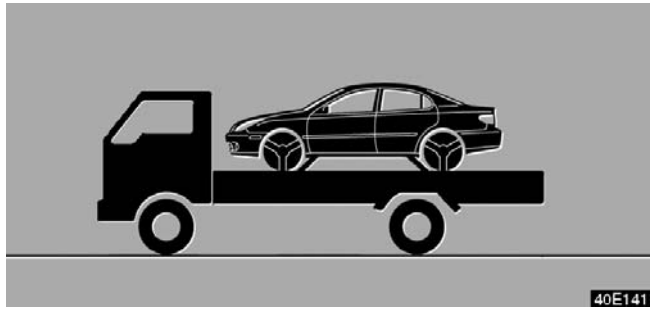


Use a towing dolly under the front wheels.

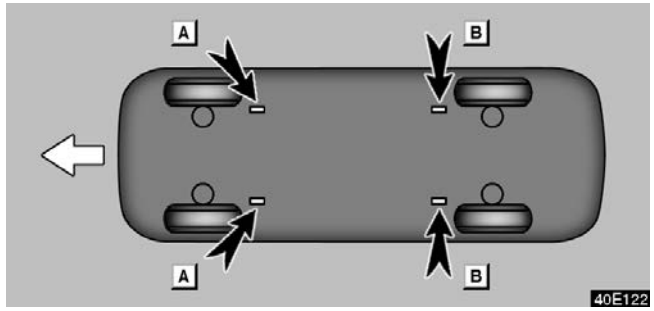
NOTICE

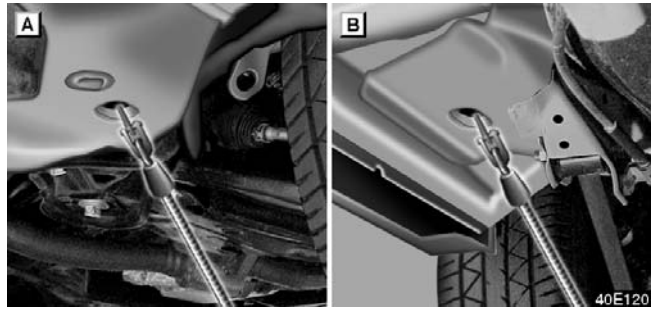
Never tow a vehicle with an automatic transmission from the rear with front wheels on the ground, as this may cause serious damage to the transmission.

(b) Using a flat bed truck

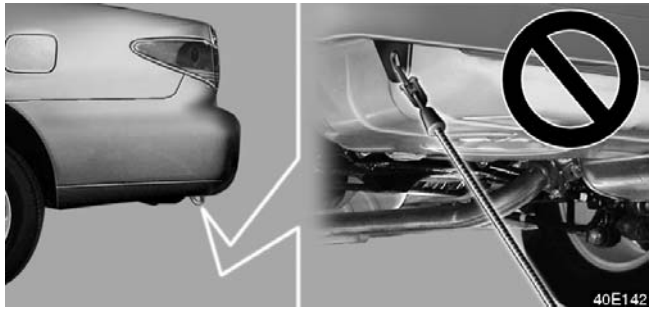


- **Tie down points**





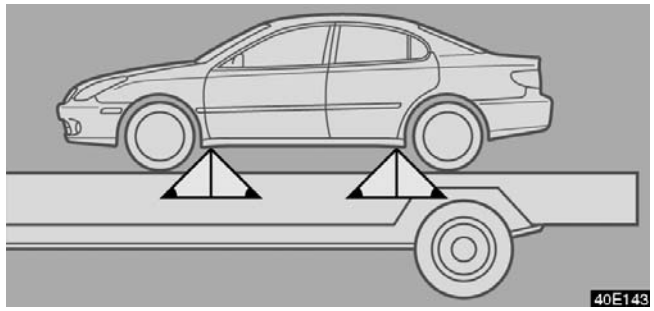
If your Lexus is transported by a flat bed, it should be tied down at locations A and B as shown above.



▶ *Rear emergency towing eyelets*

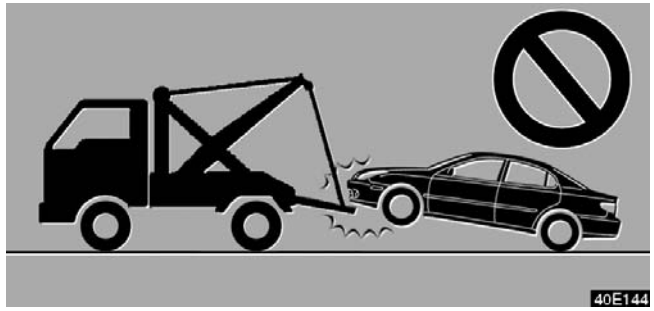
NOTICE
Do not use the rear emergency towing eyelets.

- **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 “(e) Installing front towing eyelet” on page cccxxv.

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 ignition key must be in “ACC” (engine off) or “ON” (engine running).

⚠ 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.

(e) Installing front towing eyelet

1. Remove the front towing eyelet cover on the front bumper using a flathead screwdriver. To protect the bodywork, place a piece of rag over the cover.

2. Use the front towing eyelet in the trunk. Secure it to the hole on the bumper by turning clockwise. (For the eyelet location, see page cccxi.)

3. Tighten the front towing eyelet securely by a wheel nut wrench.

⚠ CAUTION

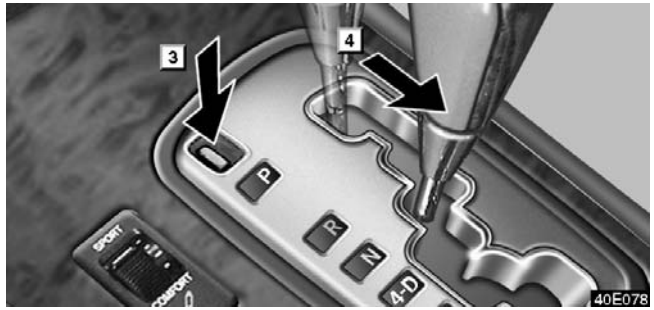
When installing the eyelet on the vehicle, be sure to tighten the front eyelet securely. If the eyelet is loose, it may come off when being towed and result in death or serious injury.

IF YOU CANNOT SHIFT AUTOMATIC TRANSMISSION SELECTOR LEVER

If you cannot shift the selector lever out of "P" position to other positions even though the brake pedal is depressed, use the shift lock override button as follows:

1 Turn the ignition key to "LOCK". Make sure the parking brake is applied.

2 Pry up the cover with a flathead screwdriver or equivalent.



3 Push down the shift lock override button. You can shift out of "P" position only while pushing the button.

4 Shift into "N" position.

Insert the cover. Start the engine. 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 master key, because your vehicle is equipped with the engine immobilizer system.

Even if you lose only one key, contact your Lexus dealer to make a new key. However, if you lose all your master keys, the dealer cannot duplicate key but only replace the whole system.

See the suggestion given in “Keys” on page xi.

You can use the wireless remote control system 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 cccxxxi
General maintenance cccxxxii
Does your vehicle need repairing? cccxxxv
Emissions Inspection and Maintenance (I/M) programs cccxxxvi

For scheduled maintenance information, please refer to the "Owner's Manual Supplement/Scheduled Maintenance".

MAINTENANCE REQUIREMENTS

Your Lexus vehicle has been designed to have 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 the "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 any replacement parts used for maintenance or for the repair of the emission control system be Lexus supplied.

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 your "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 cdvi for additional information.

Engine coolant level

Make sure the coolant level is between the "F" and "L" lines on the see–through reservoir when the engine is cold. See page ccclix 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 ccclxi for additional information.

Battery

Check the battery condition by the indicator color. See page cccxcix for additional information.

Brake fluid level

Make sure the brake fluid level is correct. See page ccclxvii 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 ccclvi for additional information.

Power steering fluid level

Check the level through the reservoir. The level should be in the “HOT” or “COLD” range depending on the fluid temperature. See page ccclxviii 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 cclviii.)

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 freeplay. Be alert for changes in steering condition, such as hard steering, excessive freeplay 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 freeplay. 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 ccclxix for additional information.

Tire surface

Check the tires carefully for cuts, damage or excessive wear. See page ccclxxxiv 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 ccclxxxiii 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.

EMISSIONS 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 even 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

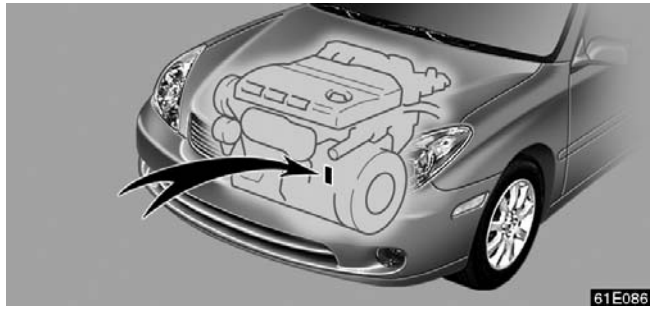
Vehicle identification cccxxxix
Theft prevention labels cccxl
Engine Compartment Overview cccxli
Do–it–yourself service precautions cccxlii
Parts and tools cccxliii
Positioning the jack cccxlv

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.



The engine number is stamped on the engine block as shown.

