

## FOREWORD

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

### U.S. OWNERS

- When traveling in the U.S. mainland or Canada:  
**Lexus Roadside Assistance 1-800-25-LEXUS (Toll-Free)**  
**(1-800-255-3987)**
- HAWAII:  
**Lexus Customer Service Assistance 1-800-25-LEXUS (Toll-Free)**  
**(1-800-255-3987)**

### CANADIAN OWNERS

- When traveling in Canada or the U.S. mainland:  
**Lexus Roadside Assistance/Customer Service 1-800-26-LEXUS (Toll-Free)**  
**(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.**

**TOYOTA MOTOR CORPORATION**

## IMPORTANT INFORMATION ABOUT YOUR LEXUS

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### 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.

## IMPORTANT INFORMATION ABOUT YOUR LEXUS

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### 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.

## **IMPORTANT INFORMATION ABOUT YOUR LEXUS**

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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 INFORMATION ABOUT YOUR LEXUS

### 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.

If you install any Genuine Accessories such as a bull-bar, winch, etc., consult your Lexus dealer.

### 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.

## **IMPORTANT INFORMATION ABOUT YOUR LEXUS**

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### **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 574 and 483.

### **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 a 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.

### **On-pavement and off-road driving tips**

This vehicle belongs to the utility vehicle class. Utility vehicles have a significantly higher rollover rate than other types of vehicles. This vehicle will handle and maneuver differently from an ordinary passenger car because it is designed for off-road use also. In addition, this vehicle has a higher ground clearance and center of gravity than that of an ordinary passenger car. This vehicle design feature causes this type of vehicle to be more likely to rollover. Failure to operate this vehicle correctly may result in loss of control, accidents or vehicle rollover causing death or serious injury. Be sure to read "Off-road vehicle precautions" on page 459 and "Off-road driving precautions" on page 464.

### **Leak detection pump**

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

## HOW TO USE THIS MANUAL

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

This will help you enjoy safe and comfortable driving.

### TABLE OF CONTENTS

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

### BASIC OPERATION — QUICK REFERENCE

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

### SECTION 1 — INSTRUMENTS AND CONTROLS

The vehicle's equipment is divided into the 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!

## HOW TO USE THIS MANUAL

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### **SECTION 4 — IN CASE OF AN EMERGENCY**

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

### **SECTION 5 — MAINTENANCE**

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

### **SECTION 6 — SERVICE PROCEDURES AND SPECIFICATIONS**

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

### **INDEX**

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

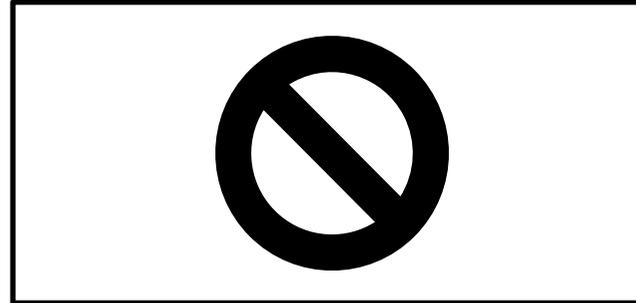
### **GAS STATION INFORMATION**

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

### **QUICK INDEX**

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

### **Safety symbol**



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

**Safety and vehicle damage warnings**

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



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

***NOTICE***

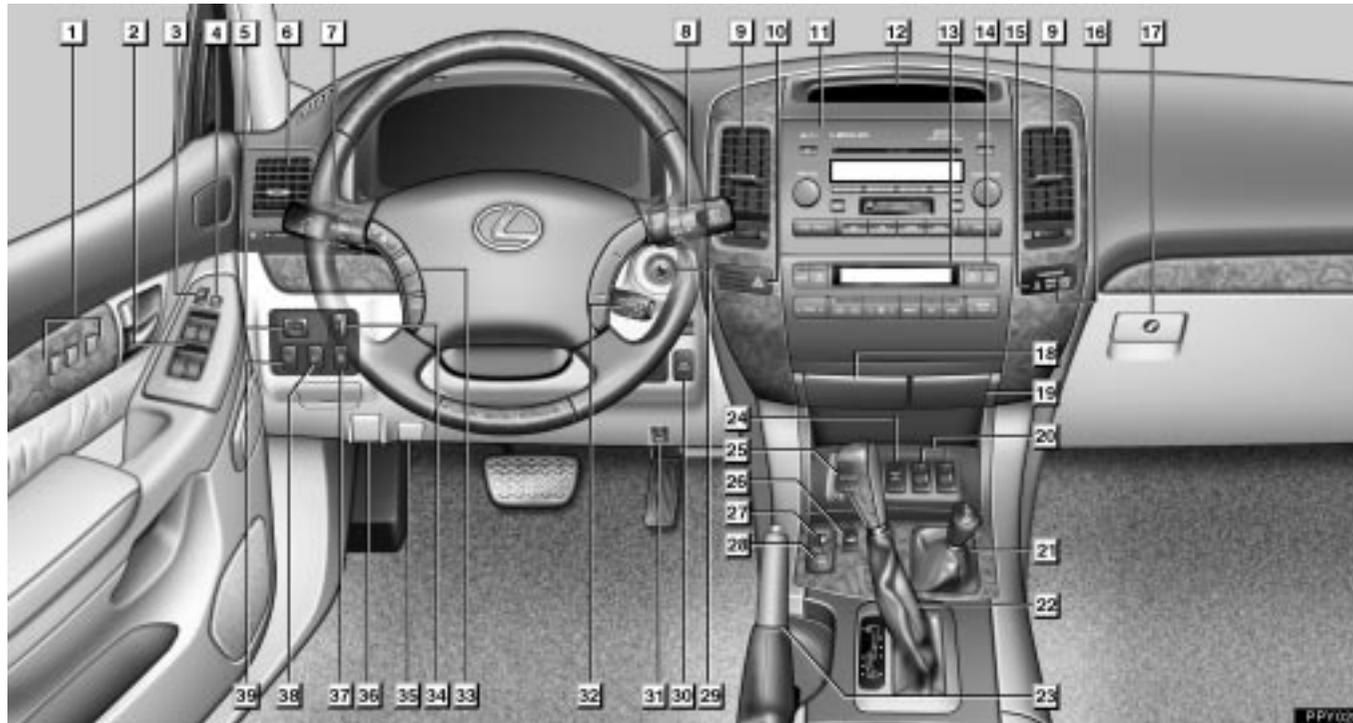
***This is a warning against anything which may cause damage to the vehicle or its equipment if the warning is ignored. You are informed about what you must or must not do in order to avoid or reduce the risk of damage to your Lexus and its equipment.***

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



PICTORIAL INDEX

**INSTRUMENT PANEL (vehicles without navigation system)**



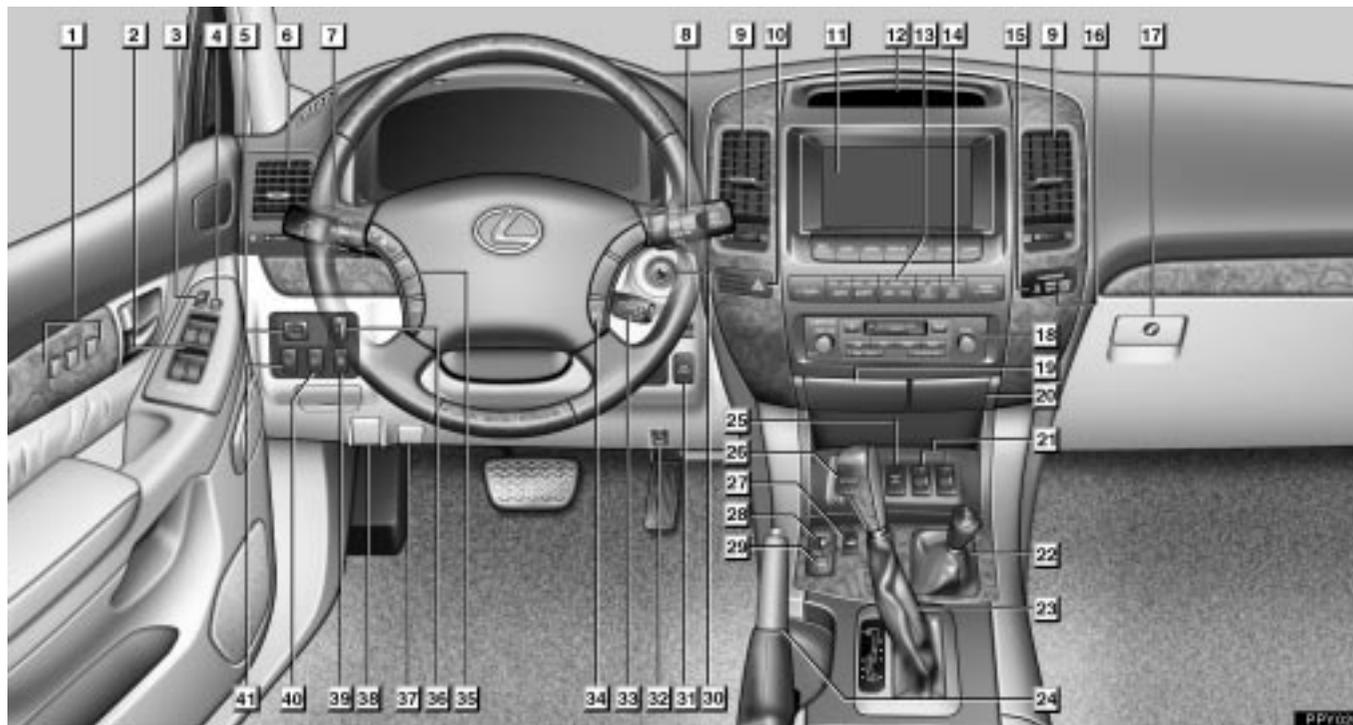
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*For detailed information, refer to the description given in each Section.*

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**INSTRUMENT PANEL (vehicles with navigation system)**



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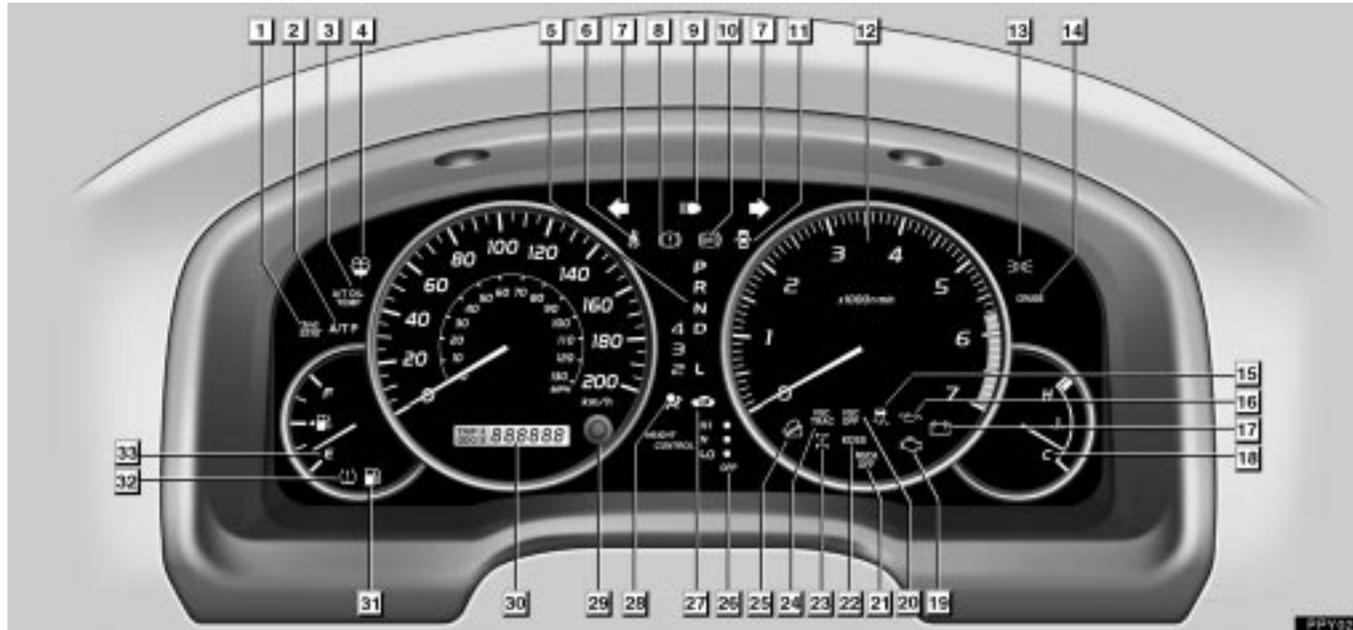
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*For detailed information, refer to the description given in each Section.*

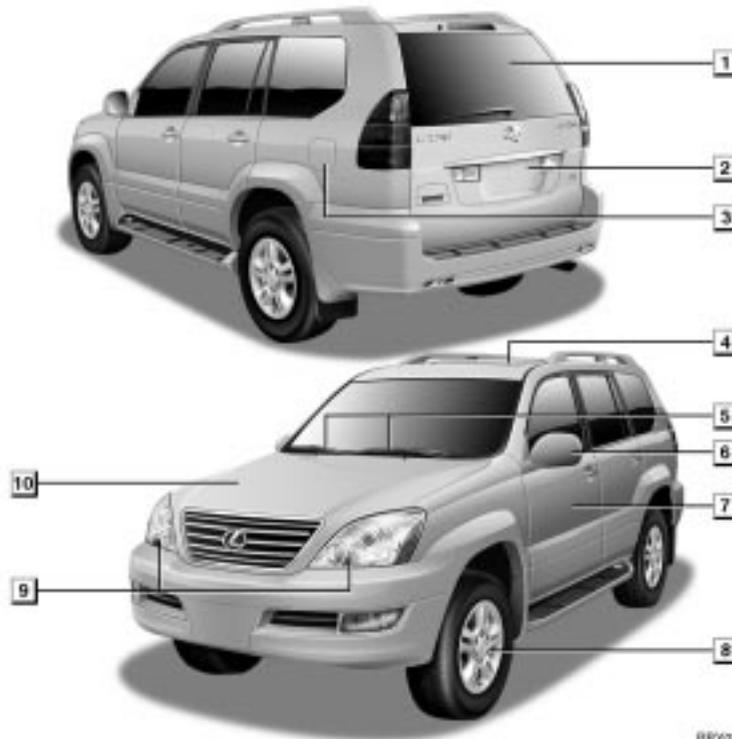
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# ***BASIC OPERATION***

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Automatic transmission .....	3
Headlight and turn signal switch .....	4
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**QUICK REFERENCE**

**1. DRIVER'S SEAT**



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

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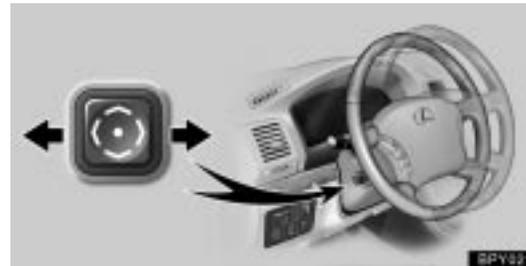
**2. STEERING WHEEL**

● **TILT STEERING WHEEL**



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

● **TELESCOPIC STEERING WHEEL**



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

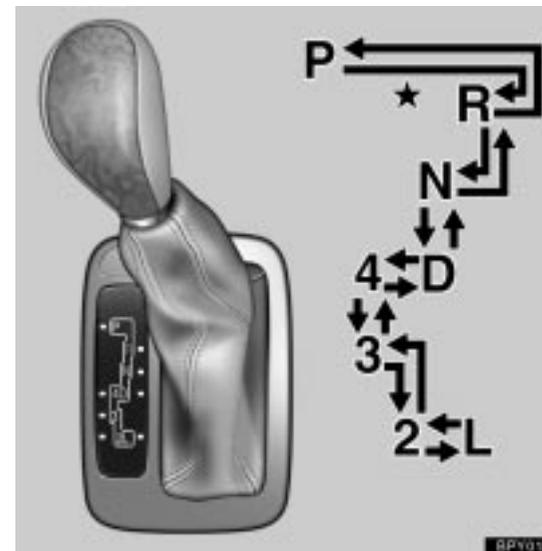
### 3. AUTOMATIC TRANSMISSION



#### 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 421.

**QUICK REFERENCE**

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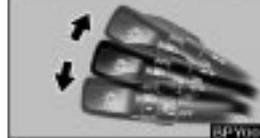
**4. HEADLIGHT AND TURN SIGNAL SWITCH**

**● HEADLIGHT SWITCH**

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

	High beam
	Headlight flasher

**● TURN SIGNAL SWITCH**

	Right or left turn
	Lane change (right or left)

## 5. WIPER AND WASHER SWITCH

● **Front**

**Variable intermittent windshield wipers**

	Variable intermittent operation
	<b>1</b> Low speed operation <b>2</b> High speed operation
	Washer on

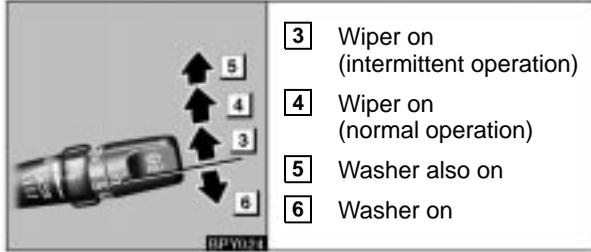
**Rain-sensing windshield wipers**

	Automatic operation
	<b>1</b> Low speed operation <b>2</b> High speed operation
	Washer on

## QUICK REFERENCE

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### • Rear



# **SECTION 1 - 1**

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## **INSTRUMENTS AND CONTROLS**

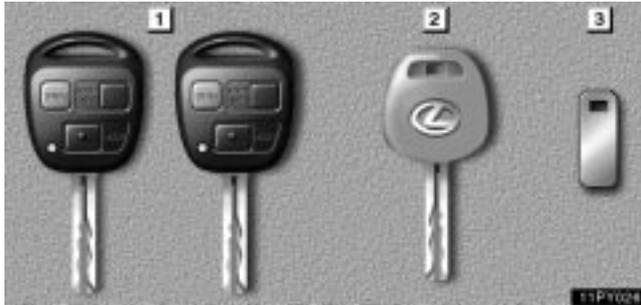
### **Keys and doors**

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## KEYS AND DOORS

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

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

Since the side doors and back door can be locked without a key, you should always carry a 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**



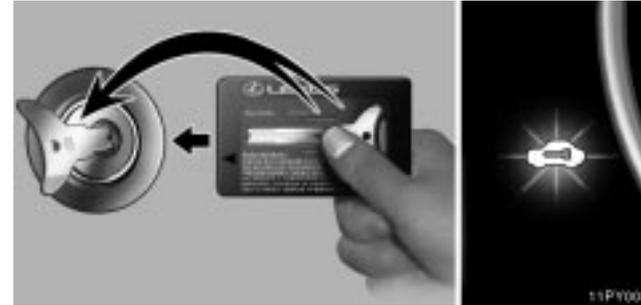
**As a transponder chip is built in its key case, you can start the engine with this key.**

**The flat key works in every lock.**

A transponder chip for the engine immobilizer system has been placed in the key case of the flat key. This chip is required for 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 14.) 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.

## KEYS AND DOORS

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4. Start the engine within 60 seconds after the security indicator light goes out. You cannot start the engine if 60 seconds have passed 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.*



*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.*

## KEYS AND DOORS

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- *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 or 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.*

## KEYS AND DOORS

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### ENGINE IMMOBILIZER SYSTEM



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.

The transponder chip of the flat key is in its key case. You can cancel the engine immobilizer system using the flat key. (For details, see "Flat key" on page 9.)

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  
MADE IN JAPAN**

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

**⚠ CAUTION**

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

**For vehicles sold in Canada**

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

**WIRELESS REMOTE CONTROL\***

- 1 Locking the doors**
- 2 Unlocking the doors**
- 3 Indicator light**
- 4 Sounding an alarm**

**NOTE:**

\* This feature can be set inoperative as vehicle theft deterrent measure in case of the loss of the wireless remote control key.

Ask your Lexus dealer for details.

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.

## KEYS AND DOORS

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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 20. 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.

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 side doors and back door can be locked from outside the vehicle.**

At this time, you can hear one beep\* and the turn signal lights flash.\*\* 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 side doors and back door 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. If they were already locked, the turn signal lights will flash.

**NOTE:**

\* *The beep volume can be changed.*

\*\* *The turn signal lights can be set not to flash.*

\*\*\* *The buzzer can be set not to sound if a door is not closed securely.*

*Ask your Lexus dealer for details.*

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

**NOTE:**

\* *The 2–step unlocking function can be changed.*

*Ask your Lexus dealer for details.*

At this time, you can hear two beeps\* and the turn signal lights flash twice.\*\* Together with the activation of unlocking, the personal lights and center interior light come on for 15 seconds if the personal light switch and center interior light switch is in the “DOOR” position and the running board lights come on for 15 seconds.\*\*\* However, this function does not work when the ignition key is in the “ON” position. For further information, see “Illuminated entry system” on page 90.

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.

## KEYS AND DOORS

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**NOTE:**

\* The beep volume can be changed.

\*\* The turn signal lights can be set not to flash.

\*\*\* The personal lights, center interior light and running board lights can be set not to come on or the duration of lighting can be changed.

\*\*\*\* The time before automatic re-locking can be changed.

Ask your Lexus dealer for details.

### Sounding an alarm\*



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

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

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

**NOTE:**

\* The alarm can be set not to sound.

Ask your Lexus dealer for details.

### Operating the windows and moon roof

The windows and moon roof can be opened using a wireless key from outside the vehicle.\*

**NOTE:**

\* The windows and moon roof can be set inoperative. Ask your Lexus dealer for details.



Push the “UNLOCK” button until the windows and moon roof start to move. A beep sounds just before opening. When you release the button, the windows and moon roof stop opening.

**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.

## KEYS AND DOORS

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- 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 CR1616 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, screws and O-ring.*
- *Replace only with the same or equivalent type recommended by a Lexus dealer.*
- *Dispose of used batteries according to the local laws.*

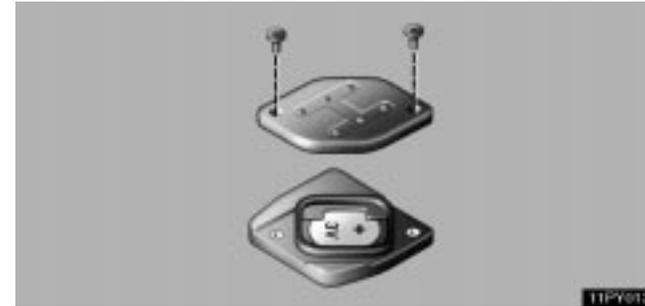
## KEYS AND DOORS



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



2. Remove the module from the key frame.



3. Remove the 2 screws to take out the lid of the module.

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

## KEYS AND DOORS

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### **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 the module.*
- *Take care not to lose the screws and O-ring.*

5. Install the lid with the 2 screws.

### **NOTICE**

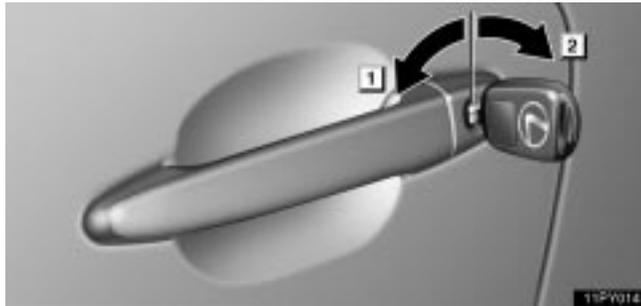
*Take care not to damage or bend the O-ring when installing.*

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

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

## **SIDE 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.**

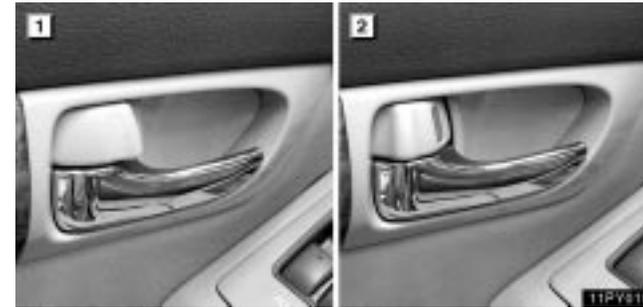
All the side doors and back door lock and unlock simultaneously with the driver's door. In the driver's door lock, turning the key once will unlock the driver's door and twice in succession will unlock all the side doors and back door simultaneously.\*

**NOTE:**

\* The 2-step unlocking function can be changed.  
Ask your Lexus dealer for details.