THEFT PREVENTION LABELS (U.S.A. ONLY)

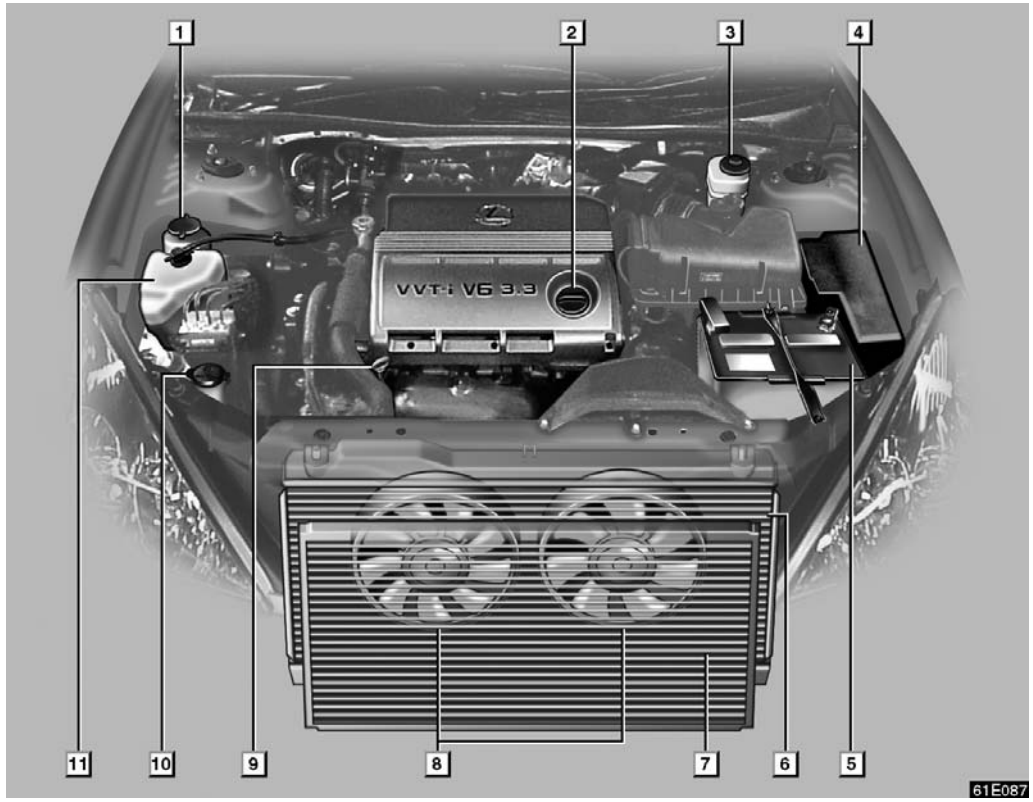
Your new vehicle carries theft prevention labels which are approximately 47 mm (1.85 in.) by 12 mm (0.47 in.).

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



1 *Power steering fluid reservoir*

2 *Engine oil filler cap*

3 *Brake fluid reservoir*

4 *Fuse box*

5 *Battery*

6 *Radiator*

7 *Condenser*

8 *Electric cooling fans*

9 *Engine oil level dipstick*

10 *Washer fluid tank*

11 *Engine coolant reservoir*

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 cccxliii.

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, exhaust manifold and power steering fluid reservoir, 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 that the ignition is off if you work near the electric cooling fans or radiator grille. With the ignition on, the electric cooling fans will automatically start to run if the engine coolant temperature is high and/or the air conditioning is on.**

- **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.***
- ***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.***
- ***Do not overfill automatic transmission fluid, or the transmission could be damaged.***
- ***Be careful not to scratch the glass surface with the wiper frame.***

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
  See page ccclviii for details about engine oil selection.

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 (Coolant with long–life hybrid organic acid technology is a combination of low phosphates and organic acids.)

  "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). This coolant provides protection down to about –35°C (–31°F) (for the U.S.A.) or about –42°C (–44°F) (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 power steering fluid

Parts (if level is low):

- Automatic transmission fluid DEXRON®II or III

Tools:

- Rag or paper towel
- 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:

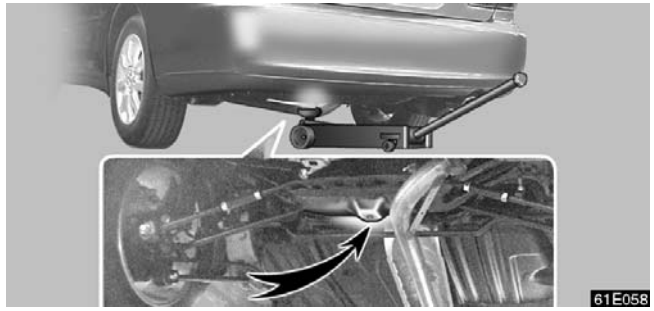
- Water
- Washer fluid containing antifreeze (for winter use)

Tools:

- Funnel

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". Block the wheels on the opposite side of the jack up point 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 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.

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SECTION 6 – 2

SERVICE PROCEDURES AND SPECIFICATIONS

Engine

Specifications cccxlix
Fuel ccclii
Fuel pump shut off system cccliv
Facts about engine oil consumption cccliv
Used engine oil ccclvi
Checking the engine oil level ccclvi
Checking the engine coolant level ccclix
Checking the radiator and condenser ccclxi
Spark plugs ccclxi

SPECIFICATIONS

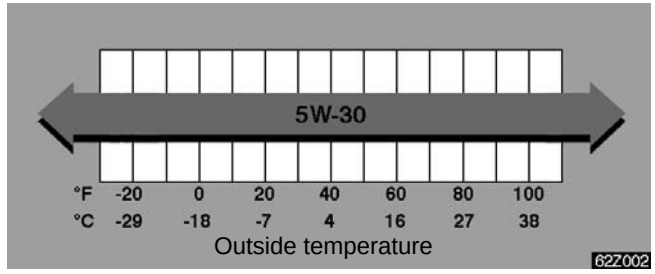
— GENERAL

Model	3MZ–FE
Type	6 cylinder V type, 4 cycle, gasoline
Bore and stroke	92.0 × 83.0 mm (3.62 × 3.27 in.)
Displacement	3311 cm^3 (202.1 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 (with Borroughs drive belt tension gauge No. BT–33–73F)	125 ± 20 lb.

— 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	 4.7 L (5.0 qt., 4.1 Imp. qt.) 4.5 L (4.8 qt., 4.0 Imp. qt.)
Oil grade	ILSAC multigrade engine oil
Recommended oil viscosity (SAE):	

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	9.2 L (9.7 qt., 8.2 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.

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.) 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):	12.6 — 12.8 V	Fully charged
		12.2 — 12.4 V	Half charged
		11.8 — 12.0 V	Discharged
		[Voltage that is checked 20 minutes after the key is removed with all the lights turned off]	
	Charging rates	5 A 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

Premium unleaded gasoline with an Octane Rating of 91 (Research Octane Number 96) or higher required for optimum engine performance. However, if such premium type cannot be obtained, you may use unleaded gasoline with an Octane Rating as low as 87 (Research Octane Number 91).

Use of unleaded fuel with an Octane Rating or Research Octane Number lower than stated above will cause persistent heavy knocking. If it is 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.

Gasolines containing detergent additives

Lexus recommends the use of gasoline that contain detergent additives to avoid build−up of engine deposits.

For further details, ask your Lexus dealer or a local gasoline retailer.

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 4 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 91.

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

70 L (18.5 gal., 15.4 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 ignition switch to “ACC” or “LOCK” 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 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.

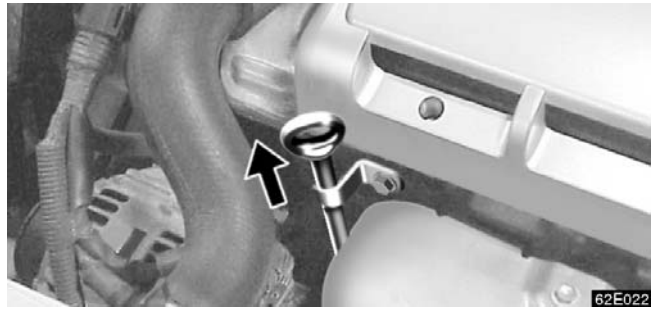
For detailed information on oil level check, see “Checking the engine oil level” on page ccclvi.

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

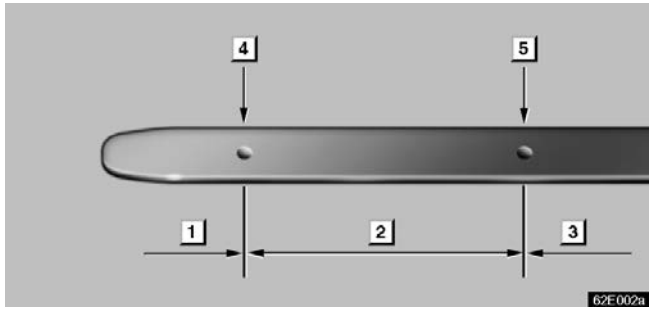


With the engine at operating temperature and turned off, check the oil level on the dipstick.

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.



▶ 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 low level mark (4) and the full level mark (5), it is O.K.

NOTICE
Be careful not to drop engine oil on the vehicle components.

If the oil level is below or only slightly above the low 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 mark and full mark 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 page cccxlix.

When the level reaches within the correct range, return the filler cap and turn the cap clockwise until you hear a click.