Together with the activation of unlocking, the personal lights and center interior light come on for 15 seconds if the personal light and center interior light switches are in the "DOOR" positions, and the running board lights come on for about 15 seconds. However, this function does not work when the ignition key is in the "ON" position. For further information, see "Illuminated entry system" on page 90.

### 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.

## KEYS AND DOORS

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### 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.

### 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 side doors and back door 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 side doors and back door 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.

## KEYS AND DOORS

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### AUTOMATIC DOOR UNLOCKING

You can select the following functions:

- **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.

- **Unlocking linked with the shift position**

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

**You can set or cancel the automatic door unlocking functions:**

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

**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.

**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.

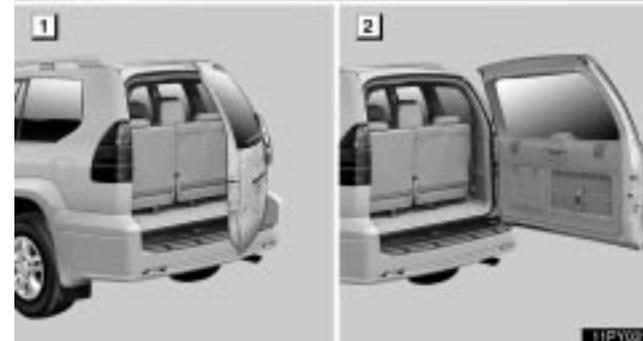
Locking with rear door child-protector



- ▶ **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 and then close the door.

BACK DOOR



- ▶ **1** *Temporary open position*
- 2** *Full-open position*

To open the back door, pull the handle. The back door can be opened at the above mentioned positions.

## KEYS AND DOORS

The back door can be locked and unlocked together with the side doors by means of the power door lock system. (For instructions, see “Locking with power door lock switch” on page 24.)

See “Stowage precautions” on page 485 for precautions when loading luggage.

### CAUTION

- Keep the back door closed while driving. This not only keeps the luggage from being thrown out but also prevents exhaust gases from entering the vehicle.
- If the open back door hides the rear stop and tail lights or rear turn signal lights while you are parked, other road users must be warned of the presence of your vehicle by a warning triangle or other device.

## Back door stopper



► **1** Lock      **2** Unlock

**For your safety, lock the back door with the door stopper when you fully open the back door.**

When closing the back door, check that the back door stopper is unlocked.

### CAUTION

- When keeping the back door open, use only the lock lever of the back door stopper without touching the other parts.
- To avoid serious personal injury, make sure not to get your hands caught in the back door stay when closing the back door.

## THEFT DETERRENT SYSTEM



To deter theft of the vehicle, this system is designed to sound an alarm if any of the doors 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 center interior light switch and personal light switch are in the "DOOR" position, the center interior light and personal lights turn on.



► *Security indicator light*

### 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 and hood using an ignition key or wireless remote control.**

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

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

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

## KEYS AND DOORS

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### Cancelling the system

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

If you unlock any door with wireless remote control, the turn signals flash twice.

### Activating the system

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

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

If the battery becomes discharged due to the vehicle being unused for a long time, etc., when the battery is recharged or replaced, the system will give the alarm. If this happens, immediately unlock any of the doors with the key or the wireless remote control, and the alarm will stop.

If any door is unlocked and the ignition key is not in the ignition switch during the alarm sounding, its 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**

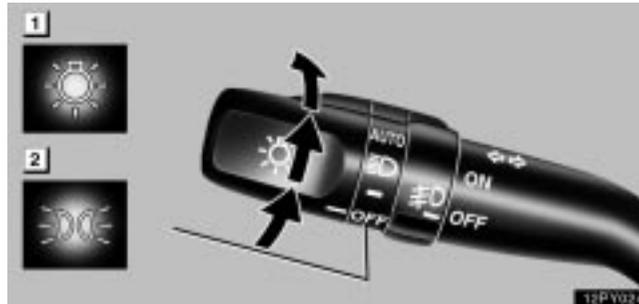
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## **INSTRUMENTS AND CONTROLS**

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## HEADLIGHT SWITCH



► **1 U.S.A.**      **2 Canada**

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

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

**SECOND CLICKSTOP:** Headlights also turn on.

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

**NOTE:**

\* The sensitivity of the automatic light control sensor can be changed.

Ask your Lexus dealer for details.

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

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

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

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

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

## SWITCHES

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The automatic light control sensor is on 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 side door 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.

**NOTE:**

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

If any of the side door is kept opened, the lights automatically turn off after 30 minutes.

When the headlight switch is on with all the doors locked, pushing the "LOCK" button on the wireless remote control key turns off the headlights.

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

### **Daytime Running Light System**

The daytime running light system make your front turn signal lights turn on when the parking brake is released with the engine started and the headlights are turned off. They will not go off until the ignition switch is turned off.

**NOTICE**

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

## SWITCHES

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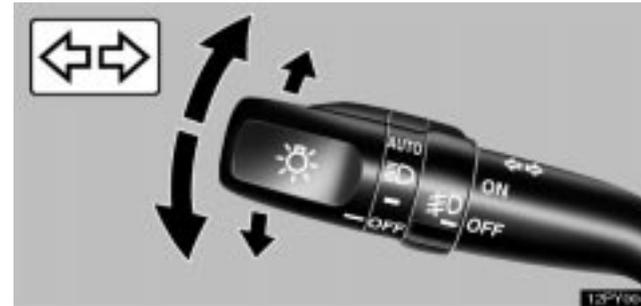
### HEADLIGHT DIMMER AND TURN SIGNAL SWITCH



**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.

## 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

## SWITCHES

---

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

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

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

If you stop the vehicle with the wiper switch in the "LO" position, the wiper speed automatically changes from low speed to variable intermittent operation speed.\* This function does not work when the interval adjuster is in the full upward position.

*NOTE:*

*\* This feature can be deactivated.*

*Ask your Lexus dealer for details.*

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

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

*NOTE:*

*\* The last single wipe can be deactivated.*

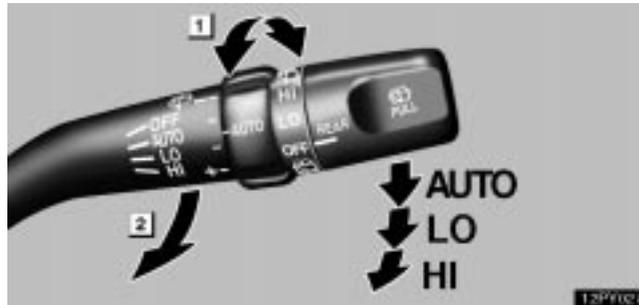
*Ask your Lexus dealer for details.*

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 618.

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

**NOTICE**

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

**Rain-sensing windshield wipers**

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

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

The ignition key 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.

## SWITCHES

---

Twist the automatic control adjuster in the “-” direction to lower the sensitivity, and the “+” direction to boost the sensitivity.



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

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

- When the windshield gets extremely cold (at less than  $-10^{\circ}\text{C}$  or  $14^{\circ}\text{F}$ )
- When the system malfunctions

However, when the windshield gets extremely hot (at more than  $90^{\circ}\text{C}$  or  $194^{\circ}\text{F}$ ), 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.

If you stop the vehicle with the wiper switch in the “LO” position, the wiper speed automatically changes from low speed to intermittent operation speed.\* This function does not work when the automatic control adjuster is in the “+” position.

**NOTE:**

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

 **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.*

## SWITCHES

---

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

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

*NOTE:*

*\* The last single wipe can be deactivated.*

*Ask your Lexus dealer for details.*

### **NOTICE**

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

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 618.

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

## REAR WINDOW WIPER AND WASHER SWITCH



- ▶ **1** *Washer on during wiping*
- 2** *Washer on*

**To turn the wipers on, twist the knob at the end of the lever.**

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

**There are 2 settings:**

**“LO” position:** Intermittent operation

**“HI” position:** Low speed operation

If you stop the vehicle with the rear window wiper switch in the “HI” position, the wiper speed automatically changes from low speed to intermittent operation speed.

**To make the washer squirt, twist the knob downward to position 2.**

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

**To make the washer squirt while operating in “ON” position, twist the knob upward to position 1.**

The knob automatically returns from these positions after you release it.

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 618.

## SWITCHES

---

### **NOTICE**

*Do not operate the rear window wiper if the rear window is dry. It may scratch the glass.*

## REAR WINDOW DEFOGGER SWITCH



► *Vehicles without navigation system*



► *Vehicles with navigation system*

To turn the electric rear window 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 will quickly clear the surface. An indicator light will illuminate to indicate the defogger is operating.

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

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.

## SWITCHES

---

### **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.*

## OUTSIDE REAR VIEW MIRROR DEFOGGER SWITCH



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

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

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

The system will automatically shut off when the defogger has operated about 5 minutes.

### **NOTICE**

***To prevent the battery from being discharged, turn the switch off when the engine is not running.***

### **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.

## SWITCHES

### 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.

**Key off 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 switches

To raise or lower the window, pull the switch halfway up or push it halfway down.

**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.

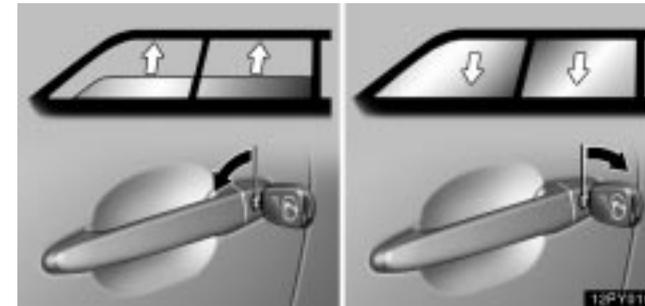
The indicator lights on the switch tell you which of the switches can be operated.

### Operating the windows from outside the vehicle

The windows can be operated using an ignition key.\*

#### *NOTE:*

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



#### ► **Close**

#### ► **Open**

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

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

After the doors are locked, the windows begin to close. To stop in the middle, return the key.

## SWITCHES

---

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

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

The windows also can be opened using the wireless remote control. For details, see page 19.

### Jam protection function

During automatic raising operation or key off 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.

### If the battery is disconnected or run down

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

To normalize the power windows:

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

2. Pull up the switches until the windows close and hold the switches for a second.

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

### CAUTION

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

- **Before you close the power windows, always make sure there is nobody around the power windows. You must also make sure the heads, hands and other parts of the bodies of all occupants are kept completely inside the vehicle. If someone's neck, head or hands get caught in a closing window, it could result in death or serious injury. When anyone closes the power windows, make sure he or she operates the windows safely.**
- **When small children are in the vehicle, never let them use the power window switches without supervision. Use the window lock switch to prevent them from making unexpected use of the switches.**
- **Be sure to 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.
- The jam protection function may not work if something gets caught just before the window fully closed.

## EMERGENCY FLASHER SWITCH



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

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

## SWITCHES

---

### **NOTICE**

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

## SEAT HEATER SWITCHES



The seat heater has two dials; one marked “L” (for the driver’s seat) and the other marked “R” (for the front passenger’s seat). To turn the seat heaters on, turn the dials forward. The indicator lights come on. To turn them off, turn the dials backward until they stop. The indicator lights go off.

You can adjust the heating temperature to 5 stages. To increase the temperature, turn them forward. To decrease the temperature, turn them backward.

The ignition key must be in the “ON” position to operate seat heaters.

### 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 delicate 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.

## SWITCHES

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### **NOTICE**

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

1

# **SECTION 1 – 3**

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## **INSTRUMENTS AND CONTROLS**

### **Gauges, meters and service reminder indicators**

Fuel gauge .....	57
Engine coolant temperature gauge .....	58
Tachometer .....	60
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Service reminder indicators and warning buzzers .....	62
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## FUEL GAUGE



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

### ► *Low fuel level warning light*

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

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.

## 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 496.*

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

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### TACHOMETER



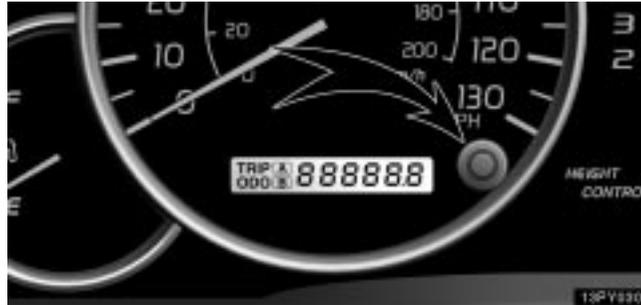
#### **NOTICE**

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

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.

## 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, etc.

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.

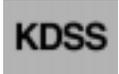
**GAUGES, METERS AND SERVICE REMINDER INDICATORS**

**SERVICE REMINDER INDICATORS AND WARNING BUZZERS**

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

IF THIS INDICATOR OR BUZZER COMES ON...		DO THIS.
(f)	 or 	Take vehicle to Lexus dealer. If brake system warning light is also on, stop immediately and contact Lexus dealer.
(g)		Close all side doors and back door.
(h)		Shift four-wheel drive control out of "N".
(i)		Stop and check.
(j)		Take vehicle to Lexus dealer.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

IF THIS INDICATOR OR BUZZER COMES ON...		DO THIS.
(k)		Take vehicle to Lexus dealer.
(l)		Stop and check.
(m)		Stop and check.
(n)		Replace engine oil.
(o)		Adjust tire inflation pressure. If light remains, contact Lexus dealer.
(p)		Fill up tank.

IF THIS INDICATOR OR BUZZER COMES ON...		DO THIS.
(q)		Add washer fluid.
(r)	Key reminder buzzer	Remove key.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

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

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 in the "ON" position even after the parking brake is released.

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

 <b>CAUTION</b>
<b>It is dangerous to continue driving normally when the brake fluid level is low.</b>

- **When the hydraulic brake booster fails...**

If the hydraulic booster causes a problem resulting in poor braking performance, the warning light comes on and buzzer sounds continuously.

**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.

 <b>CAUTION</b>
<b>If any of the following conditions occurs, immediately stop your vehicle at a safe place and contact your Lexus dealer.</b>
<ul style="list-style-type: none"><li>● <b>The light does not turn off even after the parking brake is released while the engine is running.</b></li><li>● <b>The warning buzzer comes on together with the warning light.</b></li></ul>
<b>In either case, this can indicate that 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.</b>
<ul style="list-style-type: none"><li>● <b>The brake system warning light remains on together with the "ABS" warning light.</b></li></ul>
<b>In this case, not only the anti-lock brake system will fail, but also the vehicle will become extremely unstable during braking.</b>

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

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**Any of the following conditions may occur, but do not indicate the malfunction:**

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

### **(b) 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 flashes and buzzer sounds if the driver’s seat belt is not fastened. Unless the driver fastens the belt, the light continues flashing and the buzzer stops after about 4 to 8 seconds.

### **(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 “ON” or “START”, the reminder light flashes if a 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 flash.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

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### (d) SRS Warning Light

The 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 front 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 ON” indicator light, “AIRBAG OFF” indicator light, front passenger’s seat belt buckle switch, front seat belt pretensioner assemblies, inflators, warning light, “RSCA OFF” indicator light, interconnecting wiring and power sources.

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

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

If the light stays on, it indicates that the driver and front passenger airbags and/or front passenger occupant classification system, “AIRBAG ON” indicator light and “AIRBAG OFF” indicator light fail. If the light flashes, the side and curtain shield airbags and/or seat belt pretensioners have a problem.

### (e) 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.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

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 "ACC" or "LOCK" position.



### 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 532.

### (f) "ABS" Warning Light

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 following systems do not operate, but the brake system still operates conventionally.

- Anti-lock brake system
- Brake assist system
- Active traction control system
- Vehicle stability control system
- Downhill assist control system
- Hill-start assist control

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 will lock up during a sudden braking or braking on slippery road surfaces.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

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

- The light does not come on when the 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.

Either of the following conditions may occur, but do not indicate a malfunction:

- The light may stay on for about 60 seconds after the ignition key is turned to the “ON” position. It is normal if it turns off after a while.
- Depressing the brake pedal repeatedly may turn on the light. It is normal if it turns off after a few seconds.

### (g) Open Door Warning Light

This light remains on until all the side doors and back door are completely closed.

### (h) Unengaged “Park” Warning Light

This light warns that the transmission “Park” mechanism is not engaged. If the four-wheel drive control is in the “N” position while the selector lever is in the “P” position, the transmission will disengage and the wheels will not lock.



### CAUTION

To restore the park function, shift the four-wheel drive control out of “N”.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

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### (i) Automatic Transmission Fluid Temperature Warning Light

This light warns that the automatic transmission fluid temperature is too high.

If this light comes on while you are driving, slow down and pull off the road. Stop the vehicle at a safe place and put the selector lever in "P" and leave the engine idling until the light goes off. If the light goes off, you can start the vehicle again. If the light does not go off, call a Lexus dealer or qualified repair shop for assistance.

**NOTICE**

*Continued driving with the warning light on may damage the automatic transmission.*

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

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### (j) “VSC TRAC” Warning Light

This light warns that there is a problem somewhere in the following.

- Vehicle stability control system
- Active traction control system
- Downhill assist control system
- Hill–start assist control

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

It is not a malfunction that the warning light may stay on for 60 seconds after the ignition key is turned to the “ON” position.

Depressing the brake pedal repeatedly may turn on the lights. It is normal if they go out after a few seconds.

If the light comes on while driving, the above mentioned systems do 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.

When the brake fluid level is too low, the above–mentioned systems will not operate and the warning light come on.

### (k) “KDSS” Warning Light (vehicles with kinetic dynamic suspension system)

This light warns that there is a problem somewhere in the kinetic dynamic suspension system.

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

If the light comes on while driving, bring your vehicle to your Lexus dealer as soon as possible and have it checked.

### (l) Discharge Warning Light

This light warns that the battery is being discharged.

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

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

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

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

---

### **NOTICE**

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

#### **(m) 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.***

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

---

### **(n) 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 "ON" 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 "ON" position. If you continue driving without the engine oil replacement, and if the driving range exceeds 8000 km (5000 miles), the light will come on after the ignition key is turned to "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 condition. If the light comes on, replace it as soon as possible.

You need to reset the light after the engine oil replacement. Reset the light by following the procedure below:

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 61.)
2. Turn the ignition key to the "ON" position while holding down the trip meter reset knob.

Hold down the knob until the light goes off. Before the light goes off, it illuminates for 3 seconds, flashes for 2 seconds and illuminates for 1 second.

If the system fails to reset, the light will remain flashing. In this case, return to step 1 and try again.

### **(o) Low Tire Pressure Warning Light**

This light warns that the tire pressure of one or more of your tires (including the spare tire) is low. The light comes on when the ignition key is turned to the "ON" position. It goes off after a few seconds. This indicates that the tire pressure warning system is functioning properly.

If the warning light comes on, stop your vehicle in a safe place as soon as possible and check that the inflation pressure of all tires (including the spare tire) is as specified on the tire and loading information label. (See "Checking tire inflation pressure" on page 574.) The light should go off a few minutes after the tire pressure is adjusted.

If the warning light blinks, the tire pressure warning system may be malfunctioning. Contact your Lexus dealer.

For details, see "Tire pressure warning system" on page 446.

### **(p) Low Fuel Level Warning Light**

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

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

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

---

### **(q) Low Washer Fluid Warning Light**

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

### **(r) 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)**

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. Place the four-wheel drive control lever in "N" position and the selector lever in "P" position and turn the ignition key to "ACC".

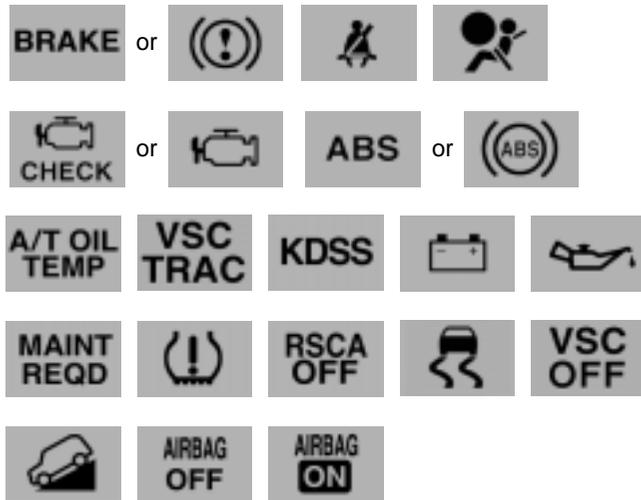
The following service reminder indicator should come on. It goes off when you place the four-wheel drive control lever in "H" or "L" position.



## GAUGES, METERS AND SERVICE REMINDER INDICATORS

4. Turn the ignition key to "ON".

The following service reminder indicators should come on.



The following service reminder indicator goes off after a few seconds.



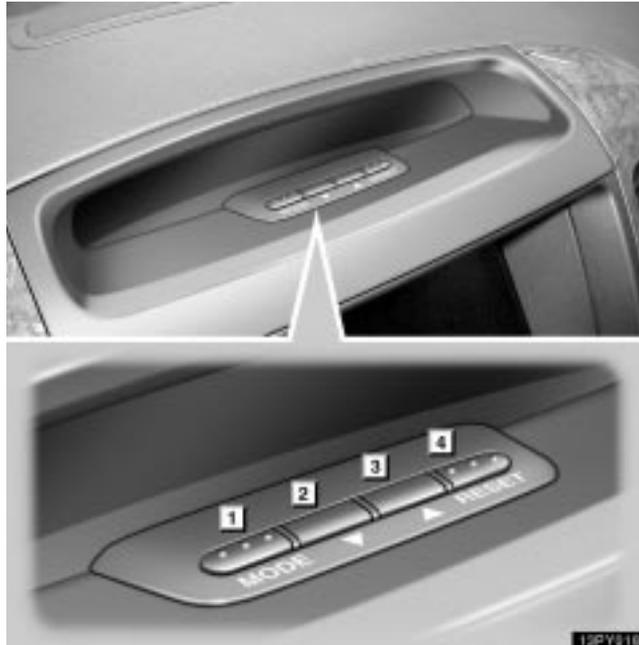
The anti-lock brake system warning light, vehicle stability control system off indicator light and vehicle stability control system, slip indicator light and active traction control system warning light may stay on for about 60 seconds after the ignition key is turned to the "ON" position. It is normal if they go out after a while.

The following service reminder indicator should come on. It goes off after about 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



- ▶ **1** “MODE” button
- 2** “▼” button
- 3** “▲” button
- 4** “RESET” button

The multi-information display provides various information, including clock, outside temperature, and your vehicle’s driving condition.

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.

You can adjust the brightness of the display. To adjust the brightness, see “ADJUSTING THE BRIGHTNESS OF THE DISPLAY” below.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

### ADJUSTING THE BRIGHTNESS OF THE DISPLAY

The key must be in the “ACC” or “ON” position. To adjust the brightness of the display, push and hold the “MODE” button for more than 2 seconds. “ILL” will appear on the display.

To increase the brightness — Push the “▲” button.

To decrease the brightness — Push the “▼” button.

You can adjust the brightness to 3 levels (when the tail lights are off) or 6 levels (when the tail lights are on).

After adjusting, the display automatically return to the previous display.

#### CAUTION

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

### Clock



► *U.S.A.*



► *Canada*

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

---

**The digital clock indicates the time when the key is in the “ACC” or “ON” position.**

To reset the time, push and hold the “MODE” button for 2 seconds. “ILL” will appear on the display. Then push the “MODE” button once. The time will blink.

To reset the hour — Push the “▼” button.

To reset the minutes — Push the “▲” button.

To adjust the time to the nearest hour, push the “RESET” button. For example, if the “RESET” button is depressed when the time is between 1:01 — 1:29, the time will change to 1:00. If the time is between 1:30 — 1:59, the time will change to 2:00.

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

### **Outside temperature and cruise information**

**The following information is shown with the ignition switch turned on. Each time you push the “MODE” button, the display toggles through this information.**

- Outside temperature
- Average fuel consumption
- Instantaneous fuel consumption
- Driving range
- Average vehicle speed
- Barometer
- Altimeter
- Elapsed time

The displayed values indicate general driving conditions. Accuracy varies with driving habits and road conditions.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

---

- **Outside temperature**



▶ **U.S.A.**



▶ **Canada**

**In outside temperature mode, outside air temperatures are displayed.**

The displayed value is updated every 1 second.

The displayed temperature ranges from  $-22^{\circ}\text{F}$  ( $-30^{\circ}\text{C}$ ) up to  $122^{\circ}\text{F}$  ( $50^{\circ}\text{C}$ ).

If there is some abnormality in the connection of the outside air temperature sensor, “—” will appear on the display. If “—” appears on the display, contact your Lexus dealer.