NOTICE

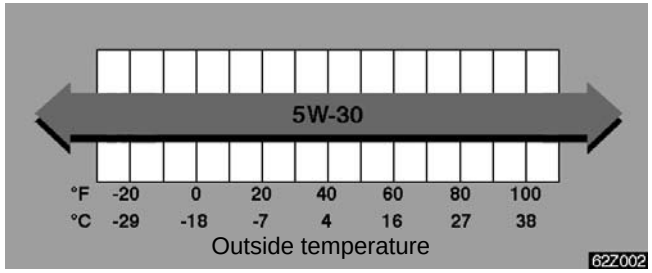
- ***Be careful not to spill engine oil on the vehicle components.***
- ***Avoid overfilling, or the engine could be damaged. Check the oil level on the dipstick once again after adding the oil.***

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: ILSAC multigrade engine oil

Recommended viscosity: SAE 5W−30



SAE 5W−30 is the best choice for good fuel economy and good starting in cold weather.

If SAE 5W−30 is not available, SAE 10W−30 may be used. However, it should be replaced with SAE 5W−30 at the next oil change.

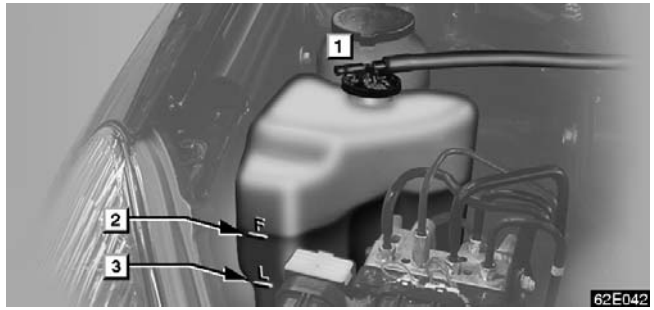
Oil identification mark

The ILSAC (International Lubricant Standardization and Approval Committee) Certification Mark is added to some oil containers to help you select the oil you should use.

To ensure excellent lubrication performance 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



▶ 1 *Reservoir cap* 2 *Upper line* 3 *Lower line*

Look at the see−through coolant reservoir when the engine is cold. The coolant level is satisfactory if it is between the “F” and “L” 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 “L” line, add coolant. Bring the level up to the “F” 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 a Lexus dealer.

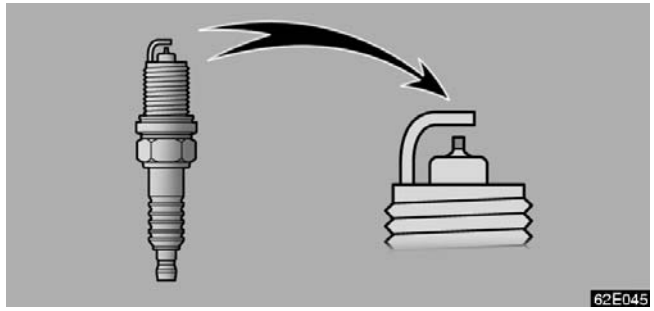
CAUTION

To prevent burning yourself, be careful not to touch the radiator, condenser or intercooler when the engine is hot.

NOTICE

To prevent damage to the radiator and condenser, do not perform the work by yourself.

SPARK PLUGS



Your engine is fitted with iridium−tipped spark plugs.

NOTICE

Use only iridium−tipped spark plugs. Do not adjust gaps for engine performance or smooth drivability.

SECTION 6 – 3

SERVICE PROCEDURES AND SPECIFICATIONS

Chassis

Specifications ccclxiii
Checking brake fluid ccclxvii
Checking power steering fluid ccclxviii
Checking tire inflation pressure ccclxix
Tire information ccclxxiii
Types of tires ccclxxxii
Rotating tires ccclxxxiii
Checking and replacing tires ccclxxxiv
Installing snow tires and chains ccclxxxvi
Replacing wheels ccclxxxviii
Aluminum wheel precautions ccclxxxix
Suspension and chassis cccxc

SPECIFICATIONS

— AUTOMATIC TRANSAXLE

Fluid capacity Drain and refill	3.5 L (3.7 qt., 3.1 Imp. qt.)
Fluid type	**Toyota Genuine ATF Type T−IV***

*: 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 Type T−IV” (ATF JWS3309 or NWS6500) to aid in assuring optimum transaxle performance.

NOTICE

Using automatic transmission fluid other than “Toyota Genuine ATF Type T−IV” may cause deterioration in shift quality, locking up of your transmission accompanied by vibration, and ultimately damage the automatic transmission of your vehicle.

Please contact your Lexus dealer for further details.

— BRAKES

Pedal clearance Fixed type Adjustable type (in frontmost position)	 70 mm (2.8 in.) Min. *1 59 mm (2.3 in.) Min. *1
Pedal free play Fixed type Adjustable type (in frontmost position)	 1 — 6 mm (0.04 — 0.24 in.) 1 — 8 mm (0.04 — 0.31 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	3 — 6 clicks *2
Fluid type	SAE J1703 or FMVSS No. 116 DOT 3

*1: Minimum pedal clearance when depressed with the force of 490 N (50 kgf, 110 lbf) with the engine running
*2: Parking brake adjustment when depressed with the force of 294 N (30 kgf, 66 lbf)

— STEERING

Wheel free play	Less than 30 mm (1.2 in.)
Power steering fluid type	Automatic transmission fluid DEXRON®II or III

— TIRES AND WHEELS (type A)

Tire size	P215/60R16 94V
Tire inflation pressure Recommended cold tire inflation pressure	Front 200 kPa (2.0 kgf/cm^2 or bar, 29 psi) Rear 200 kPa (2.0 kgf/cm^2 or bar, 29 psi) Spare 200 kPa (2.0 kgf/cm^2 or bar, 29 psi) For sustained high speeds above 160 km/h (99 mph), in countries where such speeds are permitted by law, add 40 kPa (0.4 kgf/cm^2 or bar, 6 psi) to the front tires and rear tires, but never exceed the maximum cold tire inflation pressure molded on the tire sidewall.
Wheel size	16 × 6 1/2 JJ
Wheel nut torque	103 N·m (10.5 kgf·m, 76 ft·lbf)

NOTE:
For a complete information on tires (e.g. replacing tires or replacing wheels), see “Checking tire inflation pressure” through “Aluminum wheel precautions” on pages ccclxix through ccclxxxix.

— TIRES AND WHEELS (type B)

Tire size	P215/55R17 93V
Tire inflation pressure Recommended cold tire inflation pressure Normal driving	Front 210 kPa (2.1 kgf/cm^2 or bar, 30 psi) Rear 210 kPa (2.1 kgf/cm^2 or bar, 30 psi) Spare 210 kPa (2.1 kgf/cm^2 or bar, 30 psi) For sustained high speeds above 160 km/h (99 mph), in countries where such speeds are permitted by law, add 30 kPa (0.3 kgf/cm^2 or bar, 4 psi) to the front tires and rear tires, but never exceed the maximum cold tire inflation pressure molded on the tire sidewall.
Trailer towing	Front 220 kPa (2.2 kgf/cm^2 or bar, 32 psi) Rear 220 kPa (2.2 kgf/cm^2 or bar, 32 psi)) Spare 220 kPa (2.2 kgf/cm^2 or bar, 32 psi)
Wheel size	17 × 7 JJ
Wheel nut torque	103 N·m (10.5 kgf·m, 76 ft·lbf)

NOTE:
For a complete information on tires (e.g. replacing tires or replacing wheels), see “Checking tire inflation pressure” through “Aluminum wheel precautions” on pages ccclxix through ccclxxxix.

CHECKING BRAKE FLUID

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. So be sure to keep the reservoir filled.

If the reservoir needs frequent refilling, it may indicate a serious mechanical problem.

If the level is low, add FMVSS No.116 DOT 3 or SAE J1703 brake fluid to the brake reservoir.

Remove and replace the reservoir cap by hand. Add brake fluid up to the "MAX" line.

Use only newly opened brake fluid. Once opened, brake fluid absorbs moisture from the air, and excess moisture can cause a dangerous loss of braking efficiency.

⚠ CAUTION

Take care when filling the reservoir because 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.

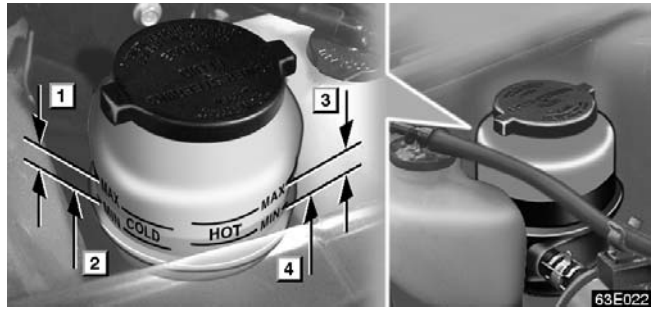
NOTICE

If you spill some of the fluid, be sure to wipe it off to prevent it from damaging the parts or paintwork.

CHECKING POWER STEERING FLUID

Check the fluid level through the reservoir. If necessary, add automatic transmission fluid DEXRON® II or III.

If the vehicle has been driven around 80 km/h (50 mph) for 20 minutes (a little more in frigid temperatures), the fluid is hot (60°C — 80°C or 140°F — 175°F). You may also check the level when the fluid is cold (about room temperature, 10°C — 30°C or 50°F — 85°F) if the engine has not been run for about five hours.