In some cases, “—” may appear momentarily when the ignition is quickly turned to “ON”. It is normal if it goes out soon.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

- Average fuel consumption



► *U.S.A.*



► *Canada*

**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 "RESET" button for more than 1 second.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

---

- Instantaneous fuel consumption



► *U.S.A.*



► *Canada*

**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.

- When the vehicle is stopped with the engine running, the display will indicate extremely high fuel consumption.
- When the vehicle is driving down a long slope, with the engine brake applied, the display will indicate extremely low fuel consumption.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

- Driving range



► *U.S.A.*



► *Canada*

**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 required to travel 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. If fuel consumption is poor, the driving range will be shorter.

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

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

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- Average vehicle speed



► *U.S.A.*



► *Canada*

**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 "RESET" button for more than 1 second.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

- **Barometer**



► **U.S.A.**



► **Canada**

**In barometer mode, the atmospheric pressure in the vehicle is displayed.**

The displayed atmospheric pressure ranges from 17.8 IN.HG (600 hPa) up to 31.0 IN.HG (1050 hPa).

The displayed value is updated every 2 seconds.

The displayed value may deviate from the actual atmospheric pressure depending on opening or closing of the windows and doors and the driving conditions.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

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- **Altimeter**



► **U.S.A.**



► **Canada**

**In altimeter mode, the approximate altitude is displayed.**

The displayed altitude ranges from -1500 ft. (-500 m) up to 13000 ft. (4000 m).

As the altitude value is converted from the atmospheric pressure, it can be easily affected by air motion and temperature, so the indication may vary. The indicated altitude of a single position may deviate according to the atmospheric pressure and temperature.

The displayed value is updated every 2 seconds.

**RECTIFICATION OF THE ALTITUDE**

Rectification is valid only when the correct altitude is known.

While the altitude mode is on the display, push the "▼" or "▲" button to increase or decrease the altitude by 50 ft. (10 m).

To reset the rectified altitude, push and hold the "RESET" button for more than 1 second.

## GAUGES, METERS AND SERVICE REMINDER INDICATORS

- Elapsed time



► *U.S.A.*



► *Canada*

**The time that has elapsed since the engine started is displayed.**

When the engine is started, driving time is counted from 0:00. Up to 19:59 (19 hours, 59 minutes) can be displayed. When the driving time exceeds 19:59, the counter returns to 0:00.

To reset the calculations, push and hold the "RESET" button for more than 1 second.

## 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.

# SECTION 1 - 4

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## INSTRUMENTS AND CONTROLS

### Interior equipment

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## INTERIOR EQUIPMENT

### SUN VISORS



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

- 1 To block out glare from the front, swing the sun visor down.
  - 2 To block out glare from the side, remove the sun visor from the hook and swing it to the side.
  - 3 To block out glare coming obliquely from behind you, slide the visor backwards.
- At this position, the vanity light does not come on.
- 4 To block out glare from the front with the sun visor in the position 2 or 3, swing the other sun visor down.

### INTERIOR LIGHTS

Center



► Vehicles without rear seat audio system



► Vehicles with rear seat audio system

## INTERIOR EQUIPMENT

### To turn on the interior light, slide the switch.

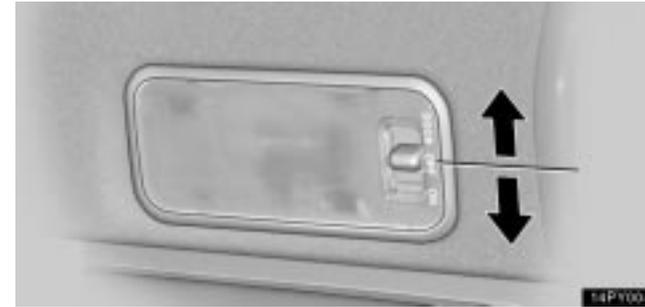
The interior light switch has the following positions:

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

“OFF” — Turns the light off.

“DOOR” — Turns the light on when any side door is opened.  
The light goes off when all the doors are closed. For details, see “Illuminated entry system” on page 90.

### Rear



### 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” — Turn the light on when the back door is opened.  
The light goes out immediately when the back door is closed.

## INTERIOR EQUIPMENT

### PERSONAL LIGHTS



► **1** “DOOR” position    **2** “OFF” position

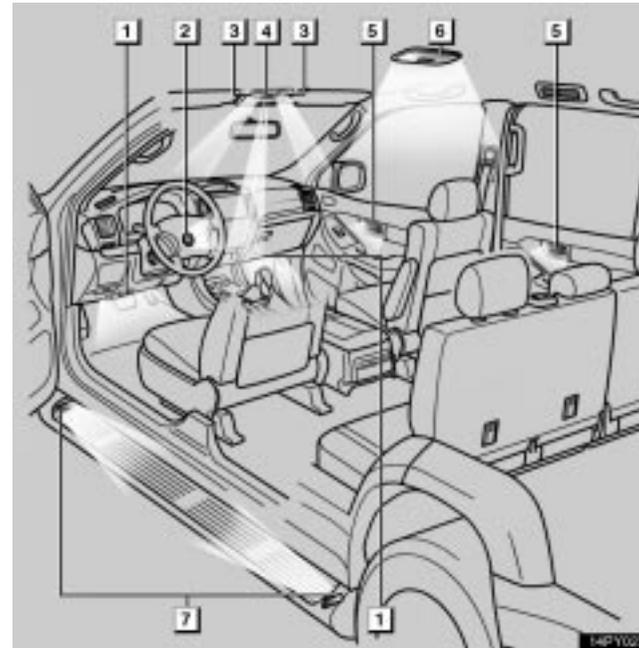
To turn on the personal light, push the lens. To turn the light off, push the lens once again.

The personal light switch has the following positions:

“DOOR” — Turn the lights on when any side door is opened without pushing the lens. The light goes off when all the doors are closed. For details, see “Illuminated entry system” on page 90.

“OFF” — Turn the lights on only when you push the lens.

### ILLUMINATED ENTRY SYSTEM



- ▶ **1 Foot lights**
- 2 Ignition switch light**
- 3 Personal lights (with the “DOOR” position)**
- 4 Center console spot lights**
- 5 Inside door handle lights**
- 6 Center interior light (with the “DOOR” position)**
- 7 Running board lights**

All of the lights except the center console spot lights will come on when any of the side 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 the foot lights and inside door handle 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 of the lights except the center console spot lights — All the side doors and back door are locked.
- Ignition switch light, personal lights and center interior light — All the side doors are closed and the ignition key is in the “ACC” or “ON” position.
- Running board lights — The vehicle speed exceeds about 8 km/h (5 mph).

When any of the side doors is unlocked, all of the lights except the center console spot lights will come on and remain on for about 15 seconds before fading out.

To prevent the battery being discharged, all of the lights will automatically turn off when the ignition key removed and the door is left opened for about 30 minutes.

#### **Ignition switch light, personal lights and center interior light**

The ignition switch light, personal lights and center interior light also come on and remain on for about 15 seconds before fading out when the ignition switch is turned to the “LOCK” position.

#### **Foot lights and inside door handle lights**

The foot lights and inside door handle 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 “P” position, the intensity of the foot lights and inside door handle lights will be reduced.\*

*NOTE:*

\* The intensity of the foot lights and inside door handle lights can be set not to be reduced.

Ask your Lexus dealer for details.

#### **Center console spot lights**

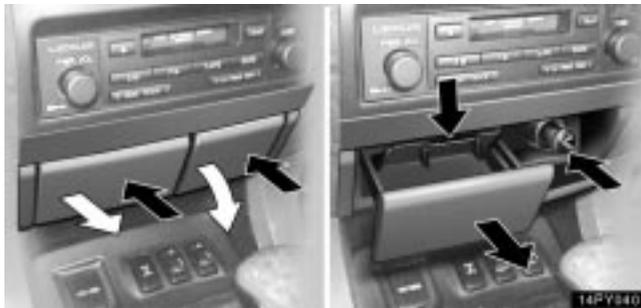
The center console spot lights come on when the ignition switch is in the “ACC” or “ON” position.

## INTERIOR EQUIPMENT

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### CIGARETTE LIGHTER AND ASHTRAY

#### Front



**To use the cigarette lighter and ashtray, first push against the cigarette lighter and ashtray covers. Then when the cigarette lighter cover opens, 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, press down on the lock spring plate and pull out.

Use a Lexus genuine cigarette lighter or equivalent for replacement.



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

Rear



**To use the ashtray, raise the lid.**

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, raise the lid and pull it out.

 **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 OUTLETS**

**12 VDC**



**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.

## INTERIOR EQUIPMENT

---

### NOTICE

- *To prevent the fuse from being blown, do not use the electricity over the total vehicle capacity of 12 VDC/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.*

### 115 VAC



**This power outlet is designed for use as a power supply for electric appliances in the vehicle.**

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

The maximum capacity for this power outlet is 115 VAC/100W. If you attempt to use an appliance that requires more than 115 VAC or 100W, the protection circuit will activate and cut the power supply. The power supply will restart automatically when you use an appliance that operates within the 115 VAC/100W limits.

## INTERIOR EQUIPMENT



► **Main switch**

**To use the power outlet, push the main switch on the instrument panel.**

An indicator light will illuminate to indicate that the power outlet is ready for use.

Push the main switch once again to turn the power outlet off. When the power outlet is not in use, make sure that the main switch is turned off.

## INTERIOR EQUIPMENT

### NOTICE

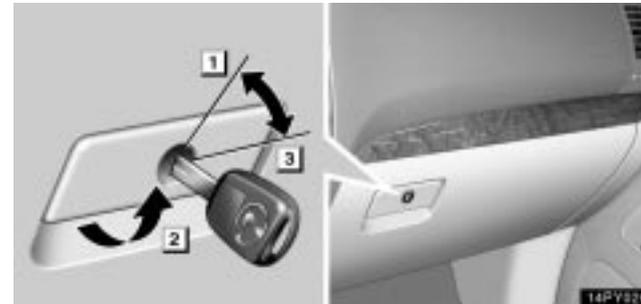
- *To prevent the battery from being discharged, do not use the power outlet longer than necessary when the engine is not running.*
- *Close the power outlet lid when the power outlet is not in use. Inserting anything other than an appropriate plug that fits the outlet, or allowing any liquid to get into the outlet may cause electrical failure or short circuits.*

The power outlet is not designed for the following electric appliances even though their power consumption is under 115 VAC/100W. These appliances may not operate properly.

- **Appliances with high initial peak wattage:** Cathode-ray tube type televisions, compressor-driven refrigerators, electric pumps, electric tools, etc.
- **Measuring devices which process precise data:** Medical equipment, measuring instruments, etc.
- **Other appliances requiring an extremely stable power supply:** Microcomputer-controlled electric blankets, touch sensor lamps, etc.

Certain electrical appliances may cause radio noise.

## GLOVE BOX



- **1** *Unlock*      **2** *Open*      **3** *Lock*

**To use the glove box:**

Open by pulling the lever.

Lock by inserting the master key and turning it clockwise.

Unlock by inserting the master key and turning it counterclockwise.

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

 **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



To access the rear console box, push the center of the lid.

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

 **CAUTION**

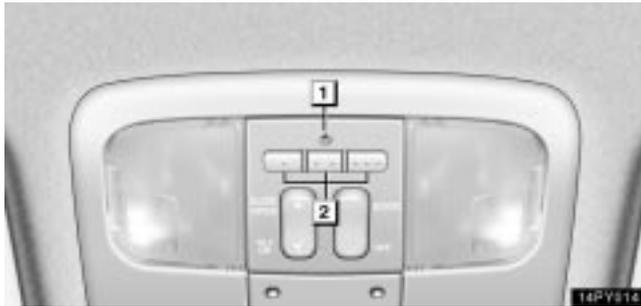
To reduce the chance of injury in case of an accident or a sudden stop, always keep the rear console box closed while driving.

## INTERIOR EQUIPMENT

### GARAGE DOOR OPENER

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

#### (a) Programming the HomeLink®



► **1** Indicator light      **2** Buttons

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

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

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

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

1. Decide which of 3 HomeLink® buttons you want to program.
2. Place your hand-held garage transmitter 25 to 75 mm (1 to 3 in.) away from the surface of the HomeLink®.

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

3. Simultaneously press and hold the hand-held garage transmitter button along with the selected HomeLink® button.
4. When the indicator light on the HomeLink® changes from a slow to a rapid flash after 20 seconds, you can release both buttons.

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

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

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

### **Programming a rolling code system**

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

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

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

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

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

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

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

## INTERIOR EQUIPMENT

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### **Programming an entrance gate/programming all devices in the Canadian market**

1. Decide which of the 3 HomeLink<sup>®</sup> 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<sup>®</sup>.

Keep the indicator light on the HomeLink<sup>®</sup> in view while programming.

3. Press and hold the selected HomeLink<sup>®</sup> 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<sup>®</sup> changes from a slow to a rapid flash after 20 seconds, you can release both buttons.
6. Test the operation of the HomeLink<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> buttons cannot be erased, however, to reprogram a single button, follow the procedure "Programming the HomeLink<sup>®</sup>".

### **(b) Operating the HomeLink<sup>®</sup>**

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

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

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

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

 **CAUTION**

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

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

## INTERIOR EQUIPMENT

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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



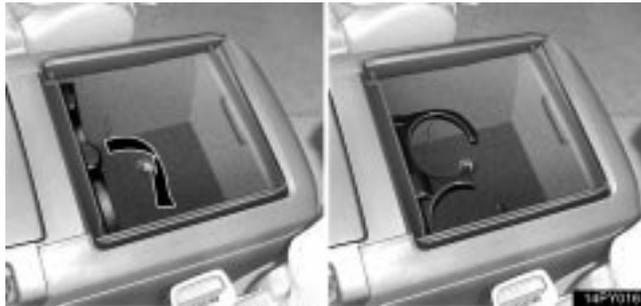
### ► *In front of the rear console box*

#### **To use the cupholder, push the cupholder lid.**

The cupholder is designed for holding cups or drink-cans securely.

The cupholder can be adjusted to the size of the cups by changing the separator position or moving the separator arms.

You can use it as an accessory box by removing the separator inside.



► ***In the rear console box***

**To use the cupholder, open the rear console box and pull down the cupholder.**

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.

**Rear**



► ***Second seat armrest***

**To use the cupholder, pull down the second seat armrest and push the cupholder portion of the armrest.**

The cupholder is designed for holding cups or drink-cans securely.

## INTERIOR EQUIPMENT



► Beside the third seat

### 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 of the second seat armrest closed when not in use.

## OVERHEAD CONSOLE BOX



To use the overhead console box, push the button.

### 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 200 g (0.44 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.*

## INTERIOR EQUIPMENT

### AUXILIARY BOX

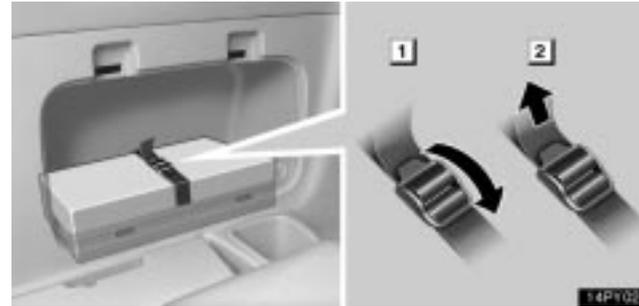


To use the auxiliary box, open it as shown above.

#### CAUTION

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

### First aid kit holder



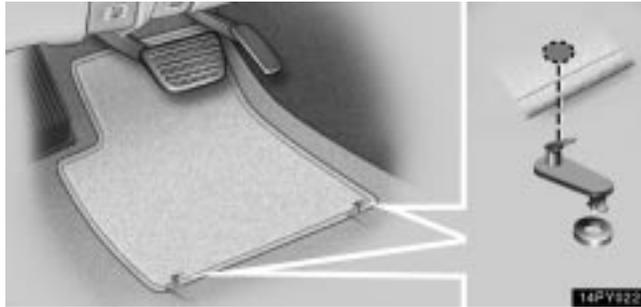
► **1** To loosen    **2** To tighten

This auxiliary box is equipped with a belt to hold the first aid kit. To loosen or tighten the belt, do as shown above.

Although the first aid kit itself is not included as original equipment, this auxiliary box can be used to store the first aid kit.

Make sure the first aid kit is securely held.

**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.

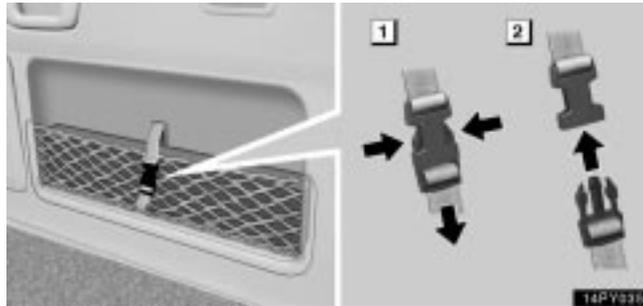


**⚠ CAUTION**

**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.**

## INTERIOR EQUIPMENT

### WARNING REFLECTOR HOLDER



► **1** To disengage      **2** To engage

This belt is designed to hold the warning reflector. To disengage or engage the belt, do as shown above.

Although the warning reflector itself is not included as original equipment, this auxiliary box can be used to store the warning reflector.

Make sure the warning reflector is securely held.

### 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.

## LUGGAGE COVER

### Using luggage cover



To use the luggage cover, pull out the luggage cover and hook it on the anchors.

**⚠ CAUTION**

Do not place anything on the luggage cover. Such items may be thrown about and possibly injure people in the vehicle during sudden braking or an accident.

### Removing luggage cover



To remove the luggage cover, retract and release the both ends, and lift it out.

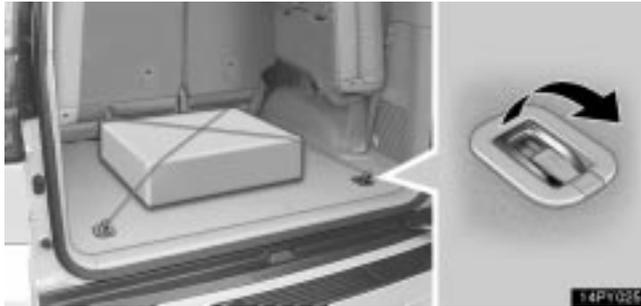
After remove the luggage cover, place it somewhere other than the passenger compartment. This will prevent passengers from injury in the event of a sudden stop or accident.

When installing the luggage cover, keep the “TOP” mark of the luggage cover ends upward.

## INTERIOR EQUIPMENT

---

### TIE-DOWN HOOKS



To secure your luggage, use the tie-down hooks as shown above.

See "Stowage precautions" on page 485 for precautions when loading luggage.

#### **NOTICE**

*Do not use the third seat anchors instead of the tie-down hooks.*

# **SECTION 1-5**

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## **INSTRUMENTS AND CONTROLS**

### **Exterior equipment**

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Fuel tank cap .....	113
Moon roof .....	116
Quarter windows .....	119
Roof luggage carrier .....	120
Rear step bumper .....	123

## EXTERIOR EQUIPMENT

### HOOD



**1. To open the hood, pull the hood lock release lever under the instrument panel. The hood will spring up slightly.**



**2. Insert your fingers under the hood, push up the auxiliary catch lever and lift the hood.**

Before closing the hood, check to see that you have not forgotten any tools, rags, etc. Then lower the hood and make sure it locks.

#### CAUTION

**Before driving, be sure that the hood is closed and securely locked. Otherwise, the hood may open unexpectedly while driving and an accident may occur.**

## 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, pull the lever under the instrument panel.

When refueling, turn off the engine.

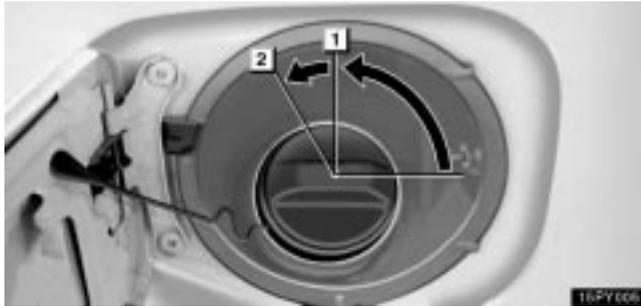


### CAUTION

- 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.

## EXTERIOR EQUIPMENT

---



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 or up and down, 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.*

## EXTERIOR EQUIPMENT

### MOON ROOF



▶ **1** Open      **2** Close

To slide open the moon roof, push the switch on the “SLIDE OPEN” side for about 1 second. The moon roof 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 moon roof, the sunshade will be opened with the moon roof.

When the moon roof is fully opened, the wind deflector raises to reduce the entering of the strong wind. The angle of the deflector is changed according to the vehicle speed.

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

To slide open the tilted-up moon roof:

Push the switch on the “SLIDE OPEN” side to tilt down the moon roof. After releasing the switch, push the switch on the same side again.



▶ **1** Tilt down      **2** Tilt up

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

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

To operate the moon roof, the ignition key must be in the “ON” position.

**Key off operation:** Even if the ignition key is turned to the “ACC” or “LOCK” position, the moon roof can be operated until a front door is opened (or for 43 seconds).

**To tilt up the slide–opened moon roof:**

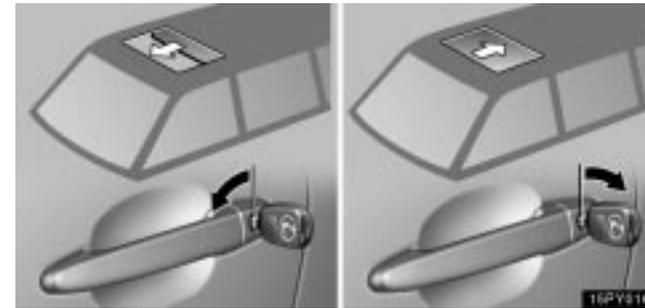
Push the switch on the “TILT UP” side to close the moon roof fully. After releasing the switch, push the switch on the same side again.

**Operating the moon roof from outside the vehicle**

The moon roof can be operated using an ignition key.\*

**NOTE:**

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



► **Close**

► **Open**

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

**To close the moon roof:** Turn the key in the locking direction and hold it.

**To open the moon roof:** Turn the key in the unlocking direction and hold it.

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

## EXTERIOR EQUIPMENT

---

The moon roof also can be opened using the wireless remote control. For details, see page 19.

### Jam protection function

- If something gets caught between the moon roof and frame during slide closing operation, the moon roof stops and opens half way, and the deflector stops and raises fully.
- If something gets caught between the moon roof and frame during tilting down operation, the moon roof stops and opens fully.

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

### If the battery is disconnected or run down

The moon roof may not operate automatically and the jam protection function will not function correctly after you reconnect, replace or recharge the battery. In any of these cases, you should normalize the moon roof.

To normalize the moon roof, push and hold the switch on the "TILT UP" side until the moon roof tilts all the way up and then tilts down a little automatically.

Make sure that the moon roof opens and closes automatically. If the moon roof cannot be operated properly, have it checked by your Lexus dealer.

### CAUTION

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

- While the vehicle is moving, always keep the heads, hands and other parts of the bodies of all occupants away from the roof opening. Otherwise, they could be seriously injured if the vehicle stops suddenly or if the vehicle is involved in an accident.
- Before you close the moon roof, always make sure there is nobody around the moon roof. You must also make sure nobody places his or her head, hands and other parts of the body in the roof opening. If someone's neck, head or hands get caught in the closing roof, it could result in death or serious injury. When anyone closes the moon roof, first make sure it is safe to do so.
- Be sure to 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 moon roof 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.
- The jam protection function may not work if something gets caught just before the moon roof fully closed.

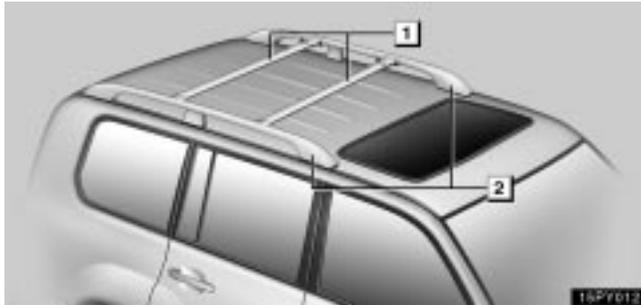
## QUARTER WINDOWS



To open the quarter windows, pull the latch handles toward you and swing it fully out.

When closing the windows, make sure there are completely closed.