▶ 1 *If cold O.K.* 2 *If cold add* 3 *If hot O.K.* 4 *If hot add*

Clean all dirt off the reservoir and look at the fluid level. If the fluid is cold, the level should be in the "COLD" range. Similarly, if it is hot, the fluid level should be in the "HOT" range. If the level is at the low side of the appropriate range, add automatic transmission fluid DEXRON® II or III to bring the level within the range.

To remove the reservoir cap, turn it counterclockwise and lift up. To reinstall it, turn it clockwise. After replacing the reservoir cap, visually check the steering box case, vane pump and hose connections for leaks or damage.

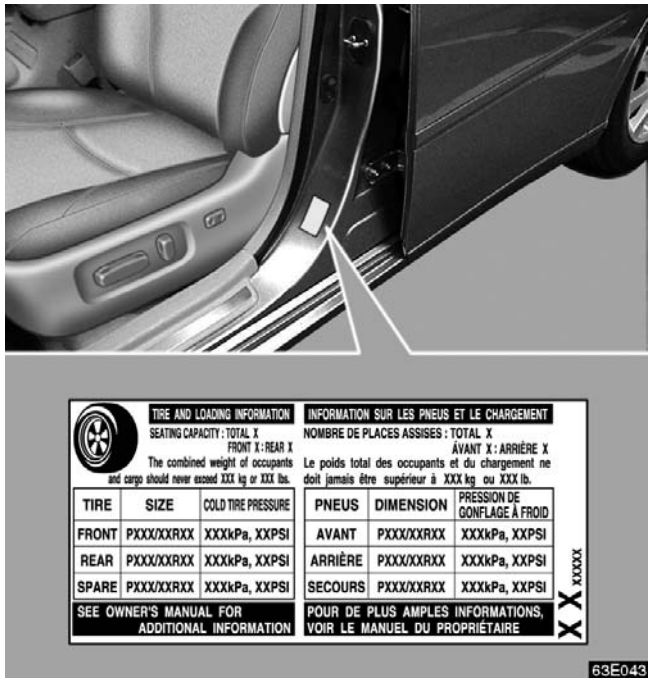
⚠ CAUTION

The reservoir may be hot so be careful not to burn yourself.

NOTICE

Avoid overfilling, or the power steering could be damaged.

CHECKING TIRE INFLATION PRESSURE



The recommended cold tire inflation pressures, tire sizes and the combined weight of occupants and cargo (vehicle capacity weight) are described on page ccclxv, ccclxvi and cdxiii. They are also described on the tire and loading information label as shown.

You should check the tire inflation pressure every two weeks, or at least once a month. And do not forget the spare!

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 a tire can be misleading. Besides, tire inflation pressures that are even just a few pounds off can degrade handling and ride.
- **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 frequently needs 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) —

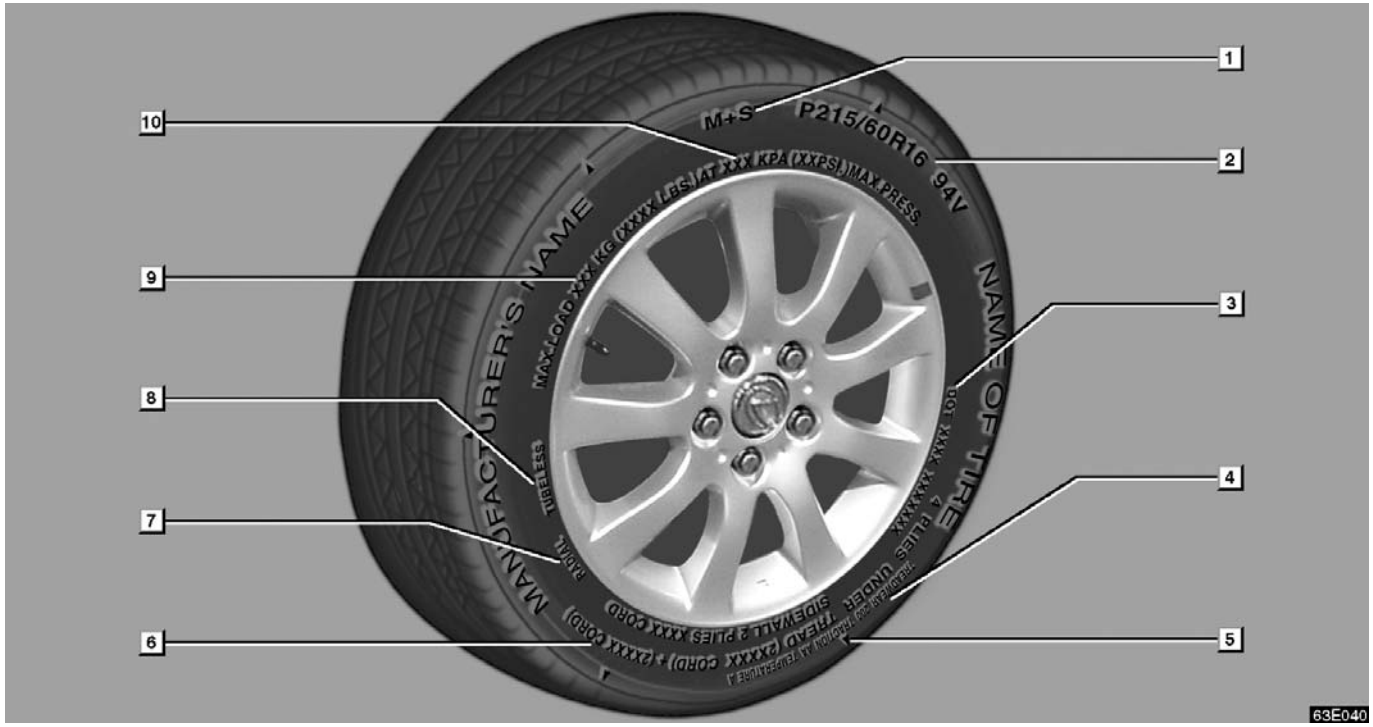
- **Excessive wear**
- **Uneven wear**
- **Poor handling**
- **Possibility of blowouts from an overheated tire**
- **Poor sealing of the tire bead**
- **Wheel deformation and/or tire separation**
- **A greater possibility of tire damage from road hazards**

High tire pressure (overinflation) —

- **Poor handling**
- **Excessive wear**
- **Uneven wear**
- **A greater possibility of tire damage from road hazards**

TIRE INFORMATION

Tire symbols



▶ ***The illustration indicates typical tire symbols.***

1 **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 ccclxxxii.

2 **Tire size:** For details, see “Tire size” on page ccclxxv.

3 **DOT and Tire Identification Number (TIN):** For details, see “DOT and Tire Identification Number (TIN)” on page ccclxxv.

4 **Uniform tire quality grading:** For details, see “Uniform tire quality grading” that follows.

5 **Location of the tread wear indicators:** For details, see “Checking and replacing tires” on page ccclxxxiv.

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.

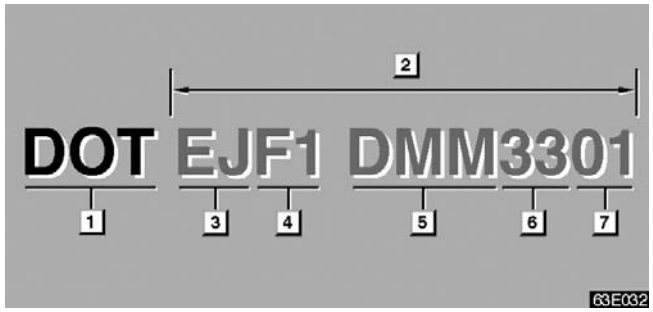
7 **Radial tires or bias−ply tires:** A radial tire has “RADIAL” on the sidewall. A tire not marked with “RADIAL” is a bias−ply tire.

8 **“TUBELESS” or “TUBE TYPE”:** A tubeless tire does not have a tube inside the tire. A tube type tire has a tube inside the tire and the tube maintains the air pressure.

9 **Load limit at maximum cold tire inflation pressure:** For details, see “Checking and replacing tires” on page ccclxxxiv.

10 **Maximum cold tire inflation pressure:** This means the pressure to which a tire may be inflated. For details about recommended cold tire inflation pressure, see “Specifications” on page ccclxiii.

DOT and Tire Identification Number (TIN)

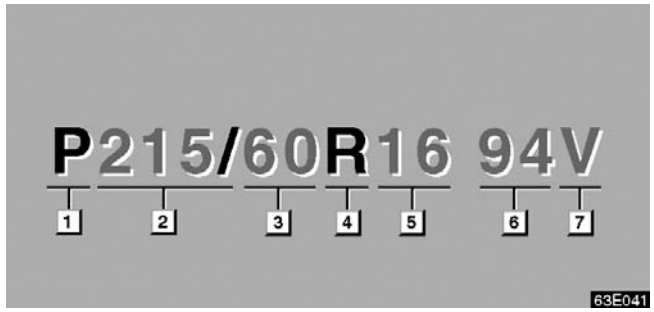


▶ ***The illustration indicates typical DOT and Tire Identification Number (TIN).***

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***

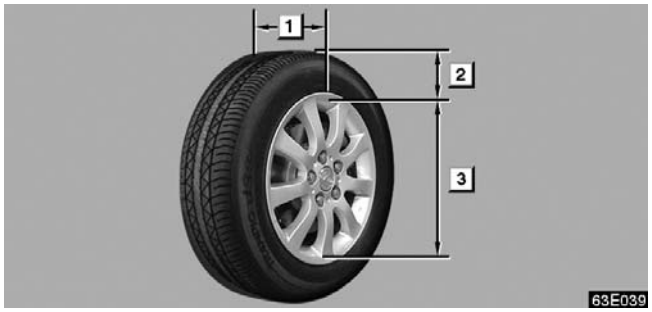
The "DOT" symbol certifies that the tire conforms to applicable Federal Motor Vehicle Safety Standards.

Tire size



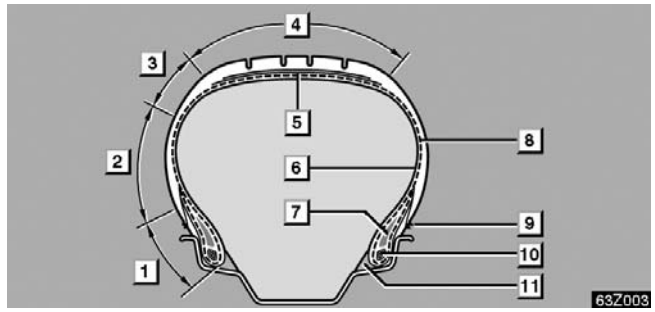
▶ ***The illustration indicates typical tire size.***

1 ***Tire use (P=Passenger car, T=Temporary use)***
2 ***Section width (in millimeters)***
3 ***Aspect ratio (tire height to section width)***
4 ***Tire construction code (R=Radial, D=Diagonal)***
5 ***Wheel diameter (in inches)***
6 ***Load index (2 digits or 3 digits)***
7 ***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 car 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 grade for this tire 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
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)
Cold tire inflation pressure	tire inflation 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
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
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
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
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
Occupant distribution	distribution of occupants in a vehicle as specified in the third 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
Recommended inflation pressure	cold tire inflation pressure recommended by a manufacturer
Rim	a metal support for a tire or a tire and tube assembly upon which the tire beads are seated
Rim diameter (Wheel diameter)	nominal diameter of the bead seat
Rim size designation	rim diameter and width
Rim type designation	the industry of manufacturer's designation for a rim by style or code
Rim width	nominal distance between rim flanges
Vehicle capacity weight (Total load capacity)	the rated cargo and luggage load plus 68 kg (150 lb.) times the vehicle's designated seating capacity

Tire related term	meaning
Vehicle maximum load on the tire	the load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two
Vehicle normal load on the tire	the load on an individual tire that is determined by distributing to each axle its share of 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

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.

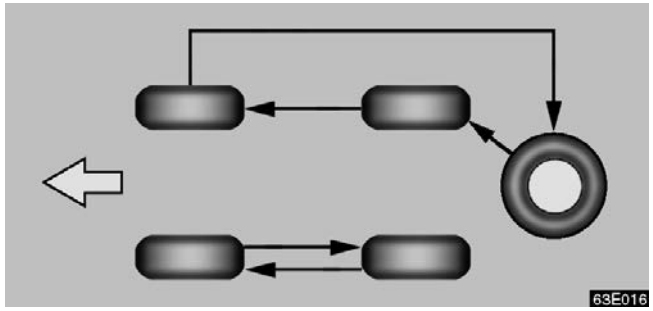
All season tires, however, do not have adequate traction performance compared with snow tires in heavy or loose snow. Also, all season tires fall short in acceleration and handling performance compared with summer tires in highway driving.

The details about how to distinguish summer tires from all season tires are described on page ccclxxiii.

⚠ CAUTION

- **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.**
- **Do not mix summer and all season tires on your vehicle as this can cause dangerous handling characteristics, resulting in loss of control.**

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.

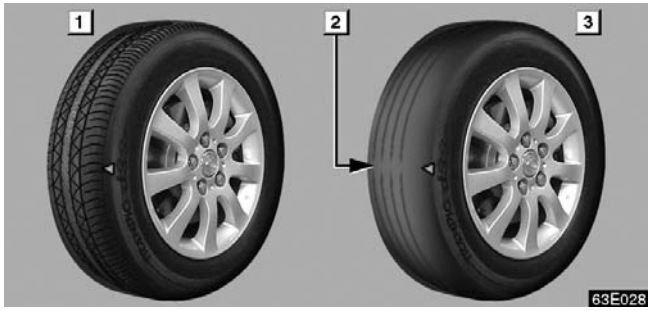
The wheel assemblies must be rotated as illustrated above.

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 marks such as "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.

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.

Tire selection

When replacing a tire, use a tire of the same size and construction, and the same or greater maximum loads as the originally installed tires.

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 Certification Label and sidewall of the tire, see pages cccxxxix and ccclxxiii.

⚠ 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.

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

Do not use snow tires other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control. Otherwise, an accident may occur resulting in death or serious injuries.

Snow tire installation

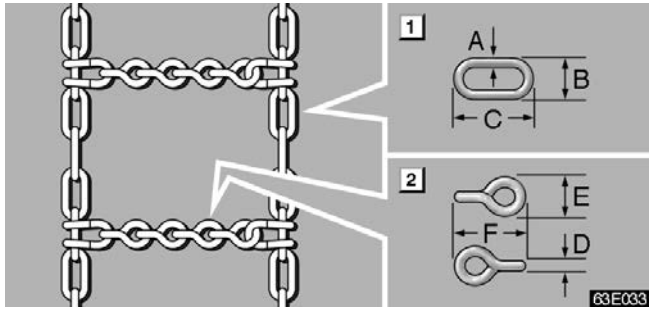
Snow tires should be installed on all wheels.

Installing snow tires on the front 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

- **Snow tires should be inflated to the same pressure as the original tires.**
- **Never drive over 120 km/h (75 mph) with any type of snow tires.**

Tire chain selection



▶ 1 *Side chain* 2 *Cross chain*

Use the tire chains of correct size.

For P215/60R16 and P215/55R17 tires, use the following type chains.

	mm	(in.)
A: Diameter of side chain	3	(0.12)
B: Width of side chain	10	(0.39)
C: Length of side chain	30	(1.18)
D: Diameter of cross chain	4	(0.16)
E: Width of cross chain	14	(0.55)
F: Length of cross chain	25	(0.98)

Regulations regarding the use of tire chains vary according to location or type of road. Always check local regulations before installing chains.

NOTICE

If the wrong combination of tire and chain is used, the chains could damage the vehicle body.

Chain installation

Install the chains on the front tires as tightly as possible. Do not use tire chains on the rear 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.**

REPLACING WHEELS

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

Do not use wheels other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control. Otherwise, an accident may occur resulting in death or serious injuries.

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

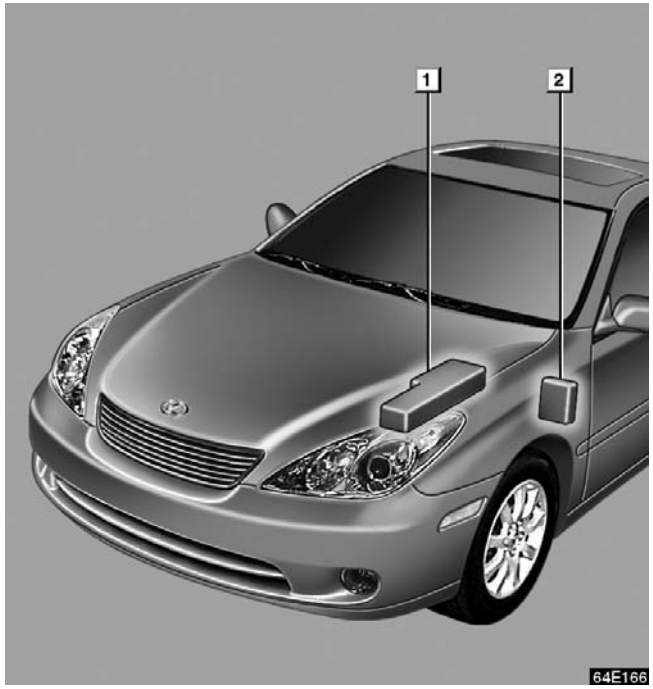
SERVICE PROCEDURES AND SPECIFICATIONS

Electrical components

Specifications cccxciii
Checking battery condition cccxcix
Battery recharging precautions . . . . . cdii
Checking and replacing the blade type fuses . . . . . cdii
Checking the cartridge type fuses . . . . . cdv
Adding washer fluid . . . . . cdvi
Checking the headlight aim . . . . . cdvii
Replacing light bulbs . . . . . cdviii