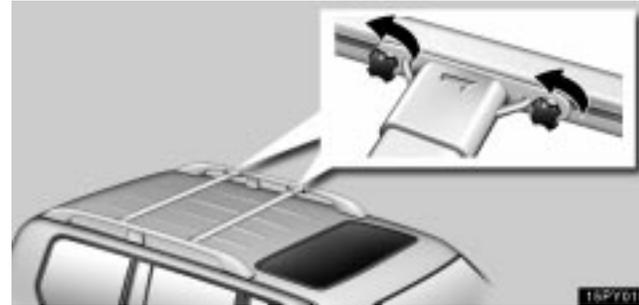
## ROOF LUGGAGE CARRIER



► **1** *Cross rails*    **2** *Roof rails*

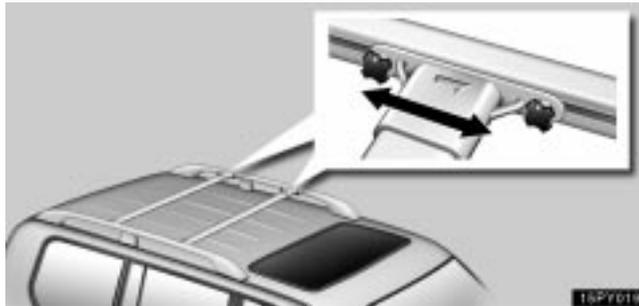
The roof luggage carrier consists of roof rails and sliding cross rails.

## Adjusting the position of cross rails



1. Turn the knobs counterclockwise to loosen the cross rails.

## EXTERIOR EQUIPMENT



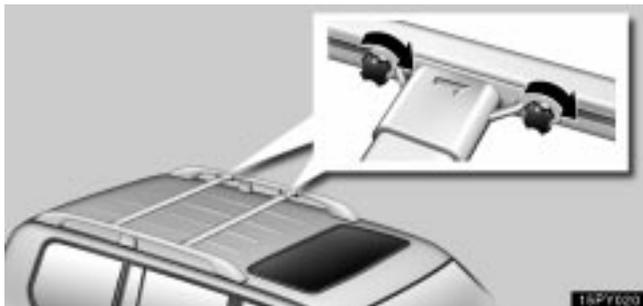
2. Slide the cross rails to the appropriate position for loading the luggages.

### **NOTICE**

*Do not remove the cross rail stoppers, or the moon roof may be damaged when it is tilted.*

There are cross rail stoppers on the roof rails which help you prevent the cross rails being touched with the tilted-up moon roof.

## EXTERIOR EQUIPMENT



3. After adjusting, be sure to tighten the cross rails by turning knobs clockwise.

### CAUTION

Make sure the cross rails are fixed securely by pushing forward and rearward them. Failure to do so may cause an unexpected accident or severe injury in the event of emergency braking or a collision.

Follow the manufacturer's instructions and precautions when installing the attachments or their equivalent.

### NOTICE

*When loading the luggages, be careful not to scratch the surface of the moon roof.*

### CAUTION

When you load cargo on the roof luggage carrier, observe the following:

- Place the cargo so that its weight is distributed evenly between the front and rear axles.
- If loading long or wide cargo, never exceed the vehicle overall length or width. (See "Specifications" on page 627 for information on your vehicle overall length and width.)
- Before driving, make sure the cargo is securely fastened on the roof luggage carrier.
- Loading cargo on the roof luggage carrier will make the center of the vehicle gravity higher. Avoid high speeds, sudden starts, sharp turns, sudden braking or abrupt maneuvers, otherwise it may result in loss of control or vehicle rollover due to failure to operate this vehicle correctly.
- If driving for a long distance, on rough roads, or at high speeds, stop the vehicle now and then during the trip to make sure the cargo remains in its place.
- Do not exceed 58 kg (130 lb.) cargo weight on the roof luggage carrier.

## REAR STEP BUMPER



The rear step bumper is for rear end protection and easier step-up loading.

 **CAUTION**

- Do not allow more than one person to get on the rear step bumper at a time. It is designed for only one person.
- Never drive the vehicle with anyone on the rear step bumper.

# SECTION 1 – 6

---

## INSTRUMENTS AND CONTROLS

### Occupant restraint systems

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## 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.

## OCCUPANT RESTRAINT SYSTEMS

---

- 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 equipped 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.

**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.*

## OCCUPANT RESTRAINT SYSTEMS

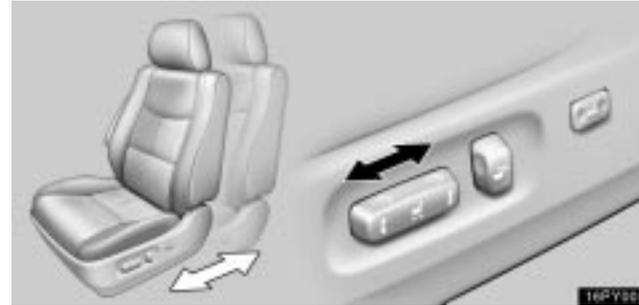
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### Adjusting front seats



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

### Adjusting seat position



**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.

**Adjusting seat cushion angle and height  
(driver's seat only)**



**Move the control switch in the desired direction.**

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

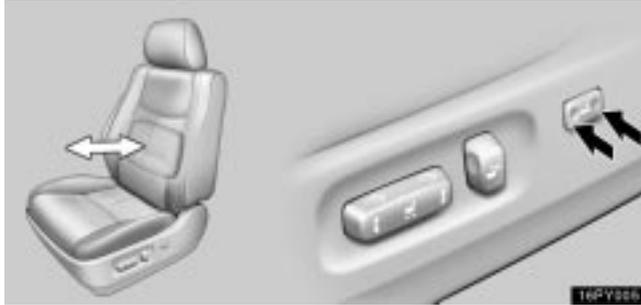
**⚠ CAUTION**

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.

## OCCUPANT RESTRAINT SYSTEMS

---

### Adjusting lumbar support



**Push the control switch on either side.**

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

## REAR SEATS

### Rear seat precautions

#### CAUTION

- Adjustment should not be made while the vehicle is moving.
- When folding the seat, secure the seat by adjusting the length of the anchorage strap to prevent the seat from falling down.
- When returning the seat to its original position, observe the following precautions in order to prevent personal injury in a collision or sudden stop.
  - There is no person or luggage around the seat and operate slowly by supporting the seat with your hands.
  - The seat is securely locked by pushing forward and rearward on the top of the seatback and by trying to pull up the edge of the bottom cushion. Failure to do so will prevent seat belt from operating properly.
  - The seat belts are not twisted or caught under the seat and are arranged in their proper position and are ready to use.
- When using the seat, make sure the seat is securely locked.

**NOTICE**

***Avoid putting heavy loads on the removed seat. The metallic tips of the seat legs may be damaged and the seat cannot be reinstalled.***

Tumbling, folding up or removing the seats will enlarge the luggage compartment. See "Stowage precautions" on page 485 for precautions when loading luggage.

**Adjusting rear seats**



► **Second seat**

## OCCUPANT RESTRAINT SYSTEMS

---



► *Third seat*

Lean forward and pull the lock release lever. Then lean back to the desired angle and release the lever.

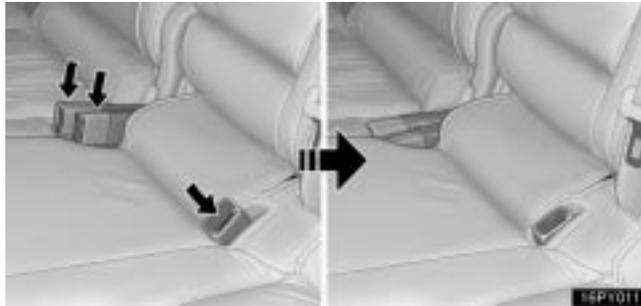
 **CAUTION**

Avoid reclining the seatback any more than needed. The seat belts provide maximum protection when the passengers 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.

## OCCUPANT RESTRAINT SYSTEMS

### Tumbling second seat (for third seat entry)

**Vehicles with third seat:** For easy access to the third seat, tumble the second seat in accordance with the following procedure.



**Before tumbling the second seat, stow the second seat buckles as shown above.**

This prevents the buckles from falling out when you fold up the second seat.

**Vehicles with rear seat audio system or rear seat entertainment system:** Before tumbling the second seat, close the headphone input jack lid.

## OCCUPANT RESTRAINT SYSTEMS

---

### **NOTICE**

- *The seat belt buckles must be stowed before you tumble the second seat.*
- *The headphone input jack lid of the rear seat audio system or the rear seat entertainment system must be closed before you tumble the second seat.*

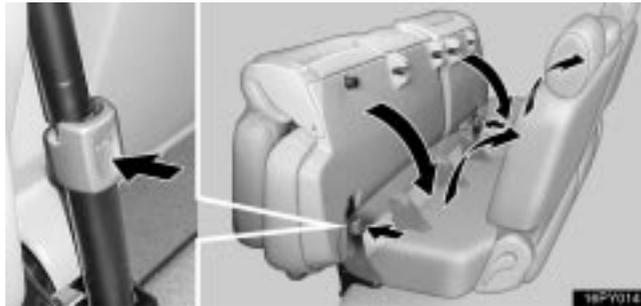


1. Lower the head restraints to the lowest position.

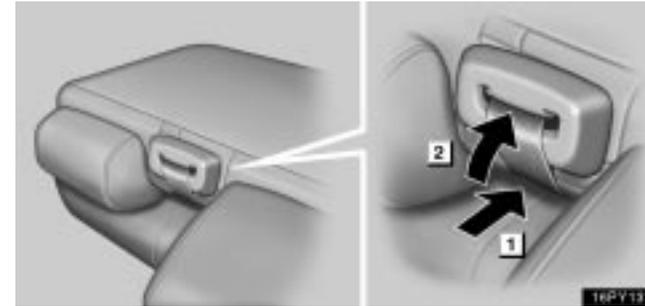


2. Fold down the seatbacks while pulling the lock release levers and swing the whole seats up and forward until they are locked.

## OCCUPANT RESTRAINT SYSTEMS



To return the seats to the original positions, push the red knobs and swing the whole seats down and swing the seatback up.



If you cannot raise the left side seatback because of the locked seat belt, do not try it hard. Release the lock of the seat belt in the following way.

- 1 Push in the lower front edge of the seatback to slacken the seat belt.
- 2 Let the seat belt retract a little.

## OCCUPANT RESTRAINT SYSTEMS

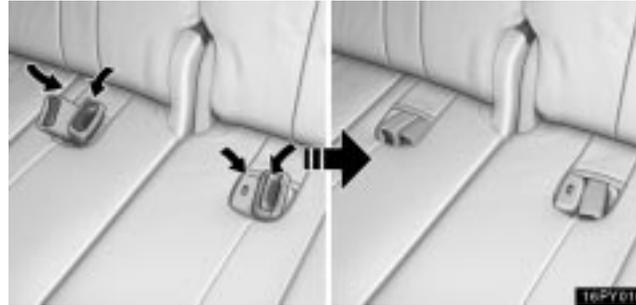
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### CAUTION

When returning the seats to their original position, observe the following precautions in order to prevent personal injury in a collision or sudden stop:

- Be careful not get your hands or feet pinched in the seat.
- Make sure the seats are securely locked by pushing forward and rearward on the top of the seatbacks or by trying to pull up the edge of the bottom cushions. Failure to do so will prevent the seat belt from operating properly.
- Make sure the seat belts are not twisted or caught under the seat and are arranged in their proper position and are ready to use.

### Folding up third seats



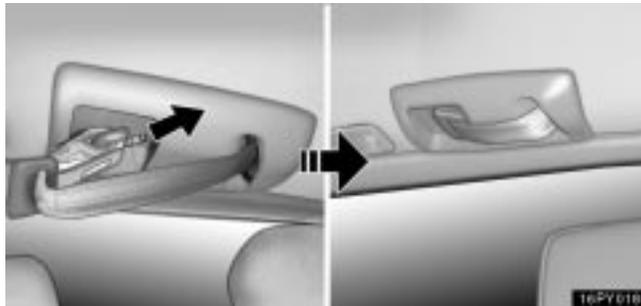
Stow the rear seat belt buckles as shown above.

## OCCUPANT RESTRAINT SYSTEMS



### ► *Seat belt hanger*

For the outer seat belts, use the seat belt hangers to prevent the belts from being tangled.



For the center seat belt, stow the seat belt tabs into the cover of the roof as shown above.

Make sure the tabs are securely locked in the cover.

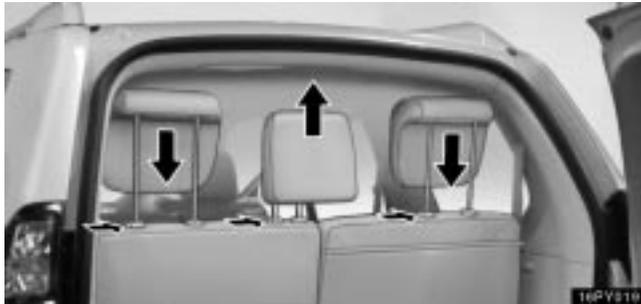
## OCCUPANT RESTRAINT SYSTEMS

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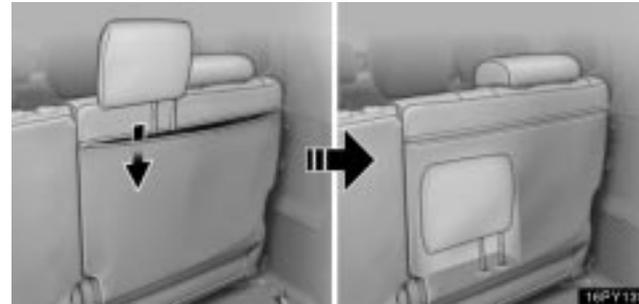
To release the concave end tab, see page 156 for instructions.

### **NOTICE**

*The seat belts and the buckles must be stowed before you fold up the seats.*



1. Lower the outboard head restraints to the lowest position and remove the center head restraint.

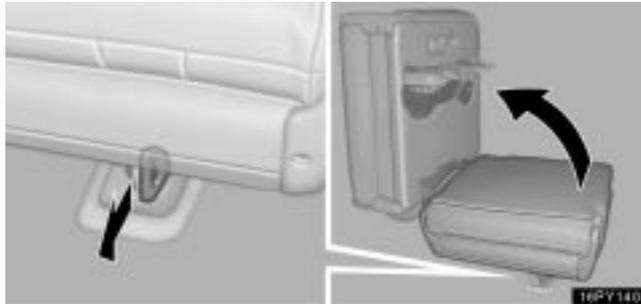


2. Unfasten the zippers behind the right side seatback and stow the center head restraint into the seatback.

## OCCUPANT RESTRAINT SYSTEMS



**3. Unlock the seatbacks by pushing the lock release levers forward and fold them down.**



**4. Unlock the seat legs by pulling the seat leg lock release knobs, and lift the whole seats sideward.**



**5. Retract the seat legs, then take the holding straps out and hang the straps to the assist grips. Pull the straps on the free end to secure the seats.**

## OCCUPANT RESTRAINT SYSTEMS

---

### CAUTION

When folding up the third seats, fix the seats securely by adjusting the length of the holding strap. Failure to do so may cause an unexpected injury in the event of emergency braking or collision.



When the third seat to its original position, stow the holding straps into the holders facing the direction shown in the illustration.

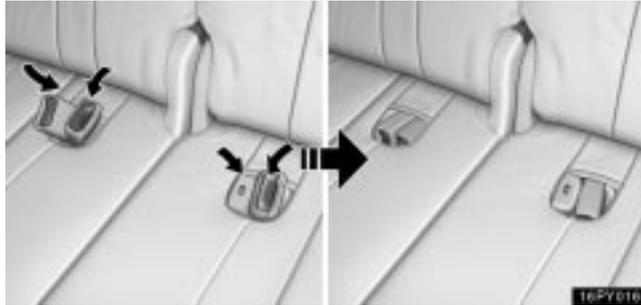
**To return them to the original positions, reverse the steps above.**

### CAUTION

When returning the seats to their original position, observe the following precautions in order to prevent personal injury in a collision or sudden stop:

- Be careful not get your hands or feet pinched in the seat.
- Make sure the seats are securely locked by pushing forward and rearward on the top of the seatbacks or by trying to pull up the edge of the bottom cushions. Failure to do so will prevent the seat belt from operating properly.
- Make sure the seat belts are not twisted or caught under the seat and are arranged in their proper position and are ready to use.

**Removing third seats**

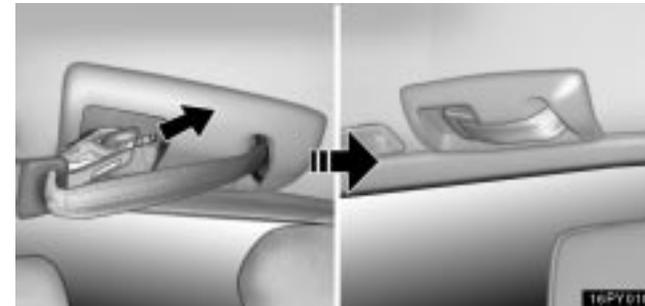


Stow the rear seat belt buckles as shown above.



► *Seat belt hanger*

For the outer seat belts, use the seat belt hangers to prevent the belts from being tangled.



For the center seat belt, stow the seat belt tabs into the cover of the roof as shown above.

## **OCCUPANT RESTRAINT SYSTEMS**

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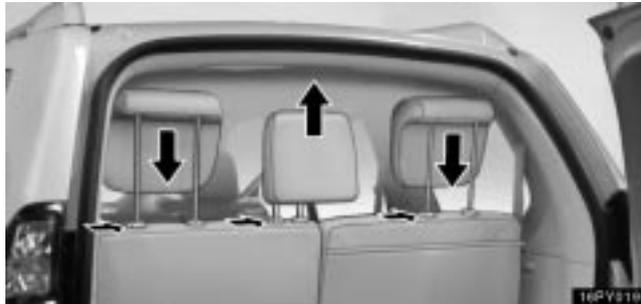
Make sure the tabs are securely locked in the cover.

## OCCUPANT RESTRAINT SYSTEMS

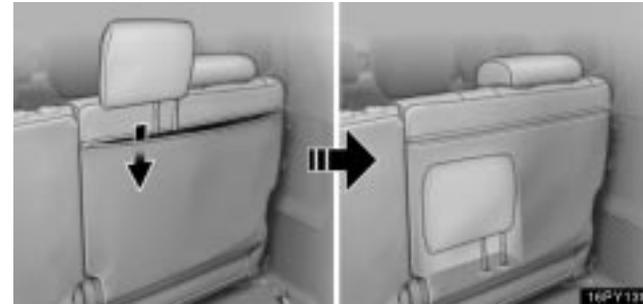
To release the concave end tab, see page 156 for instructions.

### **NOTICE**

*The seat belts and the buckles must be stowed before you remove the seats.*



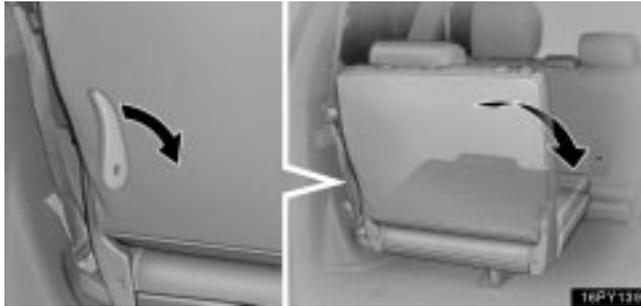
1. Lower the outboard head restraints to the lowest position and remove the center head restraint.



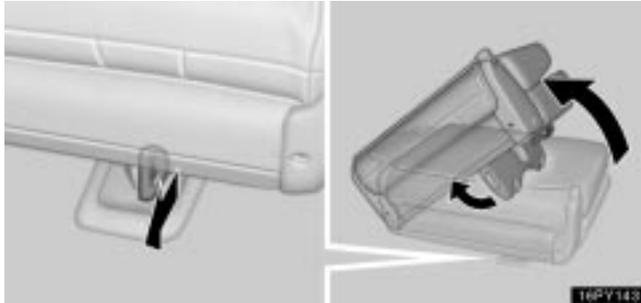
2. Unfasten the zippers behind the right side seatback and stow the center head restraint into the seatback.

## OCCUPANT RESTRAINT SYSTEMS

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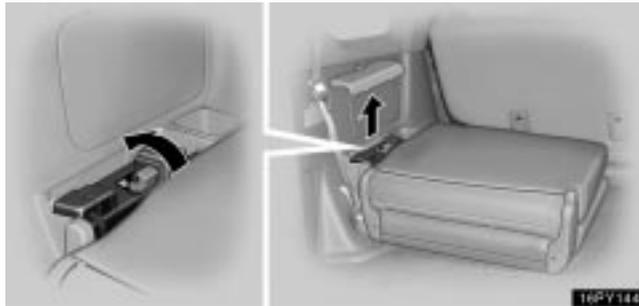
**3. Unlock the seatbacks by pushing the lock release levers forward and fold them down.**



**4. Unlock the seat legs by pulling the seat leg lock release knobs, and lift the whole seats. Retract the seat legs, then place the seats on the floor.**

## OCCUPANT RESTRAINT SYSTEMS

---



5. Remove the seat lock cover and push the seat lock release knobs, then pull up the whole seats and remove them. After removing the seats, reinstall the seat lock cover.

### **NOTICE**

*Avoid putting heavy loads on the removed seats. The metallic tips of the seat legs may be damaged and the seats cannot be reinstalled.*

## OCCUPANT RESTRAINT SYSTEMS

---

To return them to the original positions, reverse the steps above.



### CAUTION

When removing or reinstalling the seats, observe the following to prevent personal injury:

- Do not remove or reinstall the seats while the vehicle is moving.
- Be careful not to get your hands or feet pinched in the seats.
- Be careful not to hit the removed seats against a person or drop it on yourself.
- Do not try to sit on or place anything on the removed seat.

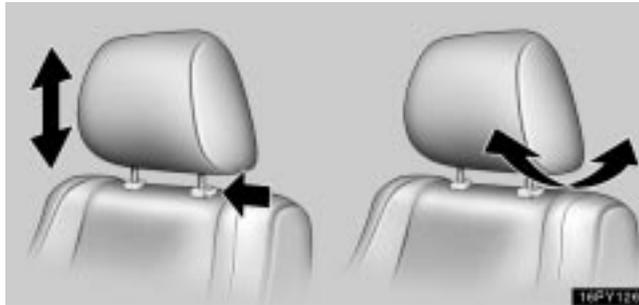
To prevent personal injury in a collision or sudden stop:

- Do not sit on or place anything on the folded seatback while driving.
- Do not leave the removed seat loose in the vehicle.
- After reinstalling the seats, make sure the seats are securely locked by pushing forward and rearward on the top of the seatbacks or by trying to pull up the edge of the bottom cushions. Failure to do so will prevent the seat belt from operating properly.
- Install each seat in the same position from which it was removed. Failure to do so will prevent third seat occupants from using seat belts properly.
- Make sure the seat belts are not twisted or caught under the seat and are arranged in their proper position and are ready to use.

## HEAD RESTRAINTS

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

### Front seat



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

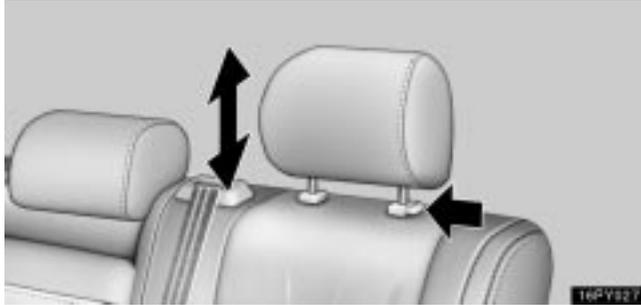
The head restraint is most effective when it is close to your head. Therefore, using a cushion on the seatback is not recommended.

### 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.

## OCCUPANT RESTRAINT SYSTEMS

### Second and third seats



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

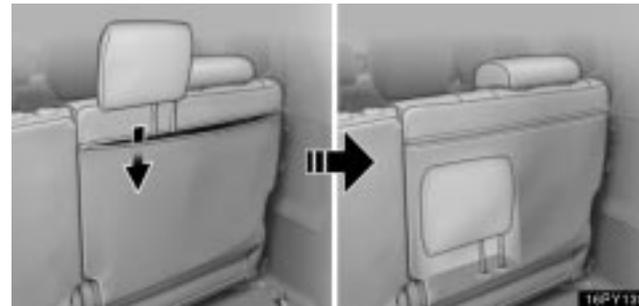
**Second center head restraint:** When an occupant sits on the second center seat, always pull up the head restraint to the lock position.

The head restraint is most effective when it is close to your head. Therefore, using a cushion on the seatback is not recommended.

### CAUTION

- Adjust the center of the head restraint so that it is closest to the top of your ears.
- After adjusting the head restraint, make sure it is locked in position.
- Do not drive with the head restraints removed.

### Stowing the third center head restraint



The third center head restraint can be stowed in the right side third seatback when they are not in use.