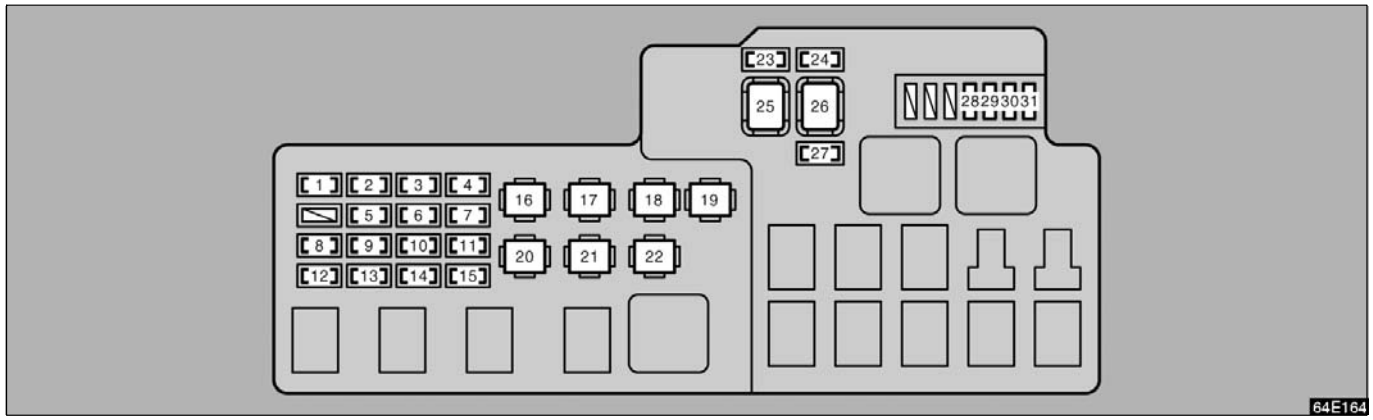
SPECIFICATIONS

— FUSE LOCATIONS

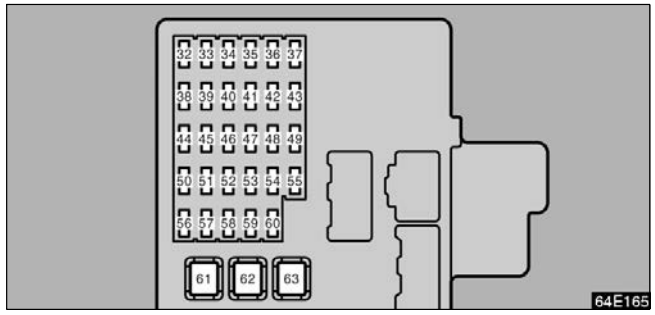


▶ 1 *Engine compartment*
2 *Driver's side instrument panel*

— FUSES



1 ***Engine compartment***



2 ***Driver's side instrument panel***

No.	FUSE	AMPERE	CIRCUIT
1	A/F	25	Multiport fuel injection system/sequential multiport fuel injection system
2	DOOR1	25	Multiplex communication system (power door lock system, auto−door locking system, wireless remote control system)
3	TEL	5	No circuit
4	AM2	30	All components in “IGN” and “IG2” fuses and starting system
5	EFI	20	Multiport fuel injection system/sequential multiport fuel injection system
6	ALT−S	5	Charging system
7	HEAD LH UPR	10	Left−hand headlight (high beam)

No.	FUSE	AMPERE	CIRCUIT
8	ETCS	10	Multiport fuel injection system/sequential multiport fuel injection system
9	HORN	10	Horns
10	IGN	15	Starting system
11	HEAD RH UPR	10	Right−hand headlight (high beam)
12	HAZ	15	Emergency flashers
13	D.C.C	30	All components in “ECU−B”, “RAD NO.1” and “DOME” fuses
14	IG2	10	Multiport fuel injection system/sequential multiport fuel injection system, SRS airbag system, seat belt pretensioners, cruise control system
15	ST	5	Starting system
16	ADJ PDL	30	Power adjustable pedals
17	CDS	30	Electric cooling fan

No.	FUSE	AMPERE	CIRCUIT
18	ABS No.2	40	Anti–lock brake system, vehicle stability control system, traction control system, brake assist system
19	MAIN	40	All components in “HEAD LH LWR”, “HEAD RH LWR”, “HEAD LH UPR”, “HEAD RH UPR” and “DRL” fuses
20	ABS No.3	30	Anti–lock brake system, vehicle stability control system, traction control system, brake assist system
21	HTR	50	Air conditioning system
22	RDI	30	Electric cooling fan
23	SPARE	5	Spare fuse
24	SPARE	10	Spare fuse

No.	FUSE	AMPERE	CIRCUIT
25	ABS NO.1	50	All components in “RDI FAN”, “ABS No.2”, “ABS No.3”, “CDS”, “HTR (50 A)” and “ADJ PDL” fuses and anti–lock brake system, vehicle stability control system, traction control system, brake assist system
26	ALT	120	All components in “DEF”, “PWR NO.1”, “PWR NO.2”, “PWR NO.3”, “PWR NO.4”, “STOP”, “DOOR NO.2”, “OBD”, “PWR SEAT”, “FUEL OPEN”, “FOG”, “AMP”, “PANEL”, “TAIL”, “AM1”, “CIG”, “POWER POINT”, “RAD NO.2”, “ECU–ACC”, “GAUGE1”, “GAUGE2”, “ECU–IG”, “WIPER”, “WASHER”, “HTR (10 A)”, “SEAT HTR” and “SUN–SHADE” fuses
27	SPARE	15	Spare fuse
28	A/C	10	No circuit
29	DRL	5	Daytime running light system
30	HEAD RH LWR	15	Right–hand headlight (low beam)
31	HEAD LH LWR	15	Left–hand headlight (low beam) and front fog lights

No.	FUSE	AMPERE	CIRCUIT
32	ECU−B	10	Multiplex communication system (power door lock system, security system, auto−door locking system, automatic light control system, headlight delay off system, tail light auto cut system, illuminated entry system, daytime running light system, wireless remote control system) air conditioning system, electronic modulated suspension, driving position memory system, front passenger seat position memory system
33	DOME	7.5	Ignition switch light, interior light, personal lights, foot lights, door courtesy lights, trunk light, vanity lights, garage door opener, clock, outside temperature gauge, multi−information display

No.	FUSE	AMPERE	CIRCUIT
34	CIG	15	Cigarette lighter
35	ECU−ACC	5	Power rear view mirrors, clock, multi−information display, driving position memory system, front passenger seat position memory system
36	RAD NO.2	10	Audio system, navigation system
37	POWER POINT	15	Power outlet
38	RAD NO.1	20	Audio system, navigation system
39	GAUGE1	10	Gauges and meters, clock, outside temperature gauge, multi−information display, shift lock system
40	ECU−IG	10	SRS airbag system, power windows, anti−lock brake system, electronic modulated suspension, driving position memory system, front passenger seat position memory system
41	WIPER	25	Windshield wipers
42	HTR	10	Air conditioning system

No.	FUSE	AMPERE	CIRCUIT
43	MIR HTR	10	Outside rear view mirror defogger
44	AM1	5	Starting system
45	FOG	15	Front fog lights
46	SUN–SHADE	15	Rear sunshade
47	GAUGE2	10	Auto anti–glare inside rear view mirror, compass, back–up lights, automatic light control system, automatic headlight leveling system, cruise control system, seat belt reminder lights
48	PANEL	10	Glove box light, console box light, clock, outside temperature gauge, multi–information display, instrument cluster lights, instrument panel lights
49	TAIL	10	Tail lights, parking lights, license plate lights
50	PWR NO.4	20	Rear passenger's power window (left side)

No.	FUSE	AMPERE	CIRCUIT
51	PWR NO.2	20	Front passenger's door lock system, front passenger's power window
52	OBD	7.5	On–board diagnosis system
53	SEAT HTR	20	Seat ventilators/heaters
54	WASHER	15	Windshield washer
55	FAN RLY	10	Electric cooling fans
56	STOP	15	Stop lights, high mounted stoplight
57	FUEL OPEN	5	Fuel filler door opener
58	DOOR NO.2	25	Multiplex communication system (power door lock system, auto–door locking system, wireless remote control system)
59	AMP	25	Audio system
60	PWR NO.3	20	Rear passenger's power window (right side)

No.	FUSE	AMPERE	CIRCUIT
61	PWR SEAT	30	Power seats, driving position memory system, front passenger seat position memory system
62	PWR NO.1	30	Driver's door lock system, driver's power window, electric moonroof
63	DEF	40	Rear window defogger

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.

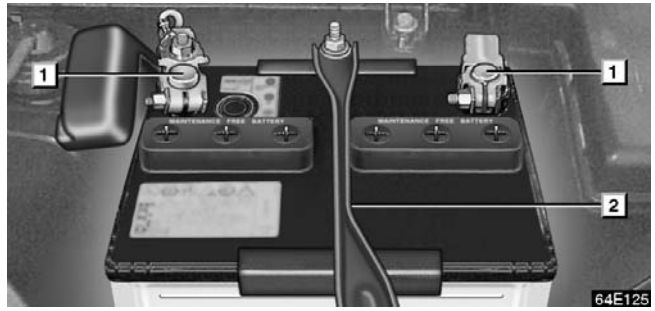
- **Avoid contact with eyes, skin or clothes.**
- **Never inhale or swallow electrolyte.**
- **Wear protective safety glasses when working near the battery.**
- **Keep children away from the battery.**

EMERGENCY MEASURES

- **If electrolyte gets in your eyes, flush your eyes with clean water immediately 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

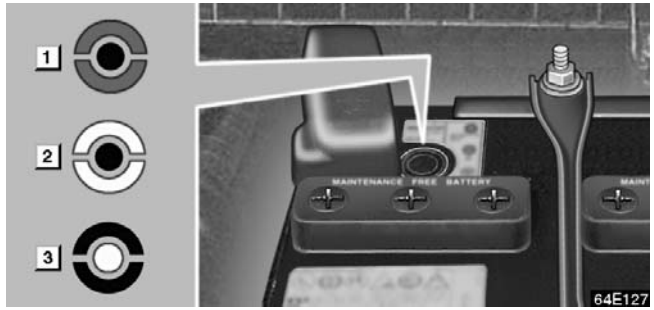
- ***Make sure the engine and all accessories are turned off before performing maintenance.***
- ***When checking the battery, remove the ground cable first and reinstall it last.***
- ***Be careful not to cause a short circuit with tools.***
- ***Take care no solution gets into the battery when washing it.***

If the battery is disconnected or run down

The moonroof 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 moonroof. To normalize the moonroof, see page cii.