To stow the head restraint, unfasten the zippers behind the seatback and stow it into the seatback.

## ARMRESTS

Front seats



### NOTICE

*To prevent damage to the armrest, avoid putting heavy loads on it.*

To use the armrest, lower the armrest to the lowest position and raise it to the desired angle. Raising the armrest to the highest position unlocks the armrest to let you return it to the lowest position.

## OCCUPANT RESTRAINT SYSTEMS

---

### Second seat

To use the armrest, pull it down as shown above.



#### **NOTICE**

*To prevent damage to the armrest, avoid putting heavy loads on it.*

## SEAT BELTS

### Seat belt precautions

Lexus strongly urges that the driver and passengers in the vehicle be properly restrained at all times with the seat belts provided. Failure to do so could increase the chance of injury and/or the severity of injury in accidents.

The seat belts provided for your vehicle are designed for people of adult size, large enough to properly wear them.

**Child.** Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belts. See "Child restraint" on page 200 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.**

## OCCUPANT RESTRAINT SYSTEMS

---

- Be careful not to damage the belt webbing or hardware. Take care that they do not get caught or pinched in the seat or doors.
- Inspect the belt system periodically. Check for cuts, fraying, and loose parts. Damaged parts should be replaced. Do not disassemble or modify the system.
- Keep the belts clean and dry. If they need cleaning, use a mild soap solution or lukewarm water. Never use bleach, dye, or abrasive cleaners, or allow them to come into contact with the belt — they may severely weaken the belts. (See “Cleaning the interior” on page 633 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.

## OCCUPANT RESTRAINT SYSTEMS

### Fastening front, second and third 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 200.) To free the belt again, fully retract the belt and then pull the belt out once more.

If the seat belt cannot be pulled out of the retractor, firmly pull the belt and release it. You will then be able to smoothly pull the belt out of the retractor.



### CAUTION

- After inserting the tab, make sure the tab and buckle are locked and that the belt is not twisted.
- Do not insert coins, clips, etc. in the buckle as this may prevent you from properly latching the tab and buckle.
- If the seat belt does not function normally, immediately contact your Lexus dealer. Do not use the seat until the seat belt is fixed, because it cannot protect an adult occupant or your child from injury.

## OCCUPANT RESTRAINT SYSTEMS



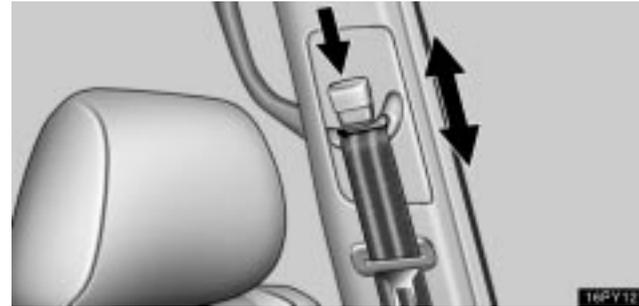
### Adjust the position of the lap and shoulder belts.

- 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 and second outboard 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.

## OCCUPANT RESTRAINT SYSTEMS



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.

### CAUTION

Do not separate the buckle with light gray buckle release button. Otherwise, the seat belt may not work properly. See the information in the following columns.

### Third center seat belt



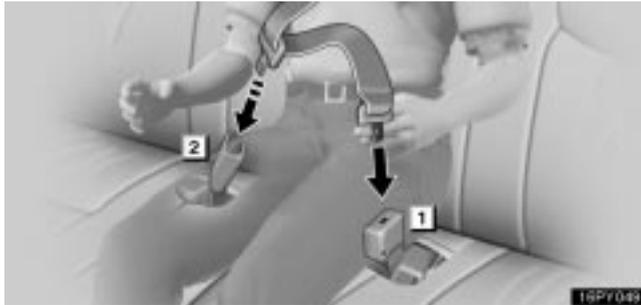
#### ► *Buckle with light gray buckle release button*

The third center seat belt is a 3-point type restraint with 2 buckles. Both seat belt buckles must be correctly located and securely latched for proper operation.

Make sure that buckle with light gray buckle release button is securely latched for ready use of the center seat belt.

## OCCUPANT RESTRAINT SYSTEMS

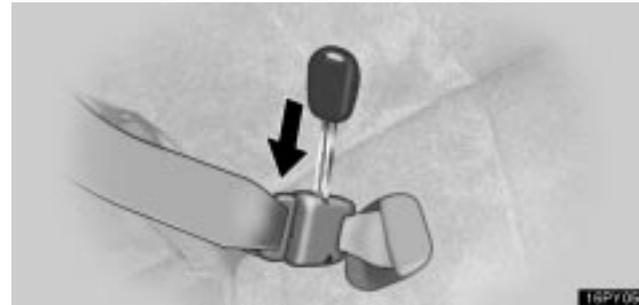
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### Two buckles and tabs for third center seat belt.

The 2 buckles for the third center seat belt are distinguished with colors of the buckle release button. Also the 2 tabs have different shape for its end so that the belt is not buckled in the wrong place.

- 1** Buckle with light gray buckle release button:  
Properly matches with concave end tab
- 2** Buckle with red buckle release button:  
Properly matches with round end tab



To release the concave end tab, insert the key into the hole on buckle with light gray buckle release button and allow the belt to retract.

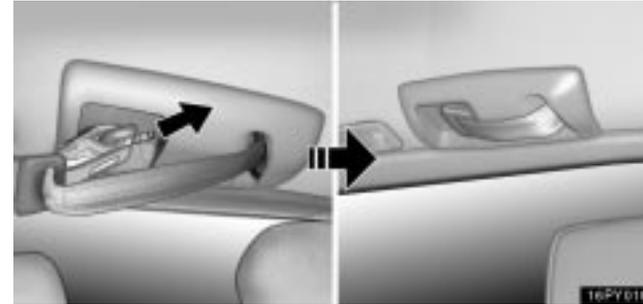
## OCCUPANT RESTRAINT SYSTEMS



### CAUTION

Do not use the third center seat belt with either buckle release. Fastening only the shoulder belt or lap belt may cause severe personal injury in case of sudden braking or a collision.

### STOWING THE THIRD CENTER SEAT BELT



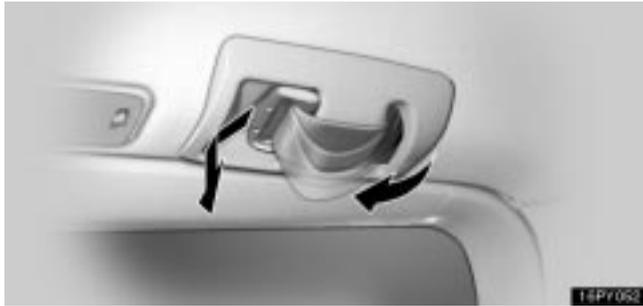
Stow the seat belt tabs into the cover of the roof as shown above.

Make sure the tabs are securely locked in the cover.

## OCCUPANT RESTRAINT SYSTEMS

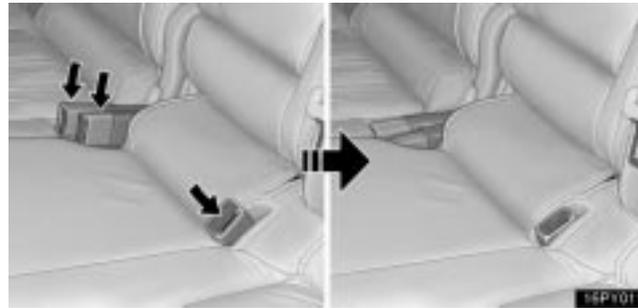
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### PULLING OUT THE THIRD CENTER SEAT BELT

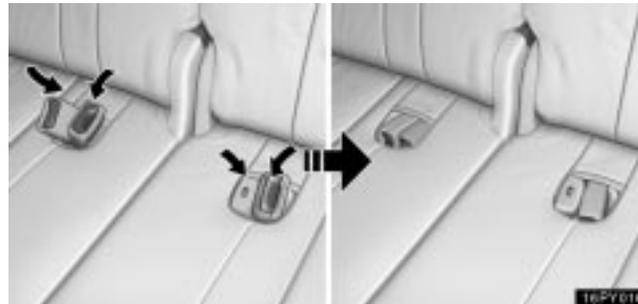


Pull the belt out a little and pull the tabs out from the cover.

### Stowing the second and third seat belt buckles



► *Second seat*



► *Third seat*

## OCCUPANT RESTRAINT SYSTEMS

The second and third seat belt buckles can be stowed when they are not in use.

### Hanging the third outboard seat belts



#### ► *Seat belt hanger*

The third outboard seat belts can be hung when they are not in use.

#### CAUTION

The third outboard seat belts must be removed from the hangers when they are in use.

### Seat belt extender

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

Please contact your local Lexus dealer 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 reduce the effectiveness of the seat belt restraint system in case of an accident, increasing the chance of personal injury.

- Remember that the extender provided for you may not be safe when used on a different vehicle, for another person, or at a different seating position than the one originally intended.

## OCCUPANT RESTRAINT SYSTEMS

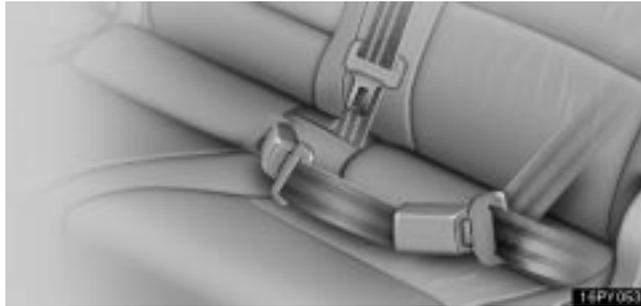
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- If the seat belt extender has been connected to the driver's seat belt buckle without wearing the seat belt when using the extender in the driver's seat, the SRS driver's airbag system will judge that the driver wears the seat belt even if not wearing 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, causing 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.

## OCCUPANT RESTRAINT SYSTEMS



**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.

## OCCUPANT RESTRAINT SYSTEMS

### Seat belt pretensioners



**The driver and front passenger's seat belt pretensioners are designed to be activated in response to a severe frontal impact or a vehicle rollover.**

When the sensor detects a severe frontal impact or a vehicle rollover, the front seat belts are quickly drawn back by the retractors so that the belts snugly restrain the front seat 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 194.)

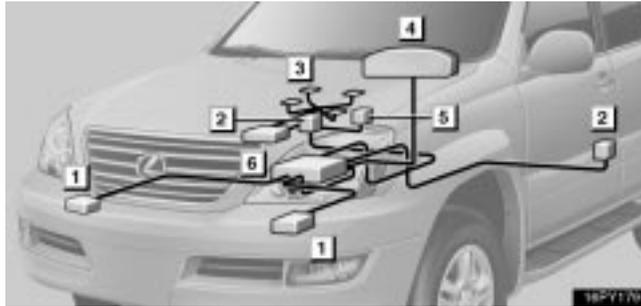
The seat belt pretensioners and SRS airbags may not operate together in case of collisions at a certain speeds and angles.



#### ► **Roll sensing of curtain shield airbags off (RSCA OFF) indicator light**

The seat belt pretensioners will not operate in a vehicle rollover if the "RSCA OFF" indicator light is on. For details, see "Roll sensing of curtain shield airbags off switch" on page 199.

## OCCUPANT RESTRAINT SYSTEMS



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

The front seat belt pretensioner system consists mainly of the above components, and their locations are shown in the illustration.

The front seat belt pretensioners are controlled by the airbag sensor assembly. The airbag sensor assembly consists of a safing sensor and airbag sensor.

When the front 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 front 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 repairs and modifications.
- Do not modify or change the suspension system. Such changes may cause the curtain shield airbags to inflate accidentally, which could result in death or serious injury. Consult your Lexus dealer about any repair and modification.
- Do not use tires or wheels other than the manufacture's recommended size. Such a use may cause the curtain shield airbags and seat belt pretensioners to inflate accidentally, which could result in death or serious injury. For details, see "Checking and replacing tires" on page 589.

## OCCUPANT RESTRAINT SYSTEMS

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- Do not place luggage heavier than specified on the roof luggage carrier. Such luggage may cause the curtain shield airbags and seat belt pretensioners to inflate accidentally, which could result in death or serious injury. For details, see “Roof luggage carrier” on page 120.

### **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 front seat belt retractor assemblies*
- *Modification of the suspension system*
- *Modification of the front end structure*
- *Attachment of a grille guard (bull bar, kangaroo bar, etc.), snowplow, winches or any other equipment to the front end*
- *Repairs made on or near the front fenders, the front end structure and console*

## OCCUPANT RESTRAINT SYSTEMS



**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.**

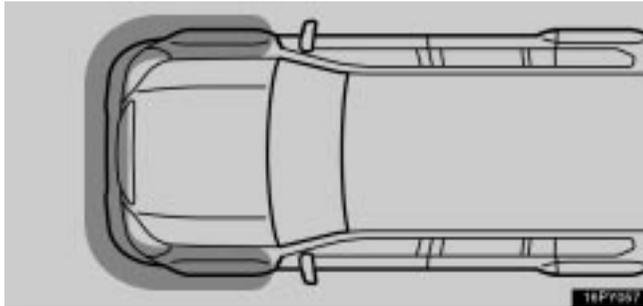
This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensor assemblies, curtain shield airbag sensor assemblies, driver's seat position sensor, driver's seat belt buckle switch, front passenger occupant classification system, "AIRBAG ON" indicator light, "AIRBAG OFF" indicator light, front passenger's seat belt buckle switch, front seat belt pretensioner assemblies, inflators, warning light, "RSCA OFF" indicator light, interconnecting wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" on page 62.)

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 or flashes.
- The light comes on or starts flashing while driving.
- If either front seat belt does not retract or cannot be pulled out due to a malfunction or activation of the relevant front seat belt pretensioner.
- The front seat belt pretensioner assembly or surrounding area has been damaged.

## OCCUPANT RESTRAINT SYSTEMS

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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 front seat belt pretensioners to operate.
- The front seat belt pretensioner assembly is scratched, cracked, or otherwise damaged.

## xSRS 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.**

In response to a severe frontal impact, the SRS front airbags work together with the seat belts to help reduce injury by inflating. The SRS front airbags help to reduce injuries mainly to the driver's or front passenger's head or chest caused hitting the vehicle interior.

## OCCUPANT RESTRAINT SYSTEMS

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 194.)

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 151.

- 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 second or third seat of the vehicle and properly restrained. The second or third seat is the safest for infants and children. For instructions concerning the installation of a child restraint system, see “Child restraint” on page 200.

## OCCUPANT RESTRAINT SYSTEMS

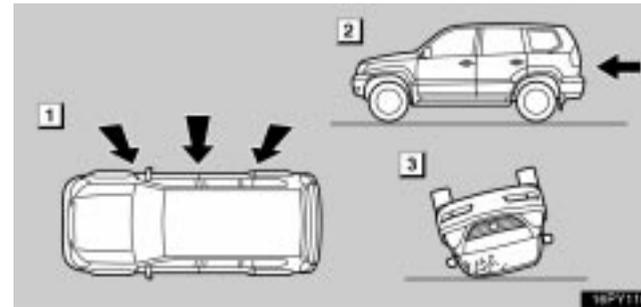
The SRS front airbags are designed to deploy in severe (usually frontal) collisions where the magnitude and duration of the forward deceleration of the vehicle exceeds the designed threshold level.

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.

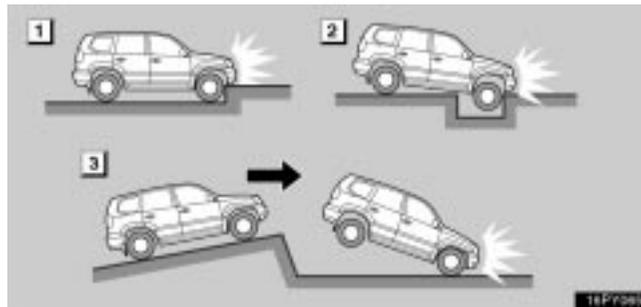
Always wear your seat belts properly.



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

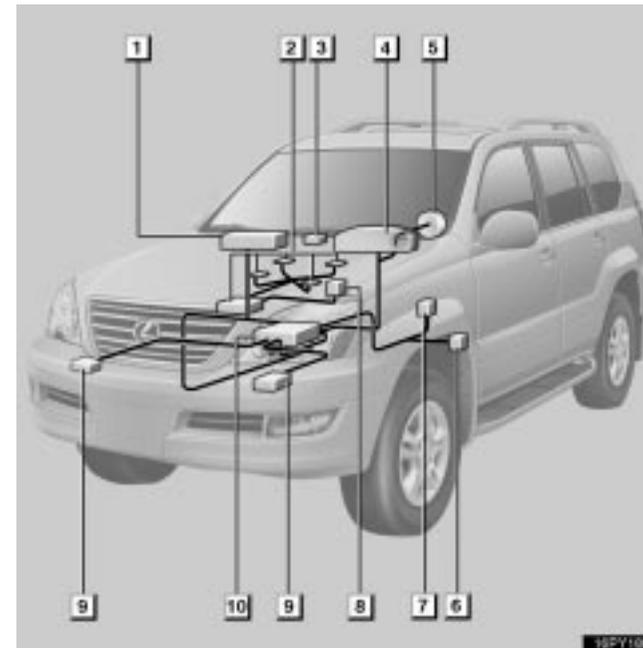
**The SRS front airbags are generally not designed to inflate if the vehicle is involved in a side or rear collision, if it rolls over, or if it is involved in a low-speed frontal collision. But, whenever a collision of any type causes sufficient forward deceleration of the vehicle, deployment of the SRS front airbags may occur.**

## OCCUPANT RESTRAINT SYSTEMS



- ▶ **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.



## OCCUPANT RESTRAINT SYSTEMS

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- ▶ **1** *Airbag module for front passenger (airbag and inflator)*
- 2** *Front passenger occupant classification system (ECU and sensors)*
- 3** *“AIRBAG ON” and “AIRBAG OFF” indicator lights*
- 4** *SRS warning light*
- 5** *Airbag module for driver (airbag and inflator)*
- 6** *Driver’s seat position sensor*
- 7** *Driver’s seat belt buckle switch*
- 8** *Front passenger’s seat belt buckle switch*
- 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 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.

## OCCUPANT RESTRAINT SYSTEMS

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 125.**

## OCCUPANT RESTRAINT SYSTEMS

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- 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 inflate with considerable speed and force. Anyone who is up against, or very close to, an airbag when it inflates, can be killed or seriously injured. Sit up straight and well back in the seat, and always use your seat belt properly.

## OCCUPANT RESTRAINT SYSTEMS



- 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 second or third seat. For instructions concerning the installation of a child restraint system, see “Child restraint” on page 200.



## OCCUPANT RESTRAINT SYSTEMS

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- 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*

## OCCUPANT RESTRAINT SYSTEMS

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**The 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.**

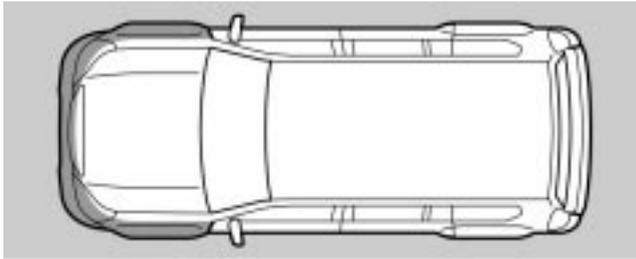
This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensor assemblies, curtain shield airbag sensor assemblies, driver's seat position sensor, driver's seat belt buckle switch, front passenger occupant classification system, "AIRBAG ON" indicator light, "AIRBAG OFF" indicator light, front passenger's seat belt buckle switch, front seat belt pretensioner assemblies, inflators, warning light, "RSCA OFF" indicator light, interconnecting wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" on page 62.)

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 or flashes.
- The light comes on or starts flashing 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.

## OCCUPANT RESTRAINT SYSTEMS



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.

## OCCUPANT RESTRAINT SYSTEMS

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- 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 194.)

Roll sensing function:

In response to a vehicle rollover, the curtain shield airbags on both sides work with the seat belts to help reduce injury by inflating. The curtain shield airbags help reduce injuries mainly to the driver's, front passenger's or second passenger's head and help prevent them from being thrown out of the vehicle. (This function can be turned off if inflation is not desired. See "Roll sensing of curtain shield airbags off switch" on page 199.)

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

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

Always wear your seat belt properly.

## OCCUPANT RESTRAINT SYSTEMS

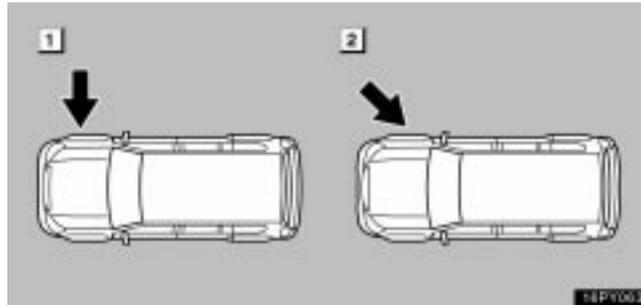
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### CAUTION

- 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 second 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 151.
- Do not allow anyone to lean his/her head or any part of his/her body against the door or the area of the seat, front pillar, rear pillar or roof side rail from which the SRS side airbag and curtain shield airbag deploy even if he/she is a child seated in the child restraint system. It is dangerous if the SRS side airbag and curtain shield airbag inflate, and the impact of the deploying airbags could cause death or serious injury to the occupant.

- Improperly seated and/or restrained infants and children can be killed or seriously injured by the deploying airbags. An infant or child who is too small to use a seat belt should be properly secured using a child restraint system. Lexus strongly recommends that all infants and children be placed in the second or third seats of the vehicle and properly restrained. The second or third seats are the safest for infants and children. For instructions concerning the installation of a child restraint system, see “Child restraint” on page 200.

## OCCUPANT RESTRAINT SYSTEMS



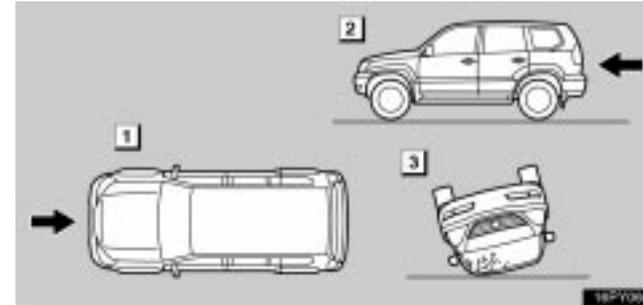
- ▶ **1** Collision from the side to the vehicle body other than the passenger compartment
- ▶ **2** Collision from the side at an angle

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 are designed to inflate when the passenger compartment area suffers a severe impact from the side.

The curtain shield airbags are designed to inflate when the passenger compartment area suffers a severe impact from the side or vehicle rollover.

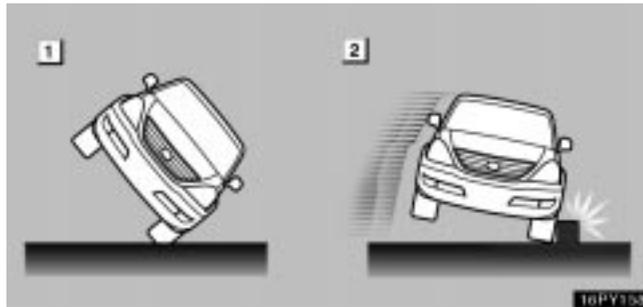
Always wear your seat belts properly.



- ▶ **1** Collision from the front
- ▶ **2** Collision from the rear
- ▶ **3** Vehicle rollover

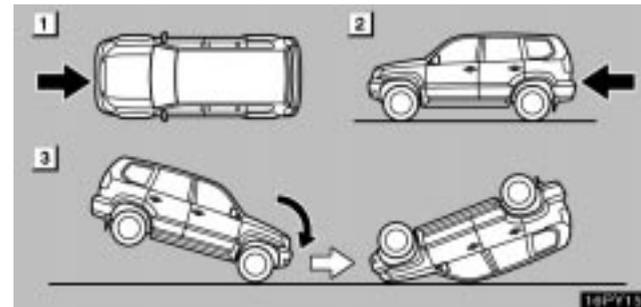
The SRS side airbags are not generally designed to inflate if the vehicle is involved in a front or rear collision, if it rolls over, or if it is involved in a low-speed side collision.

## OCCUPANT RESTRAINT SYSTEMS



- ▶ **1** *The angle of vehicle tip-up is marginal*
- ▶ **2** *Skidding vehicle hitting a curb stone*

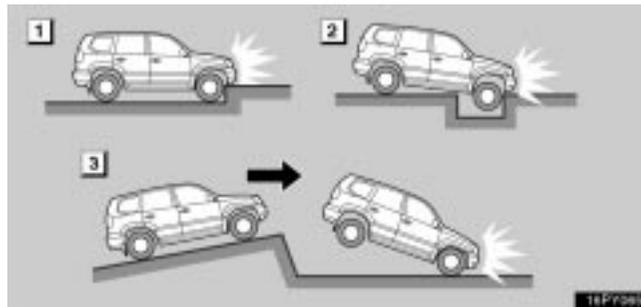
The curtain shield airbags may inflate if the angle of vehicle tip-up is marginal or if the skidding vehicle's tires hit a curb stone laterally as shown in the illustration.



- ▶ **1** *Collision from the front*
- ▶ **2** *Collision from the rear*
- ▶ **3** *Pitching end over end*

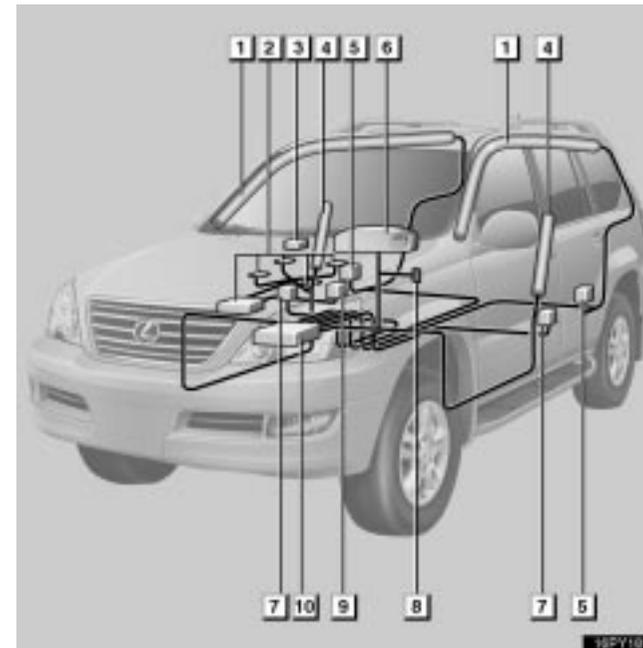
The curtain shield airbags are not generally designed to inflate if the vehicle is involved in a front or rear collision, if it pitches end over end, or if it is involved in a low-speed side collision.

## OCCUPANT RESTRAINT SYSTEMS



- ▶ **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 side and curtain shield airbags may deploy if a serious impact occurs to the underside of your vehicle. Some examples are shown in the illustration.



## OCCUPANT RESTRAINT SYSTEMS

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- ▶ **1** *Curtain shield airbag modules (airbag and inflator)*
- 2** *Front passenger occupant classification system (ECU and sensors)*
- 3** *“AIRBAG ON” and “AIRBAG OFF” indicator lights*
- 4** *Side airbag modules (airbag and inflator)*
- 5** *Curtain shield airbag sensor assemblies*
- 6** *SRS warning light and “RSCA OFF” indicator light*
- 7** *Side and curtain shield airbag sensor assemblies*
- 8** *Roll sensing of curtain shield airbags off switch*
- 9** *Front passenger’s seat belt buckle switch*
- 10** *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.

In a vehicle rollover, the airbag sensor assembly triggers the curtain shield airbag inflator. 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.

## OCCUPANT RESTRAINT SYSTEMS

### 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.
- Improper sitting and wearing of the seat belts may not retain you inside the vehicle.



## OCCUPANT RESTRAINT SYSTEMS



- Make sure the “RSCA OFF” indicator light is off. The curtain shield airbags will not inflate in a vehicle rollover if this indicator light is on and you may be killed or seriously injured. For details, see “Roll sensing of curtain shield airbags off switch” on page 199.



- 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.

## OCCUPANT RESTRAINT SYSTEMS

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- 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.

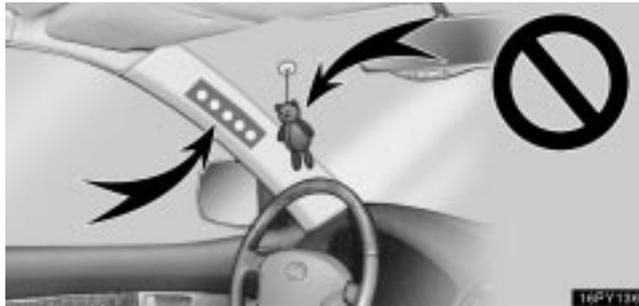
## OCCUPANT RESTRAINT SYSTEMS

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- Do not attach a cupholder or any other device or object on or around the door. When the side airbag and curtain shield airbag inflate, the cupholder or any other device or object will be thrown with great force, or the side airbag and curtain shield 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.

## OCCUPANT RESTRAINT SYSTEMS



- 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.

## OCCUPANT RESTRAINT SYSTEMS

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- 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 rails containing the curtain shield airbags. Such changes may disable the system or cause the curtain shield airbags to inflate accidentally, resulting in death or serious injury.
- Do not modify or change the suspension system. Such changes may cause the curtain shield airbags to inflate accidentally, which could result in death or serious injury. Consult your Lexus dealer about any repair and modification.
- Do not use tires or wheels other than the manufacture's recommended size. Such a use may cause the curtain shield airbags and seat belt pretensioners to inflate accidentally, which could result in death or serious injury. For details, see "Checking and replacing tires" on page 589.

- Do not place luggage heavier than specified on the roof luggage carrier. Such luggage may cause the curtain shield airbags and seat belt pretensioners to inflate accidentally, which could result in death or serious injury. For details, see “Roof luggage carrier” on page 120.

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*

## OCCUPANT RESTRAINT SYSTEMS

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**The 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 ON” indicator light, “AIRBAG OFF” indicator light, front passenger’s seat belt buckle switch, front seat belt pretensioner assemblies, inflators, warning light, “RSCA OFF” indicator light, interconnecting wiring and power sources. (For details, see “Service reminder indicators and warning buzzers” on page 62 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 or flashes.
- The light comes on or starts flashing 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.

## OCCUPANT RESTRAINT SYSTEMS



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.***

## OCCUPANT RESTRAINT SYSTEMS

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### 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 airbags. The system monitors the weight and load on the front passenger seat, and the seat belt buckle switch in determining conditions 1 — 4.

In order for the system to detect the conditions correctly, do not do any of the following:

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



The “AIRBAG OFF” indicator lights will be illuminated when the ignition switch is in the “ON” position and a child or 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.

## OCCUPANT RESTRAINT SYSTEMS

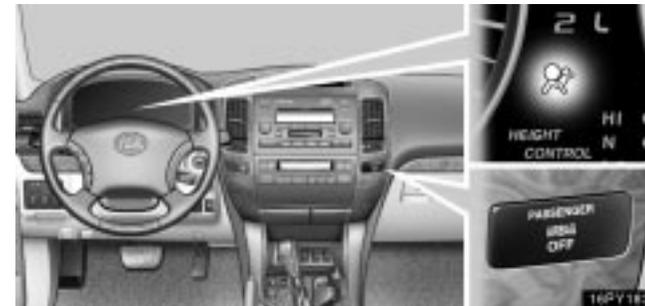
If the front passenger occupant classification system determines that a person of adult size sits in the front passenger seat but the “AIRBAG OFF” indicator light is illuminated, one of the following is likely to have occurred:

- The rear passenger lifts the front passenger seat cushion with their legs.
- Objects are placed under the front passenger seat.
- A front passenger seat seatback is in contact with a 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 sits 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 ON” and “AIRBAG OFF” indicator light 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 about two seconds, the front passenger occupant classification system operates and judges whether to turn the indicator light on or not.**



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

## OCCUPANT RESTRAINT SYSTEMS

### *Condition and operation in the front passenger occupant classification system*

Condition detected by the front passenger occupant classification system	Indicator/warning light			Devices			
	"AIRBAG ON" and "AIRBAG OFF" indicator lights	SRS warning light	Front passenger's seat belt reminder light	Front passenger airbag	Side airbag on the front passenger seat	Curtain shield airbag in the front passenger side	Front passenger's seat belt pretensioner
1 Adult*1	"AIRBAG ON"	Off	Flashing*4	Activated			
2 Child *2 or child restraint system*3	"AIRBAG OFF"	Off	Flashing*4	Deactivated	Activated		Activated
3 Unoccupied	Not illuminated	Off	Off	Deactivated			Deactivated
4 There is a malfunction in the system	"AIRBAG OFF"	On	Off	Deactivated			Activated

\*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 202 as for installing the child restraint system.)

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

## OCCUPANT RESTRAINT SYSTEMS

### 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 "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.

- Do not apply a heavy load to the front passenger seat or equipment (e.g. armrest).
  - Do not put weight on the front passenger seat by putting your hands or feet on the front passenger seat seatback from the rear passenger seat.
  - Do not let a rear passenger lift the front passenger seat with their feet or press on the seatback with their legs.
  - Do not put objects under the front passenger seat.
  - Do not recline the front passenger 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.

## OCCUPANT RESTRAINT SYSTEMS

---

- If an adult sits in the front passenger seat, the “AIRBAG ON” indicator light should be illuminated. If the “AIRBAG OFF” indicator is illuminated, ask the passenger to sit up straight, well back in the seat, feet on the floor, and with the seat belt worn correctly. If the “AIRBAG OFF” indicator still remain illuminated, either ask the passenger to move to the rear seat, or if that is not possible, move the front passenger seat fully rearward.
- When it is unavoidable to install the forward-facing child restraint system on the front passenger seat, install the child restraint system on the front passenger seat in the proper order. (As for the installation order, see “Child restraint system” on page 202.)
- Do not remove the seat.
- Do not kick the front passenger seat or subject it to severe impact. Otherwise, the SRS warning light may come on to indicate a malfunction of the detection system. In this case, contact your Lexus dealer immediately.
- Child restraint systems installed on the rear seat should not contact the front seatbacks.

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 an activated condition — the airbags will deploy if an impact meets the deployment criteria. Refer to all the cautions in this Section and “Child restraint system” on page 202.

## ROLL SENSING OF CURTAIN SHIELD AIRBAGS OFF SWITCH



The roll sensing of curtain shield airbags off switch (“RSCA OFF” switch) can turn off the curtain shield airbags and seat belt pretensioners in a vehicle rollover. This switch should only be used if inflation is not desired (such as extreme off-road driving).

When you push the “RSCA OFF” switch for a few seconds with the ignition switch on, the “RSCA OFF” indicator light comes on and the roll sensing function is turned off. When you push the switch again, the indicator light goes off and the roll sensing function is turned on. (For details about the roll sensing function, see “SRS side airbags and curtain shield airbags” on page 179.)

In a severe side impact, the curtain shield airbags on impacted side will inflate even if the roll sensing function is turned off. (For details about the curtain shield airbags, see “SRS side airbags and curtain shield airbags” on page 179.)

In a severe frontal impact, the seat belt pretensioners will work even if the roll sensing function is turned off. (For details about the seat belt pretensioners, see “Seat belt pretensioners” on page 162.)

If the ignition switch is turned to “ACC” or “LOCK” with the roll sensing function off and then the ignition switch is turned back to “ON”, the roll sensing function will turn back on automatically.

### CAUTION

- Before normal driving, make sure the “RSCA OFF” indicator light is off.
- When the roll sensing function is turned off (and the “RSCA OFF” indicator light is on), the curtain shield airbags and seat belt pretensioners will not work in a vehicle rollover. Turning off the curtain shield airbags and seat belt pretensioners reduces occupant protection which your vehicle safety systems can provide in accidents and increase the likelihood of death or serious injuries.

## OCCUPANT RESTRAINT SYSTEMS

---

### CHILD RESTRAINT

#### Child restraint precautions

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

The laws of all 50 states in the U.S.A. and Canada now require the use of a child restraint system.

Your vehicle conforms to SAE J1819.

If a child is too large for a child restraint system, the child should sit in the rear seat and must be restrained using the vehicle's seat belt. See "Seat belts" on page 151 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.

## OCCUPANT RESTRAINT SYSTEMS

---

- 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 curtain shield airbags inflate, and the impact could cause death or serious injury to the child.

## OCCUPANT RESTRAINT SYSTEMS

---

- **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 somewhere other than the passenger compartment. This will prevent it from injuring passengers in the event of a sudden stop or accident.

## OCCUPANT RESTRAINT SYSTEMS

### 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

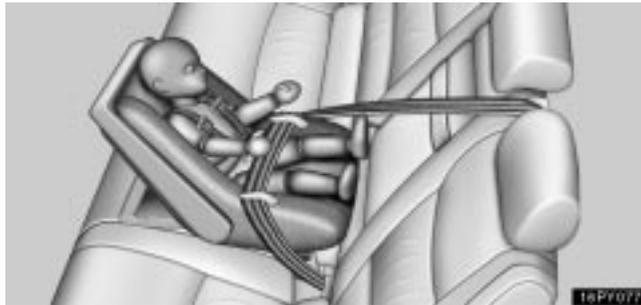
Install the child restraint system following the instructions provided by its manufacturer.

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 219.

The child restraint lower anchorages approved for your vehicle may also be used. See "Installation with child restraint lower anchorages" on page 222.

### (A) Infant seat



### (B) Convertible seat



### (C) Booster seat



## OCCUPANT RESTRAINT SYSTEMS

### INSTALLATION WITH 3-POINT TYPE SEAT BELT

#### (A) Infant seat installation



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



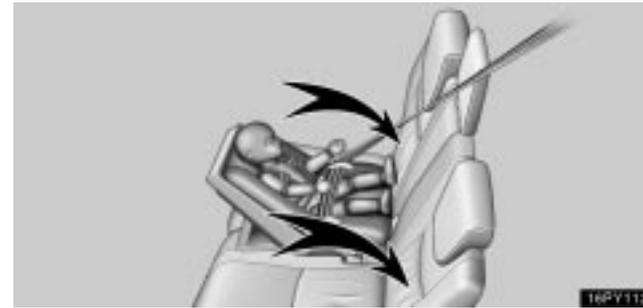
#### CAUTION

- 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.

## OCCUPANT RESTRAINT SYSTEMS



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

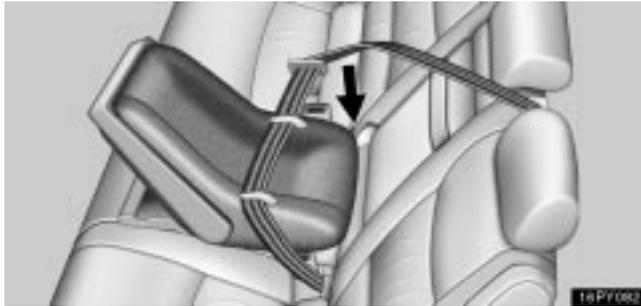


► *Align both third seatbacks at the same angle*

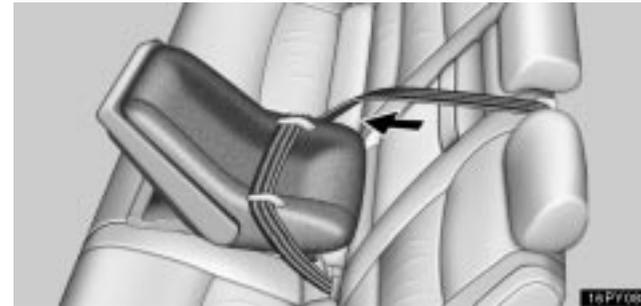
- When installing a child restraint system in the third center position, align both seatbacks at the same angle. Otherwise, the child restraint system cannot be securely restrained and this may cause death or serious injuries in a collision.

## OCCUPANT RESTRAINT SYSTEMS

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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.



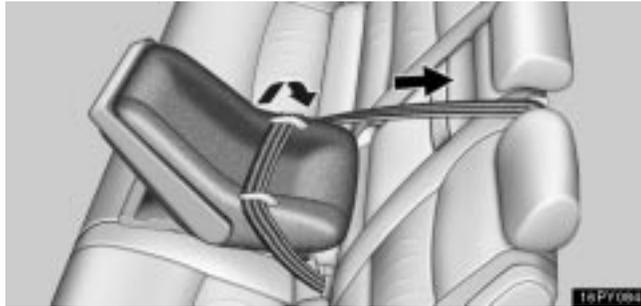
2. Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted even slightly, it cannot be extended.

To hold the infant seat securely, make sure the belt is in the lock mode before letting the belt retract.

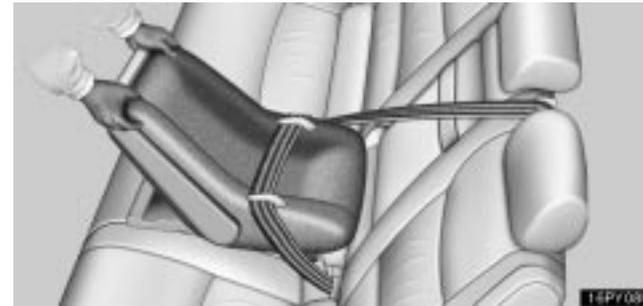
### CAUTION

- 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.

## OCCUPANT RESTRAINT SYSTEMS



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.

## OCCUPANT RESTRAINT SYSTEMS

---



4. To remove the infant seat, press the buckle release button and allow the belt to retract completely. The belt will move freely again and be ready to work for an adult or older child passenger.

### (B) Convertible seat installation



**A convertible seat must be used in forward-facing or rear-facing position depending on the age and size of the child. When installing, follow the manufacturer's instructions about the appropriate age and size of the child as well as directions for installing the child restraint system.**

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.

## OCCUPANT RESTRAINT SYSTEMS

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.

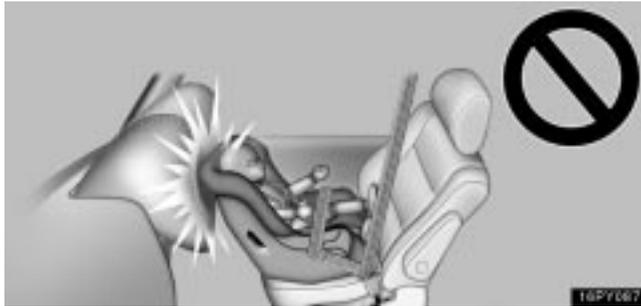
The “AIRBAG OFF” indicator light should be illuminated when the ignition key is “ON” and the child is in the child restraint system after following these procedures. The “AIRBAG OFF” indicator light indicates the SRS front passenger airbag and side airbag on the passenger side will not deploy. If the “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 ON” 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.**

## OCCUPANT RESTRAINT SYSTEMS

---



### 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.



► *Move seat fully back*

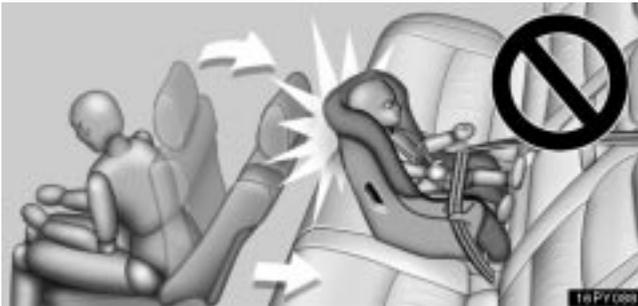
## OCCUPANT RESTRAINT SYSTEMS

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- 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 inflates 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 airbag and curtain shield airbag inflate, and the impact could cause death or serious injury to the child.

## OCCUPANT RESTRAINT SYSTEMS

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



► *Align both third seatbacks at the same angle*

- When installing a child restraint system in the third center position, align both seatbacks at the same angle. Otherwise, the child restraint system cannot be securely restrained and this may cause death or serious injuries in a collision.

## OCCUPANT RESTRAINT SYSTEMS



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.



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.

### 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.

## OCCUPANT RESTRAINT SYSTEMS

---



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.

## OCCUPANT RESTRAINT SYSTEMS



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.**

## OCCUPANT RESTRAINT SYSTEMS

---



► *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 airbag and curtain shield airbag inflate, and the impact could cause death or serious injury to the child.

## OCCUPANT RESTRAINT SYSTEMS



► **Align both third seatbacks at the same angle**

- **When installing a child restraint system in the third center position, align both seatbacks at the same angle. Otherwise, the child restraint system cannot be securely restrained and this may cause death or serious injuries in a collision.**



1. Sit the child on a booster seat. Run the lap and shoulder belt through or around the booster seat and 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 151 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.**

## OCCUPANT RESTRAINT SYSTEMS

---

- 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.

## OCCUPANT RESTRAINT SYSTEMS

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2. To remove the booster seat, press the buckle release button and allow the belt to retract.

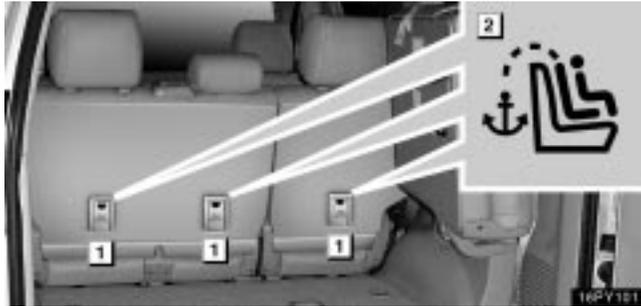
### Using a top strap



Follow the procedure below for a child restraint system that requires the use of a top strap.

## OCCUPANT RESTRAINT SYSTEMS

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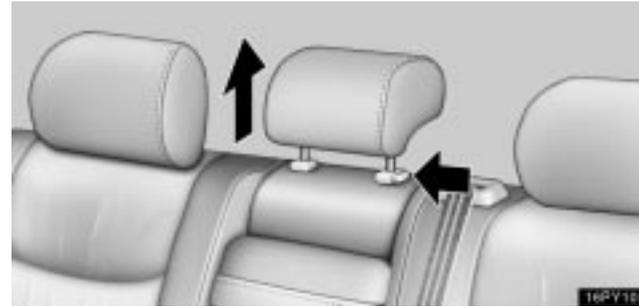


- **1** *Anchor brackets*    **2** *Symbol mark*

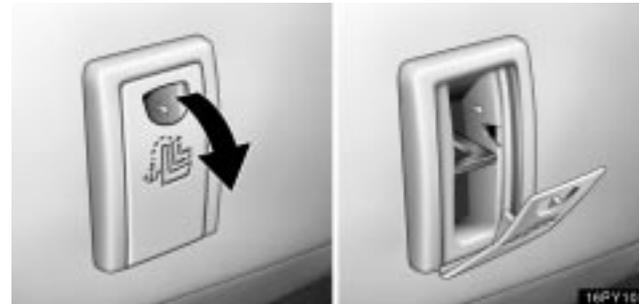
Use the anchor brackets on the back of the second seatback to attach the top strap.

Anchor brackets are installed for each second seating positions.

This symbol mark indicates the location of the anchor brackets.



- 1. Remove the head restraint.**



- 2. Open the cover of the anchor bracket.**

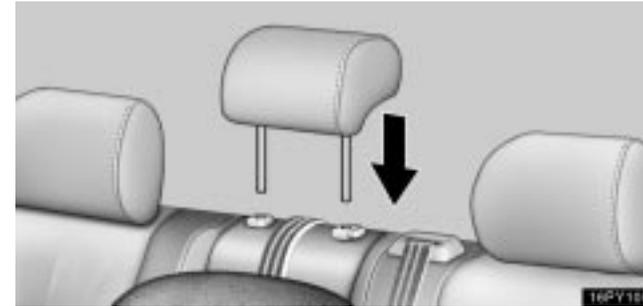
## OCCUPANT RESTRAINT SYSTEMS



**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 202.



**5. Replace the head restraint.**

Be sure to close the cover when the anchor bracket is not in use.

### CAUTION

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

## OCCUPANT RESTRAINT SYSTEMS

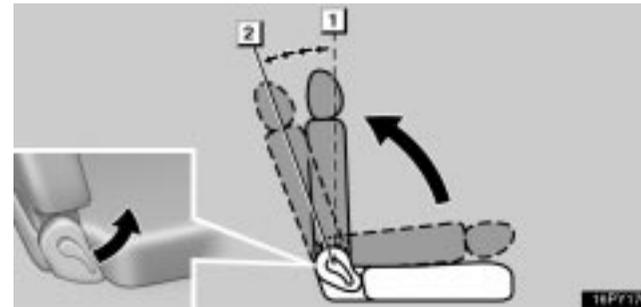
### Installation with child restraint lower anchorages



The lower anchorages for the child restraint system interfaced with the FMVSS225 or CMVSS210.2 specification are installed in the second seat.

The anchorages are installed in the seat cushion of the right side seating position and between the center and left side seating position.

Child restraint system interfaced with the FMVSS213 or CMVSS213 specification can be fixed with these anchorages. In this case, it is not necessary to fix the child restraint system with a seat belt on the vehicle.