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.

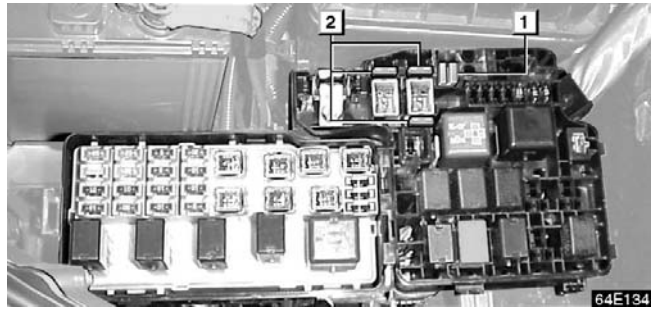
CAUTION

- **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

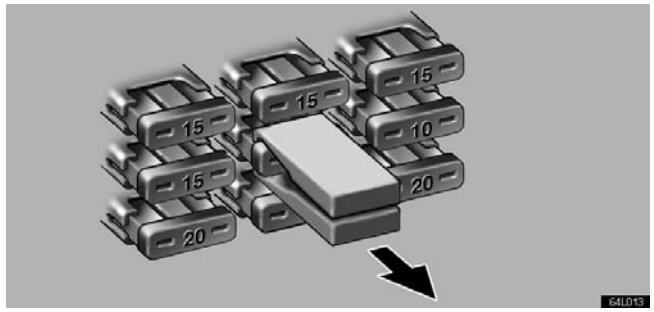


▶ ***Engine compartment*** 1 ***Pull−out tool*** 2 ***Spare fuses***

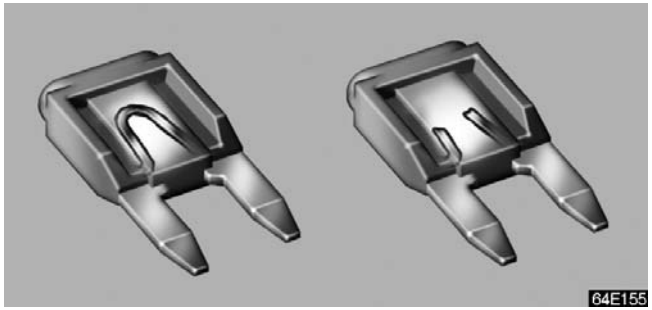
▶ ***Driver's side instrument panel***

1. Turn the ignition switch off and remove the auxiliary box.

Determine which fuse may be causing the problem. The auxiliary 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. Only install 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 “RAD NO.1”, “RAD NO.2” or “POWER POINT” 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 that is lower, but as close to the rating 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.

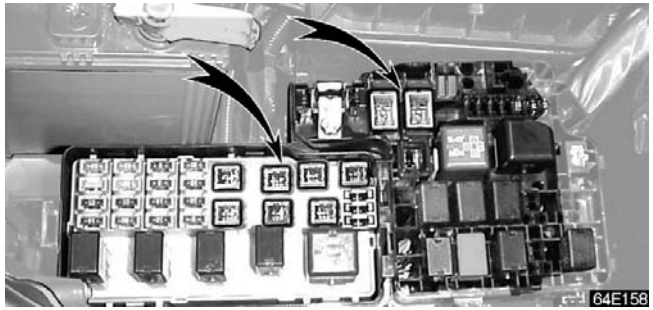
It is a good idea to purchase a set of spare fuses and keep them in your vehicle for emergencies.

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

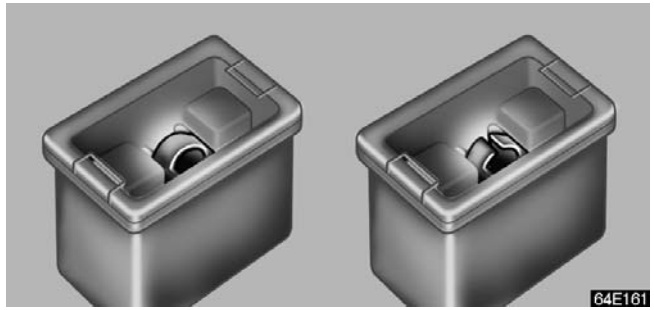
Never use a fuse with a higher amperage rating, or any other object, in place of a fuse. This may cause extensive damage and possibly a fire.

CHECKING THE CARTRIDGE TYPE FUSES



▶ *Engine compartment*

▶ *Driver's side instrument panel*



▶ *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.

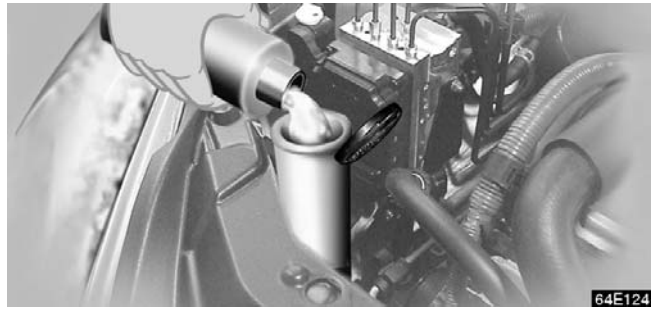
⚠ CAUTION

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



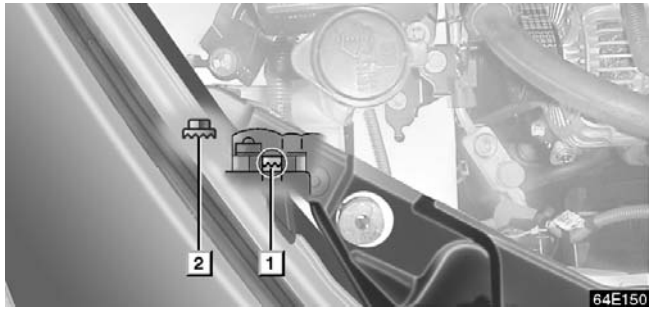
If the washer tank becomes nearly empty, add washer fluid.

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.***
- ***Do not fill washer fluid over the "NORMAL" level.***

CHECKING THE HEADLIGHT AIM (vehicles with discharge headlight)

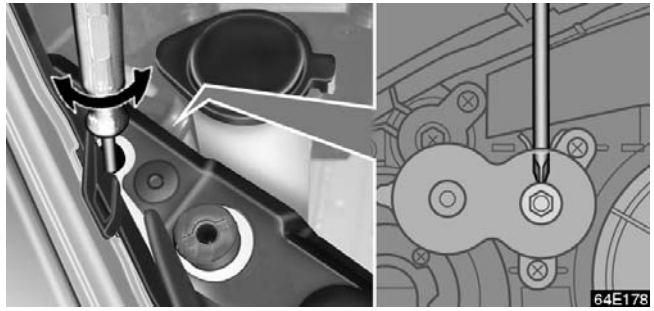


▶ 1 ***Vertical movement adjusting bolt 1***
2 ***Vertical movement adjusting bolt 2***

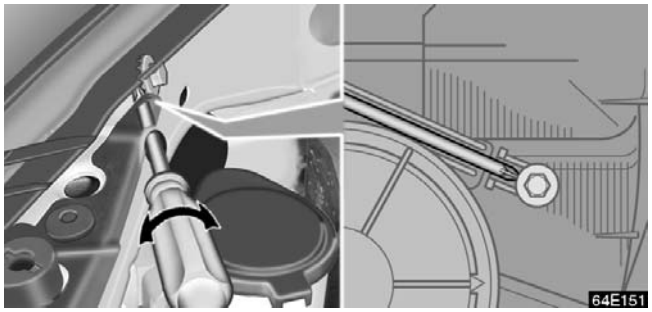
Before checking the headlight aim:

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 vertical aiming



1. Turn the vertical movement adjusting bolt 1 in either direction using a Phillips–head screwdriver. At this time, keep the turning direction and number of turns in mind.



2. Turn the vertical movement adjusting bolt 2 the same number of turns and in the same direction as step 1 using a Phillips–head screwdriver.

REPLACING LIGHT BULBS

The illustration 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.