1 1st lock position

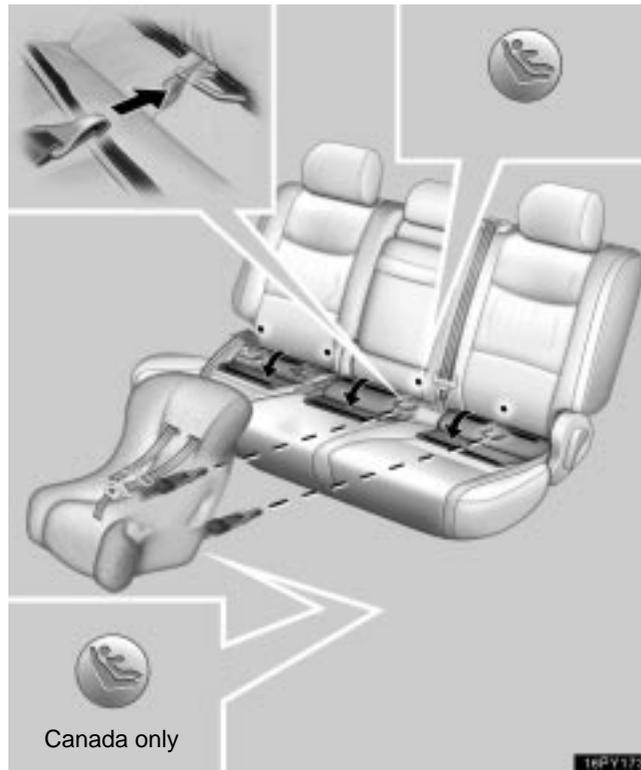
2 5th lock position

### CHILD RESTRAINT SYSTEM INSTALLATION

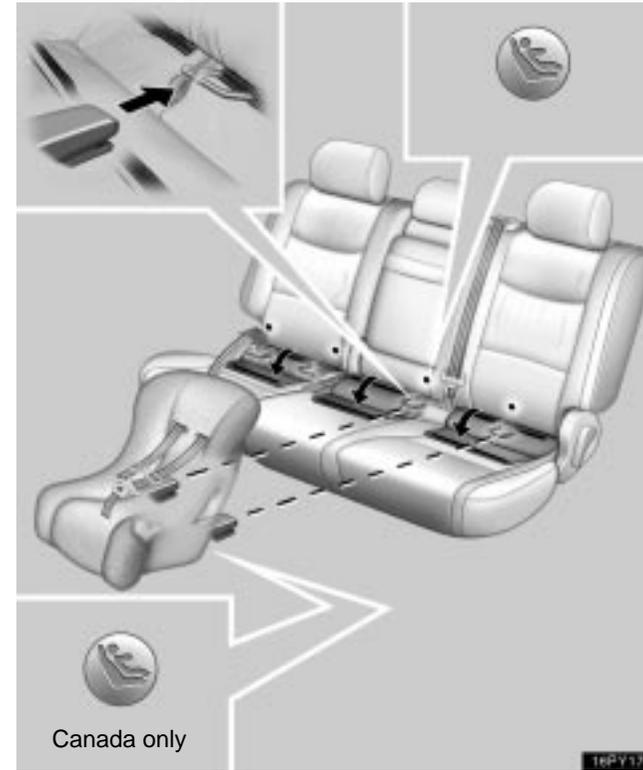
1. Fold down the seatback. Make sure the rear seat legs are relocked into place (folding down the seatback will disengage them) by pushing downward on the back of the seat. Adjust the seatback to the 1st lock position (most upright position) and then to the 5th lock position.

Make sure the seat and seatback is locked securely.

OCCUPANT RESTRAINT SYSTEMS



► *Type A*



► *Type B*

## OCCUPANT RESTRAINT SYSTEMS

---

2. Take off the cover on the seat cushion.

3. Widen the slits of the seat cushion a little and confirm the position of the lower anchorages near the buttons on the seatback.

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

4. 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 219.)

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 second 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.

## OCCUPANT RESTRAINT SYSTEMS



- When using the left side lower anchorages for the child restraint system, do not sit in the center seat. The performance of the center seat belt cannot be brought out sufficiently because the belt may be high-positioned or the seat belt may be loose-fitting, posing the risk of serious injury in the case of collision.

## DRIVING POSITION MEMORY SYSTEM

A microcomputer will memorize the position of the driver's seat, and the positions of the tilt and telescopic steering, and outside rear view mirrors. Two different driving position profiles can be entered into the computer's memory.

Recording the 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, tilt and telescopic steering and outside rear view mirrors to the desired position.
2. While pushing the "SET" button, push button "1" or "2" until the signal beeps.

## OCCUPANT RESTRAINT SYSTEMS

---

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.  
All parts of the memorized positions can be activated.
- Key not in ignition switch and within 30 seconds of opening driver's door.  
The memorized position can be activated, except for the tilt and telescopic steering.

If any driving position memory switch is pushed while one of the memorized driving position profiles is being activated, the operation will stop.

To activate the system, push the desired button ("1" 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.



# **SECTION 1-7**

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## **INSTRUMENTS AND CONTROLS**

### **Steering wheel and mirrors**

Tilt and telescopic steering wheel .....	230
Outside rear view mirrors .....	231
Inside rear view mirror .....	234
Vanity mirrors .....	240

## STEERING WHEEL AND MIRRORS

### TILT AND TELESCOPIC STEERING WHEEL

#### Adjustment of steering wheel tilt



To adjust the tilt of the steering wheel, push the control switch upward or downward to set it to the desired position.

#### 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.

#### Adjustment of telescopic steering column



To adjust the steering column length, push the control switch forward or backward to set the steering wheel to the desired position.

#### CAUTION

Do not adjust the steering column while the vehicle is moving. Doing so may cause the driver to mishandle the vehicle and an accident may occur resulting in death or serious injuries.

**Automatic tilt-away steering column\***



**When the ignition key is removed, the steering column moves forward away from the driver and also tilts up for easy exit and entry.**

When the key is inserted in the ignition switch, the steering column returns to the previously set position.

**NOTE:**

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

**OUTSIDE REAR VIEW MIRRORS**



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

Be careful when judging the size or distance of any object seen in the outside rear view mirror on the passenger's side because it is a convex mirror. Any object seen in a convex mirror will look smaller and farther away than if seen in a normal flat mirror.

When you push the outside rear view mirror defogger switch, the heater panels in the outside rear view mirrors will quickly clear the mirror surface. (See "Outside rear view mirror defogger switch" on page 47.)

The rear view mirrors are rain clearing mirrors that clear the driver's rear view when it rains. (For details, see "Rain clearing mirrors" on page 638.)

## STEERING WHEEL AND MIRRORS

---

### 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 outside rear view mirror defogger switch is on.

### Power rear view mirror control



► **1** Master switch **2** Control 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 mirrors can be adjusted when the key is in the “ACC” or “ON” position.

## STEERING WHEEL AND MIRRORS

---

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

### **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.*

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

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

## STEERING WHEEL AND MIRRORS

---

### 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 automatic function mode is selected.

**DAY mode:** The mirror surface is normal.

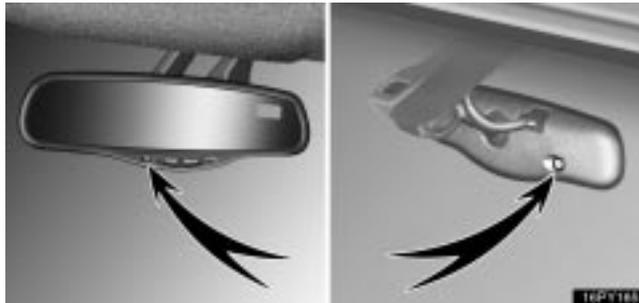
**AUTO mode:** If the mirror detects light from the headlights of the vehicle behind you, the mirror surface darkens slightly to reduce the reflected light.

When the ignition key is inserted and turned on, the inside rear view mirror always turns on in the automatic function 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.

## STEERING WHEEL AND MIRRORS

---

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.

## STEERING WHEEL AND MIRRORS

---

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



► *Compass sensor*

### **NOTICE**

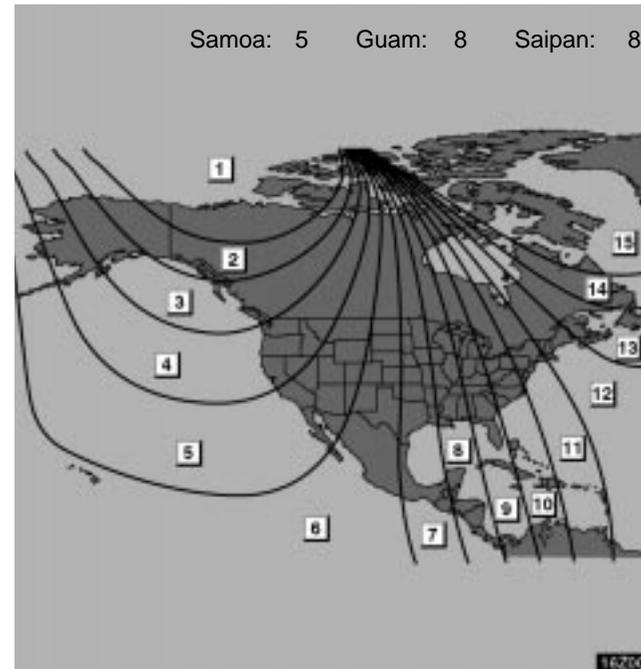
*Do not put magnets or a metal object on or near the inside rear view mirror of the vehicle. Doing this may cause malfunction of the compass sensor in the mirror.*

## STEERING WHEEL AND MIRRORS

### 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 numbers**

## STEERING WHEEL AND MIRRORS

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

### CAUTION

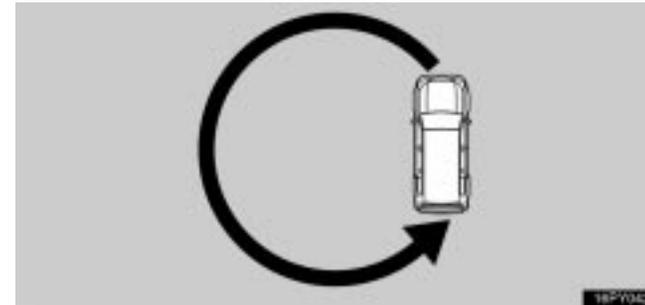
**Do not adjust the display while the vehicle is moving. Be sure to adjust the display only when the vehicle is stopped.**

#### 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.

## STEERING WHEEL AND MIRRORS

---

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 (moon roof, power windows, etc.) as they may interfere with the calibration.



### CAUTION

- When doing the circling calibration, be sure to secure a wide space, and watch out for people and vehicles in the neighborhood. Do not violate any local traffic rules while performing circling calibration.
- Do not adjust the display while the vehicle is moving. Be sure to adjust the display only when the vehicle is stopped.

## VANITY MIRRORS



To use the vanity mirrors, swing the sun visor down and slide the cover.

The vanity light comes on when you slide the cover.

;

## **SECTION 2-1**

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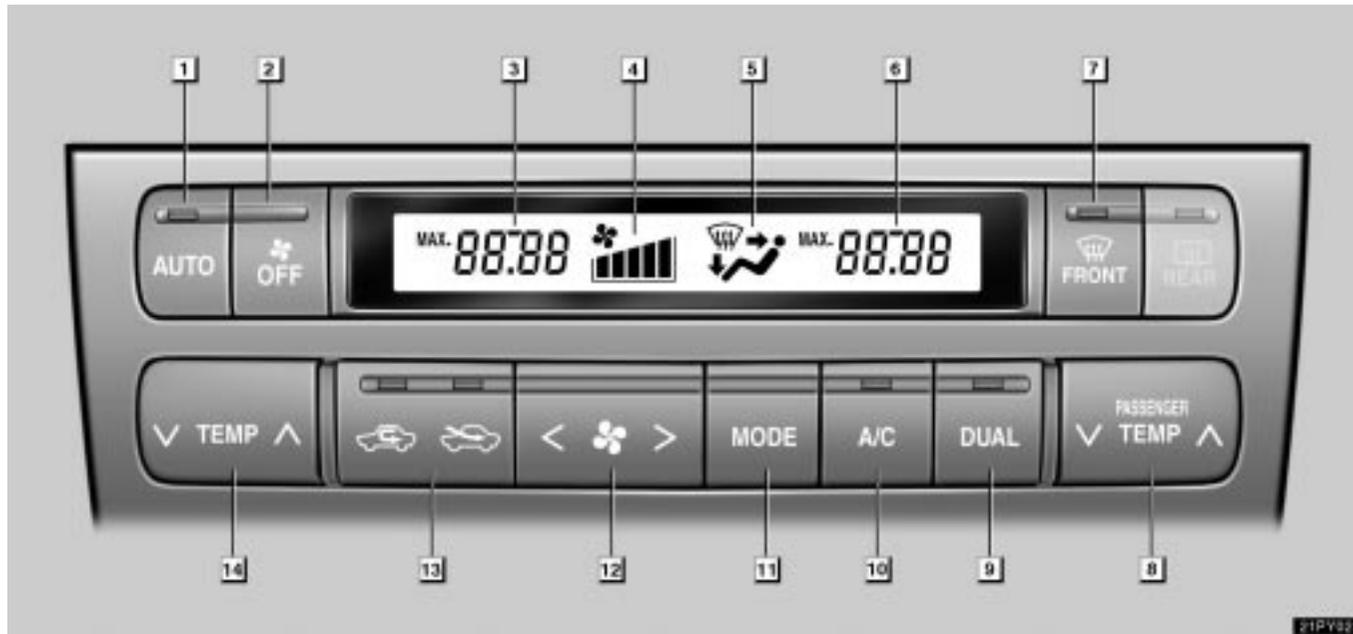
### **AIR CONDITIONING AND AUDIO**

#### **Air conditioning**

Automatic air conditioning controls .....	243
<a href="#">Rear cooler controls</a> .....	260

***For vehicles equipped with Navigation System,  
please refer to the separate “Navigation System  
Owner’s Manual”.***

## AUTOMATIC AIR CONDITIONING CONTROLS



► You can adjust the brightness of the display. See “Instrument panel light control” on page 86 for details.

## AIR CONDITIONING

---

**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**

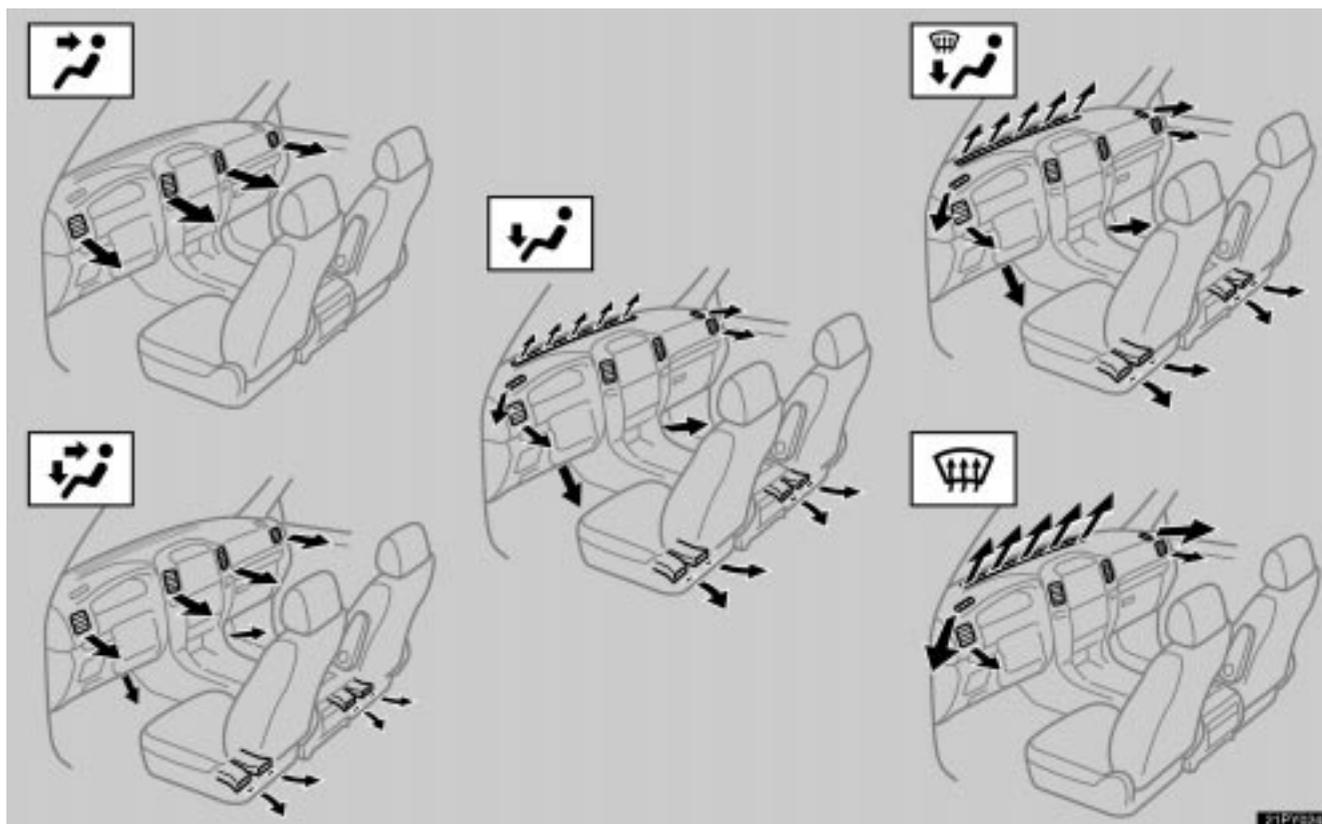
***To prevent the battery from being discharged, do not leave the air conditioning on longer than necessary when the engine is not running.***

## AIR CONDITIONING

---

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

## AIR CONDITIONING



► *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.

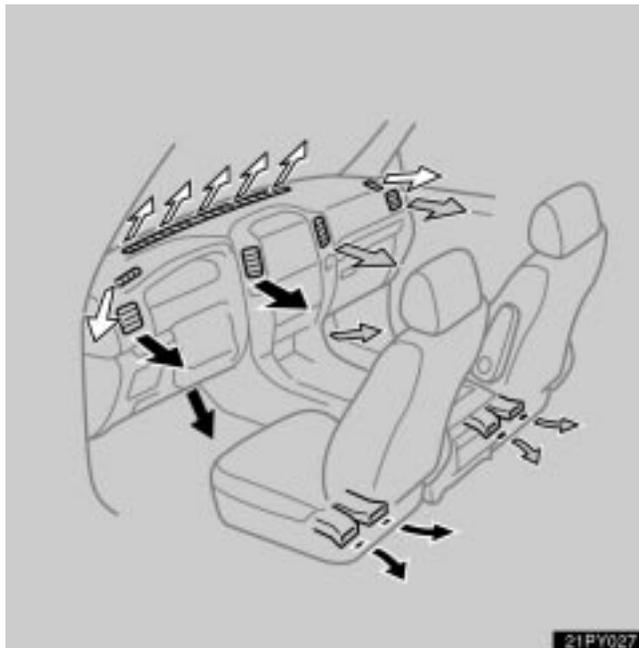
“PASSENGER TEMP” button — Changes the temperature settings separate from driver side.

“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

## AIR CONDITIONING

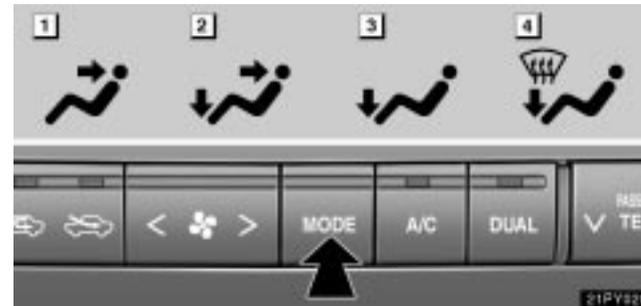


- ➔ Driver side setting
- ➞ Passenger side setting
- ⇨ Mixed setting

### 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.

**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 —**



Each time you push the air intake control button, the mode changes in order from the RECIRCULATED AIR mode to OUTSIDE AIR mode, then back to the RECIRCULATED AIR mode. Each indicator light shows which mode is now selected.

- 1** **RECIRCULATED AIR mode** — If quick circulation of cooled air is desired, select this mode.
- 2** **OUTSIDE AIR mode** — The system will take fresh outside air into the vehicle.

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.

## AIR CONDITIONING

---

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 the 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 —

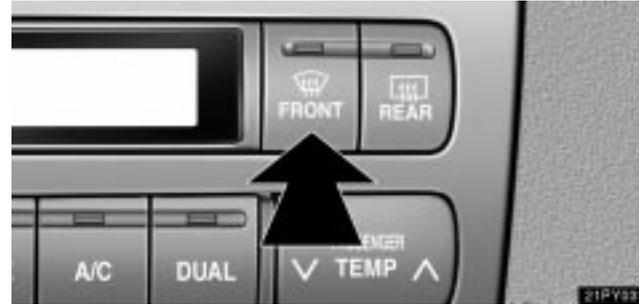
Push the “A/C” button to turn the air conditioning on and push it again to turn the air conditioning off.

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.

### (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 the OUTSIDE AIR mode automatically. This is to clean up the front view more quickly. If you want to return the setting to the 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.

 **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) Center vents and side 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".

## AIR CONDITIONING

---

- 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.

**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.

**Push in the “AUTO” button.**  
**Temperature** — To the desired temperature  
**Air intake** — OUTSIDE AIR  
**Air conditioning** — ON

For manual operation —

### Heating

For best results, set controls to:

For automatic operation —

### Air conditioning

For best results, set controls to:

For automatic 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.

**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**

**Temperature** — Towards high temperature to heat;  
low temperature to cool  
**Air intake** — **OUTSIDE AIR**  
**Air flow** — **WINDSHIELD**

**Ventilation**

For best results, set controls to:

For automatic operation —

For best results, set controls to:

For automatic operation —

## AIR CONDITIONING

---

For manual operation —

**Fan speed** — To the desired fan speed  
**Temperature** — Towards high temperature to heat;  
low temperature to cool  
**Air intake** — **OUTSIDE AIR**  
**Air flow** — **WINDSHIELD**

When the windshield air flow button is pushed, air flows mainly from the windshield vents and turns on the defogging function with the purpose of clearing the front view.

Pushing this button once again returns the air flow mode to the last one used.

This button allows the air intake to select OUTSIDE AIR mode automatically. This is to clean up the front view more quickly. If you want to return the setting to RECIRCULATED AIR mode, push the air intake control button once again.

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.

**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**

### — The outside of the windshield

For best results, set controls to:

For automatic operation —

## AIR CONDITIONING

---

When the windshield air flow button is pushed, air flows mainly from the windshield vents and turns on the defogging function with the purpose of clearing the front view.

Pushing this button once again returns the air flow mode to the last one used.

This button allows the air intake to select OUTSIDE AIR mode automatically. This is to clean up the front view more quickly. If you want to return the setting to RECIRCULATED AIR mode, push the air intake control button once again.

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.

## AIR CONDITIONING

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### (d) Center vents and side vents



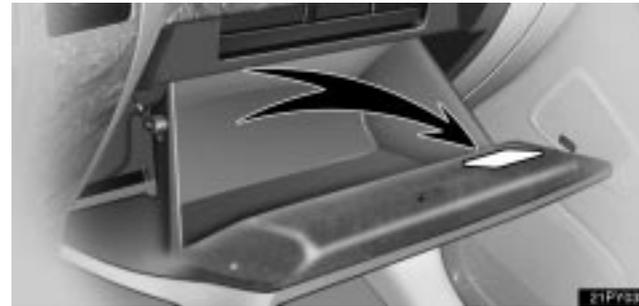
► *Center vents*



► *Side vents*

If air flow control is not satisfactory, check the center vents and side vents. The center vents and side 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.

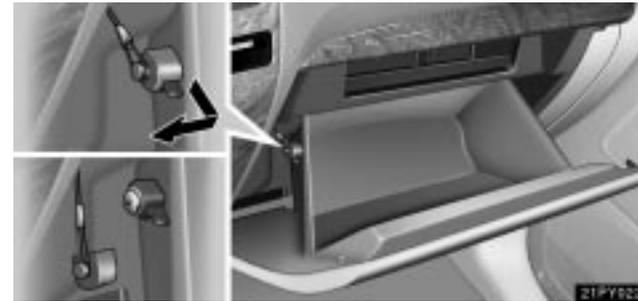
The air conditioning filter prevents dust from entering the vehicle through the air conditioning vent.