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.**

Vehicles with discharge headlights —

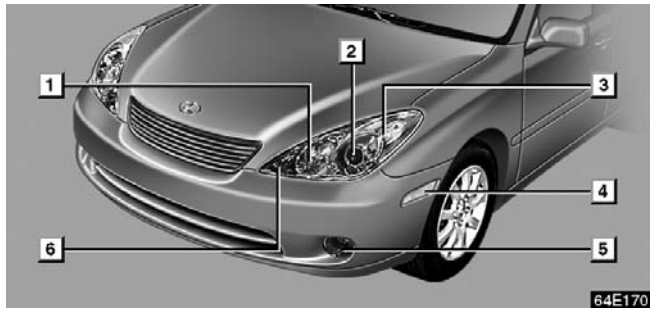
- **Do not touch the high voltage socket when the headlight turns on. 20000 V is momentarily generated and may cause severe injury by electric shock.**
- **Do not disassemble, repair or take apart the headlight bulbs, connector, power supply circuits and rotated components. Or you may be injured by electric shocks. Call your dealer when the headlights fail to work or have to be replaced or disposed of.**

NOTICE

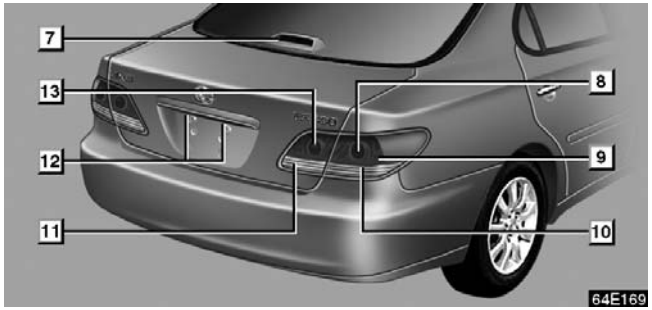
Only use a bulb of the listed type.

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.

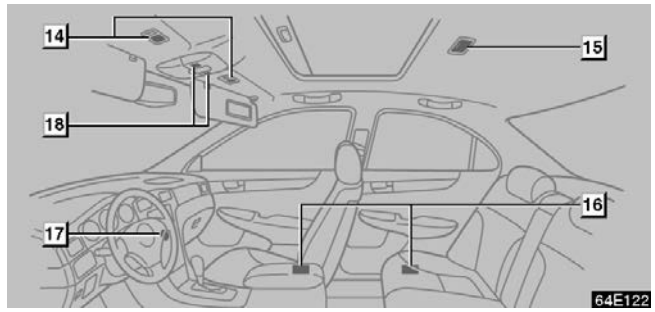
LIGHT LOCATION



	Light Bulbs	Bulb No.	W	Type
1	Headlights (high beam)	9005	60	A
2	Headlights (low beam)			
	Discharge bulbs	–––	35	B
	Halogen bulbs	–––	55	C
3	Parking lights	–––	5	E
4	Front side marker lights	194	3.8	E
5	Fog lights	9006	51	D
6	Front turn signal lights	–––	21	E



	Light Bulbs	Bulb No.	W	Type
7	High mounted stoplight	7440	21	E
8	Stop/tail lights	–––	21/5	E
9	Rear side marker lights	–––	5	E
10	Rear turn signal lights	–––	21	E
11	Back–up lights	921	16	E
12	License plate lights	–––	5	E
13	Tail lights	168	5	E



	Light Bulbs	Bulb No.	W	Type
14	Vanity lights	–––	5	G
15	Interior light	–––	8	G
16	Door courtesy lights	168	5	E
17	Glove box light	–––	1.2	E
18	Personal lights	–––	8	F

	Light Bulbs	Bulb No.	W	Type
19	Trunk light	–––	3	G

A: HB3 halogen bulbs
B: D2S discharge bulbs
C: H11 halogen bulbs
D: HB4 halogen bulbs
E: Wedge base bulbs
F: Single end bulbs
G: Double end bulbs

SECTION 6 – 5

SERVICE PROCEDURES AND SPECIFICATIONS

Body

Specifications . . . . . cdxiii
Protecting your vehicle from corrosion . . . . . cdxiv
Washing and waxing . . . . . cdxv
Cleaning the interior . . . . . cdxviii

SPECIFICATIONS

— DIMENSIONS AND WEIGHT

Overall length	4855 mm (191.1 in.)
Overall width	1810 mm (71.3 in.)
Overall height	1455 mm (57.3 in.)*
Wheelbase	2720 mm (107.1 in.)
Tread — Front — Rear	1545 mm (60.8 in.) 1535 mm (60.4 in.)
Vehicle capacity weight (occupants + luggage)	410 kg (900 lb.)
Towing capacity (trailer weight + cargo weight)	907 kg (2000 lb.)

*: Unladen vehicle

— FUEL TANK

Capacity	70 L (18.5 gal., 15.4 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 are prevented from quick–drying due to lack of proper ventilation are exposed to high 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. 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 cdxv 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 warm 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 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.

Windshield washer nozzles: Make sure that the nozzles do not become blocked when waxing. If a nozzle becomes blocked, contact your Lexus dealer to have the vehicle serviced.

NOTICE

If a nozzle becomes blocked, do not try to clear it with a pin or other object. The nozzle will be damaged.

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 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 system 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)

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 synthetic leather. 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.***
- ***Do not apply detergent to or wet the automatic wiper control sensor when cleaning the inside of the windshield.***
- ***When cleaning the inside of the rear window, be careful not to scratch or damage the heater wires or connectors.***

Air Conditioning Control Panel, Audio Panel, 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

Reporting safety defects for U.S. owners . . . . . cdxxiii

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.

BASIC OPERATION

QUICK REFERENCE

Quick reference

Driver's seat 2
Tilt steering column 2
Power adjustable pedals 2
Automatic transmission 3
Headlight and turn signal switch 4
Windshield wiper and washer switch 5

1. DRIVER'S SEAT

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

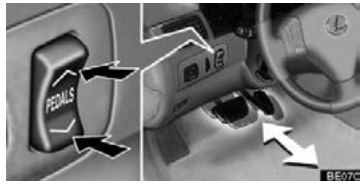
BE066

2. TILT STEERING COLUMN

To tilt the steering wheel up or down to the desired angle:

1. Pull the lever up while holding the steering wheel.
2. Tilt the steering wheel to the desired angle.
3. Release the lever.

3. POWER ADJUSTABLE PEDALS



To adjust the position of the accelerator and brake pedals:

1. Set the parking brake firmly.
2. Turn the ignition key to the "ON" position with the automatic transmission selector lever in the "P" position.
3. Push the "∧" side of the switch to move the pedals to the front most position.
4. Push the "∨" side of the switch to move the pedals toward you until you can fully depress the brake pedal.
5. After adjusting, depress the pedals a few times to get used to the feel.

4. AUTOMATIC TRANSMISSION

SELECTOR LEVER POSITION

P: Parking, engine starting and key removal position

R: Reverse position

N: Neutral position

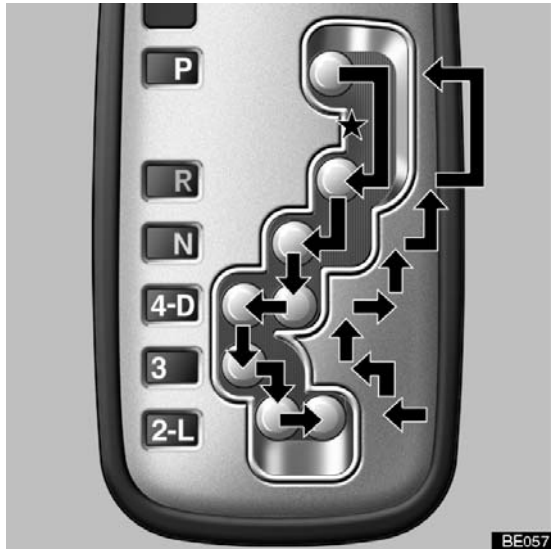
D: Normal driving position (shifting into overdrive possible)

4: Position for engine braking (shifting into overdrive not possible)

3, 2: Position for more powerful engine braking

L: Position for maximum engine braking

OPERATION OF SELECTOR LEVER



★ Shift while pressing the brake pedal. (Ignition switch must be in the “ON” position.)

NOTE: When the cruise control is being used, even if you downshift from “D” to “4”, engine braking will not be enabled because the cruise control is not cancelled. For the operation to decrease the vehicle speed, see page cclxxi.

5. HEADLIGHT AND TURN SIGNAL

● HEADLIGHT SWITCH (U.S.A.)

With the ignition OFF

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

With the engine started and parking brake released

	Automatic light control
	Parking, tail, license plate, side marker and instrument panel lights turn on.
	Headlights turn on at full intensity.
	Daytime running light system off

● HEADLIGHT SWITCH (Canada)

With the ignition OFF

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

With the engine started and parking brake released

	Parking, tail, license plate, side marker and instrument panel lights turn on.
	Headlights turn on at full intensity.
	Automatic light control

● HEADLIGHT DIMMER SWITCH

	High beam
	Headlight flasher

TURN SIGNAL SWITCH

	Right or left turn
	Lane change (right or left)

6. WINDSHIELD WIPER AND WASHER SWITCH

Variable intermittent windshield wipers

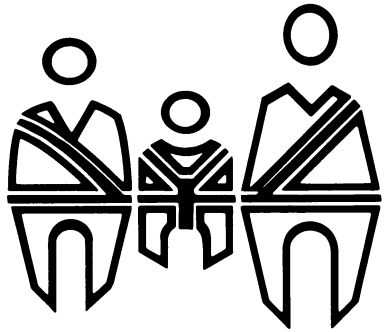
	Variable intermittent operation
	Low speed operation
	High speed operation
BE074	Washer on

Rain−sensing windshield wipers

	Automatic operation
	Low speed operation
	High speed operation
BE075	Washer on

WE REALLY CARE ABOUT YOU - PLEASE BUCKLE UP

Lexus has made a special effort to encourage use of seat belts.



Lexus belts are:

- **Comfortable**
- **Easy to use**
- **Convenient**

We encourage you to use your belts every time you drive.

2006 ES330 from Aug. ’05 Prod. (OM33703U)