**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".)



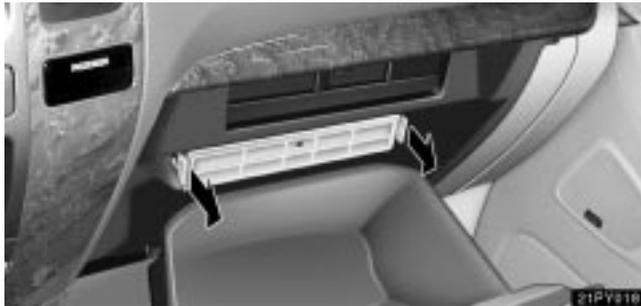
**1. Open the glove box and unhook the clip as shown above.**



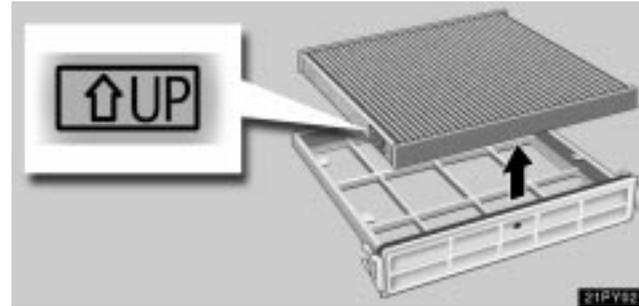
**2. Push in each side of the glove box to disconnect the claws.**

## AIR CONDITIONING

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**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.

**When installing the filter in the filter case, keep the arrow pointing up.**

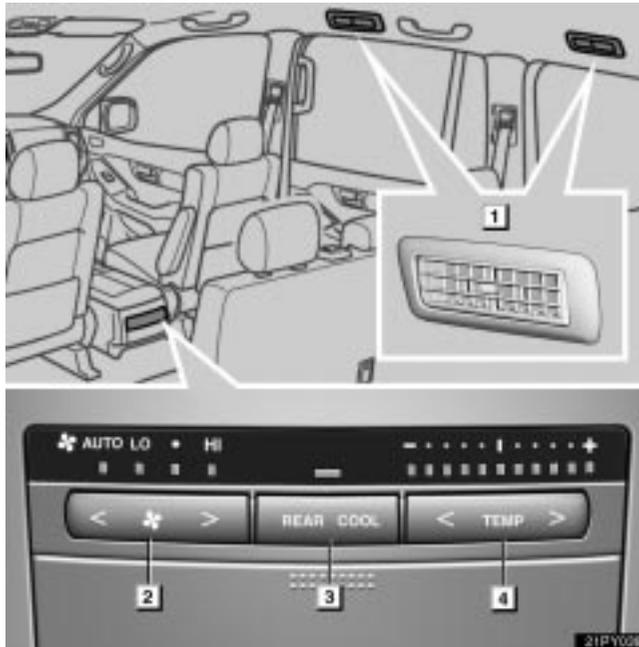
**INFORMATION**

*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.*

## AIR CONDITIONING

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### REAR COOLER CONTROLS



- 1 *Rear cooler vents*
- 2 *Fan speed control button*
- 3 *“REAR COOL” button*
- 4 *“TEMP” (temperature control) button*

### (a) Rear cooler ON–OFF

To turn the rear cooler on, push the “REAR COOL” button with front air conditioning on. To turn the rear cooler off, push the button once again.

When you turn the rear cooler on with the front air conditioning off, the cooling device is not operated.

### (b) Air flow control

The fan speed can be set to your desired speed by pushing the appropriate side of the fan speed control button.

#### **NOTICE**

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

**“AUTO” mode:** The fan speed is automatically adjusted only when the air flow setting of the front air conditioning is in the panel mode.

### (c) Temperature control

The temperature of the cooled air can be adjusted between  $\pm 10^{\circ}\text{F}$  ( $\pm 5^{\circ}\text{C}$ ) of the temperature of the front air conditioning system. Push the left side of the button to lower the temperature.



## **SECTION 2-2**

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### **AIR CONDITIONING AND AUDIO**

#### **Audio**

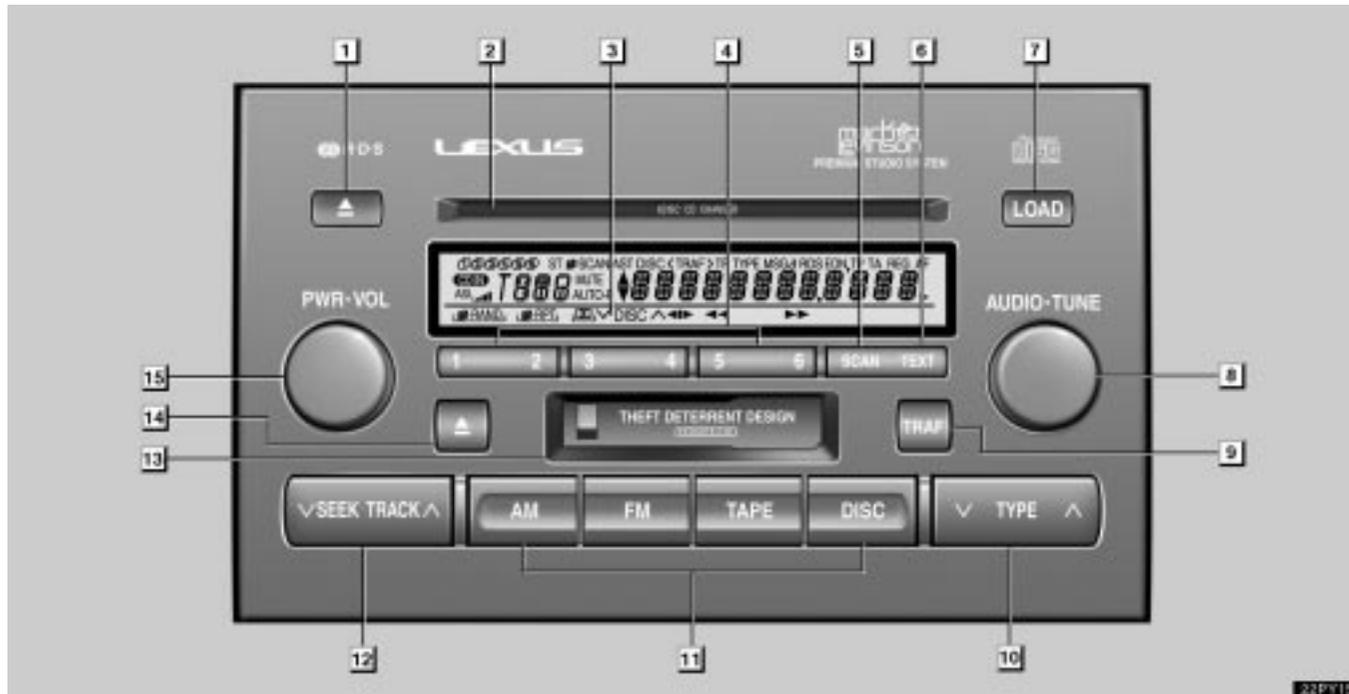
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***For vehicles equipped with Navigation System,  
please refer to the separate “Navigation System  
Owner’s Manual”.***

## AUDIO

### AUDIO SYSTEM

Quick reference for your audio system



- You can adjust the brightness of the display. See “Instrument panel light control” on page 86 for details. If a Mark Levinson brand audio system is installed, the “Mark Levinson” logo is shown on the panel.

- |   |   |
|---|---|
| <p><b>1 Ejecting a CD</b><br/>(See page 281 for details.)</p> <p><b>2 CD slot</b><br/>(See page 279 for details.)</p> <p><b>3 Display of functions in TAPE or CD mode</b></p> <p><b>RPT:</b> Automatic repeat<br/>(See page 277 or 283 for details.)</p> <p><b>□□:</b> DOLBY NR<br/>(See page 276 for details.)</p> <p><b>◀▶:</b> Side change<br/>(See page 277 for details.)</p> <p><b>◀◀:</b> Rewinding or reversing<br/>(See page 277 or 283 for details.)</p> <p><b>▶▶:</b> Fast forwarding<br/>(See page 277 or 283 for details.)</p> <p><b>RAND:</b> Random access<br/>(See page 284 for details.)</p> <p><b>∨∧:</b> CD selection<br/>(See page 282 for details.)</p> <p><b>4 Station selector and function buttons</b><br/>(See page 273 for details.)</p> <p><b>5 Radio mode:</b> Scan tuning<br/>(See page 274 for details.)</p> <p><b>CD mode:</b> Scan selection<br/>(See page 282 for details.)</p> | <p><b>6 Radio mode:</b> Radio text message<br/>(See page 275 for details.)</p> <p><b>CD mode:</b> CD text<br/>(See page 284 for details.)</p> <p><b>7 CD load button</b><br/>(See page 279 for details.)</p> <p><b>8 AUDIO-TUNE knob</b><br/>(See page 268 for details.)</p> <p><b>9 Traffic announcement button</b><br/>(See page 275 for details.)</p> <p><b>10 Program type button</b><br/>(See page 274 for details.)</p> <p><b>11 Mode selectors</b><br/>(See page 267 for details.)</p> <p><b>12 Radio mode:</b> Seek tuning<br/>(See page 273 for details.)</p> <p><b>TAPE mode:</b> Direct access to a desired program<br/>(See page 278 for details.)</p> <p><b>CD mode:</b> Direct access to a desired program<br/>(See page 283 for details.)</p> <p><b>13 Cassette tape slot</b><br/>(See page 276 for details.)</p> <p><b>14 Stopping and ejecting a cassette tape</b><br/>(See page 276 for details.)</p> <p><b>15 Turning the system on and adjusting the volume</b><br/>(See page 267 for details.)</p> |
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## AUDIO

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### 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.

#### **NOTICE**

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

Your audio system adjusts to the optimum volume and tone quality automatically. While the system is adjusting the audio sound, the audio sound fades out and then fades in.

Your audio system works when the ignition switch is in the "ACC" or "ON" position.

**(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”, “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 the other function was previously playing, it will come on again.

Vehicles with rear seat entertainment system —

The “DISC” button may also be used to operate a DVD player. Pressing the “DISC” button changes between the CD player and DVD player. When the DVD player is in operation, “AUX” appears on the display.

## AUDIO

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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-TUNE” 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 quarter windows.

**NOTICE**

- *When cleaning the inside of the quarter windows, be careful not to scratch or damage the wire antennas or connectors.*
- *Putting a window tint (especially, conductive or metallic type) on the quarter windows may affect the reception of radio or mobile telephone. For the installation of the window tint, consult with your Lexus dealer.*

## AUDIO

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(d) Your cassette player

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

**NOTICE**

*Do not oil any part of the cassette player, and do not insert anything except a cassette tape into the slot.*

### (e) Your CD player with changer



#### **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 CD into the slot.***

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

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.

### **Radio operation**

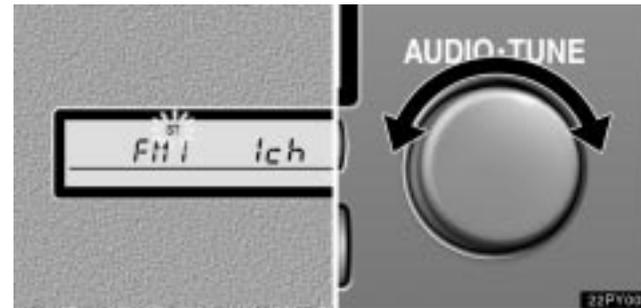
#### **(a) Listening to the radio**

## AUDIO

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**Push these buttons to choose either an AM or FM station.**  
“AM”, “FM1”, “FM2” or “FM TYPE” appears on the display.



**Turn this knob to the right to step up the frequency 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 “AUDIO-TUNE” knob. The radio will step up or down to another frequency.

## AUDIO

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**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. “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, the current program type receiving from RDS station appears on the display.

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

Each time you push the “∨” or “∧” button, the program type changes as in the following:

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

- MISC (Miscellaneous)
- ALERT (Emergency message)

Push the "SEEK TRACK" or "SCAN" button with the program type shown on the display and the radio seeks or scans the station in the relevant program type.

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

When you push the "TRAF" button, "TRAF SEEK" appear 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 the 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, the message will disappear.

In case a text message is not accepted on the display, you can push the "TEXT" button and hold it to display the rest of the message.

When the system can show the station name, "RDS" appears on the display. Each time you push the "TEXT" button, indication on the display changes from the band to the station name, a radio text in this order. After 6 seconds passes, indication returns to the band.

## AUDIO

### 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 "DOLBY NR" 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  are trademarks of Dolby Laboratories Licensing Corporation.

(b) Manual program selection



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

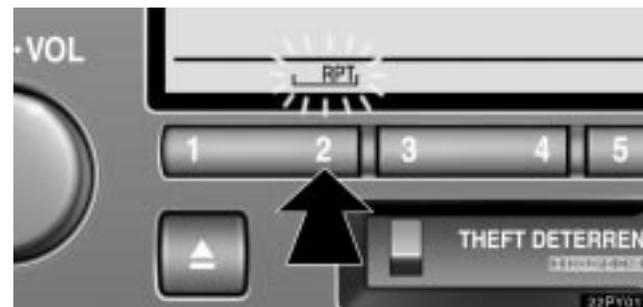
**“Rewind” button:** Push the “◀◀” button to rewind a tape. “REW” appears on the display.

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



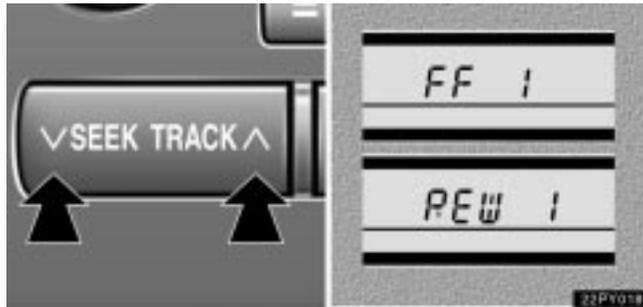
**“RPT” button:** The repeat feature automatically replays the current program.

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.

## AUDIO

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**“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 the 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 both ends of the slot start blinking and "WAIT" appears on the display. After the blinking indicators change to green and stay on, and "WAIT" changes to the "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 both ends of the slot start blinking and "WAIT" appears on the display. After the blinking indicators change to green and stay on, and "WAIT" changes to the "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 the "WAIT" changes to the "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.

## AUDIO

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### **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 CD 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.

## AUDIO

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(c) Selecting a desired CD

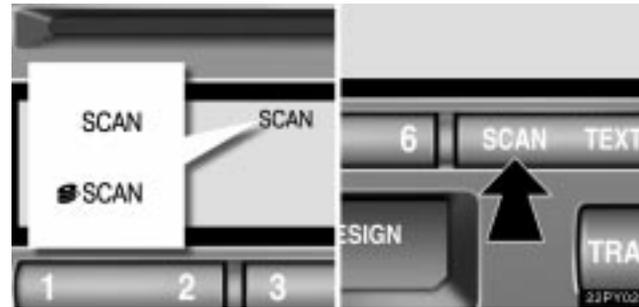


### Searching for a desired CD:

**Push the “V” or “^” button to select the CD number.**

Push the button several times until the desired CD number appears on the display.

(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 “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 automatic 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.

Vehicles with rear seat entertainment system —

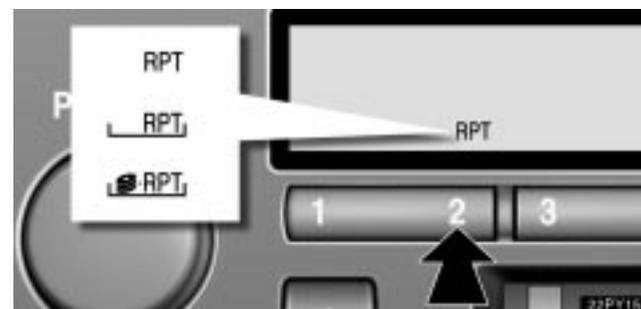
While the DVD player is in operation, the chapter or track can be changed by pushing the “^” or “v” side of the “TRACK” button.

**“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.

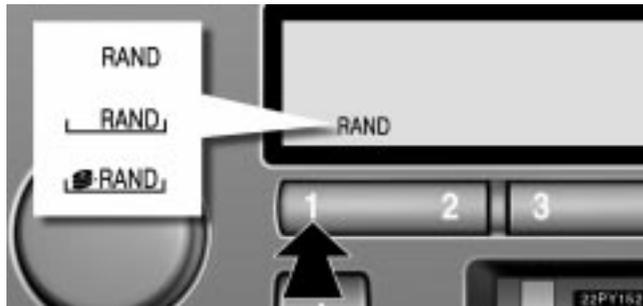
**Repeating a track:** Push the “RPT” button briefly while the track is playing. “ RPT” will appear on the display. When the track ends, it will automatically be replayed. This process will be continued until you push the button again to turn off the repeat feature.

## AUDIO

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**Repeating a CD:** Push the “RPT” button and hold it until you hear a beep. “ 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 automatic changer:** Push the “RAND” button and hold it until you hear a beep. “ RAND” will appear on the display and the player will perform all the tracks on all the CDs in the automatic 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) CD text



**When you push the “TEXT” button while the CD with CD text display function (the logo “CD TEXT” marked on the CD) is being played, the track number, elapsed time, CD title and then track title appear on the display.**

When you push this button if the CD does not have a text display function, “NO TITLE” appears on the display.

The display can show up to 12 letters at once. If the CD title or music title is longer than 12 letters, hold down the button for longer than 1 second. The letters after the 12th one are shown. However, 24 letters at maximum can be shown on the display.

When you push this button for longer than 1 second or play no operation for about 6 seconds with the letters after the 13th one on the display, the display returns and shows the first 12 letters.

Even if the CD title or music title is longer than 24 letters, the display can show up to 24 letters.

**(i) If the player malfunctions**

If the player or another unit equipped with the player malfunctions, your audio system will display one of the four 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 (steering switches)



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.

## AUDIO

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The DVD player will be selectable if a rear seat entertainment system is installed in your vehicle.

**“+ ▣ -” 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

**“∨” or “^” 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

**“∨” or “^” 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. For details, see page 278 for details.
- To fast forward or rewind the tape, push this switch until you hear a beep. To stop fast forwarding or rewinding, push and hold the same side on the switch until you hear a beep.

### (c) When the “CD” mode is selected

**“∨” or “^” 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.

Vehicles with rear seat entertainment system —

While the DVD player is in operation, the chapter or track can be changed by pushing the “^” or “∨” side of the switches.



**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.

## AUDIO

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**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, lightning, 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.**

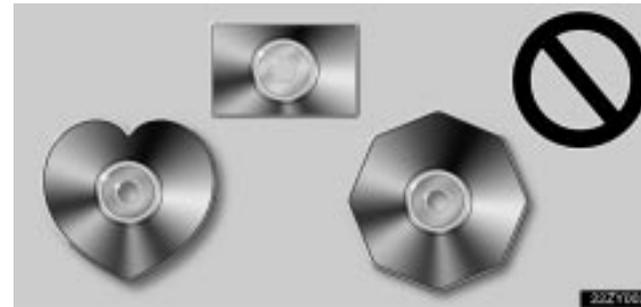
## AUDIO

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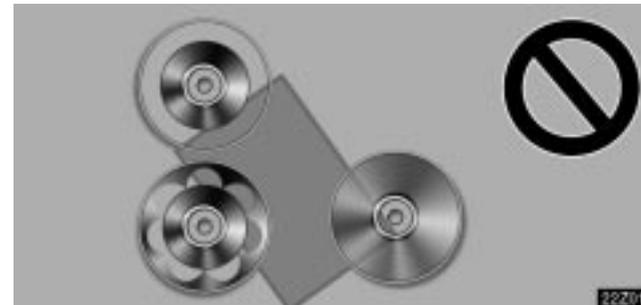


- Use only CDs marked as shown above. The following products may not be playable on your CD player.

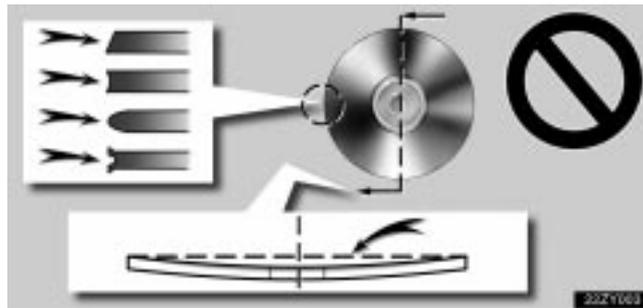
Copy-protected CD  
CD-R (CD-Recordable)  
CD-RW (CD-Re-writable)  
CD-ROM  
SACD  
dts-CD



► **Special shaped CDs**



► **Transparent/translucent CDs**



► *Low quality CDs*



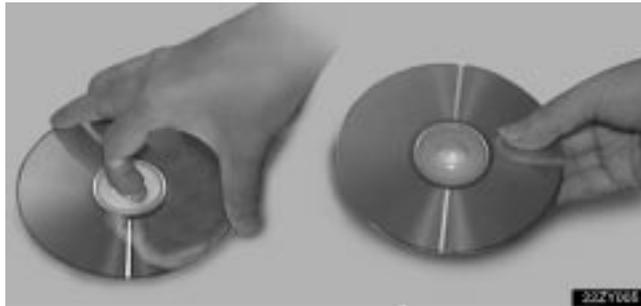
► *Labeled CDs*

## AUDIO

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### **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 CDs:** 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

### REAR SEAT AUDIO SYSTEM

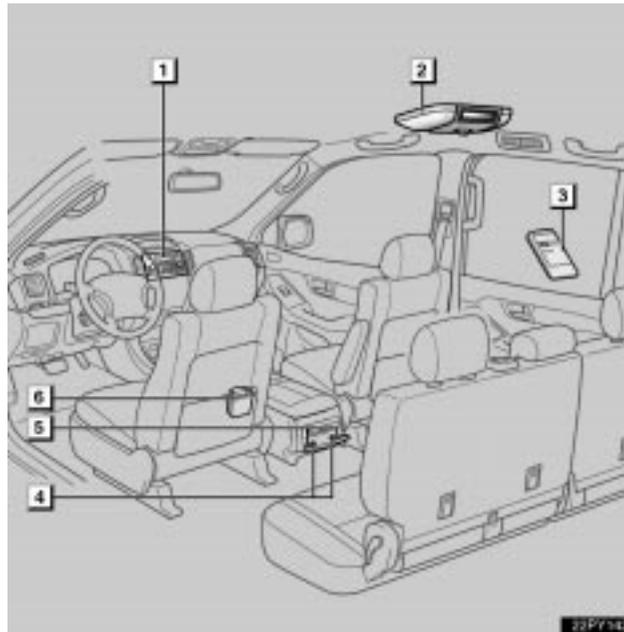
The rear seat audio system is designed for the rear seat passengers to enjoy the audio sound separately between the front seats and the rear seats.

The rear seat audio system can be turned on with the rear audio system remote control even if the front audio system is off. When the front audio is turned off, the rear audio system will be turned off simultaneously.

The rear passengers can enjoy all the modes (AM and FM radio, cassette tape player and CD player with changer) with the rear seat audio system when a cassette tape and a CD are loaded in the front audio system.

When the same mode is selected on the front and rear audio systems at the same time, the system can be operated on the front audio system.

If the radio mode is selected on the front and rear audio systems at the same time, AM and FM modes cannot be changed on the rear seat audio system.



- ▶ **1** *Front audio system*
- 2** *Rear seat audio system display*
- 3** *Rear seat audio system remote control*
- 4** *Headphone input jacks*
- 5** *Headphone volume control dials*
- 6** *Remote control holder*

**Rear seat audio system remote control**

The rear seat audio system can be operated with the rear seat audio system remote control.

***NOTICE***

*Keep the remote control away from direct sunlight, high heat and high humidity. These conditions could cause the case to deform or the battery to explode or leak.*



**CAUTION**

Do not disassemble or modify the remote control. It may cause an accident, fire or electric shock.

## AUDIO

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(a) Before using the remote control (for new vehicle owners)



A battery is already set in the remote control with an insulating sheet, which prevents the battery from being discharged. Before using the remote control, remove the insulating sheet.

(b) Using the remote control

### **NOTICE**

*Observe the followings, otherwise the remote control may be damaged.*

- *Do not drop or strongly knock the remote control against hard objects.*
- *Do not sit on or place heavy objects on the remote control.*



To use the rear seat audio system remote control, direct the signal output portion of the remote control to the signal reception portion of the rear seat audio system display.

The rear seat audio system remote control can be operated when the ignition switch is in the "ACC" or "ON" position.

The remote control does not operate properly when the signal reception portion of the display is exposed to direct sunlight. Block the display from direct sunlight.

**(c) Remote control holder****NOTICE**

*Do not leave the remote control exposed to high temperatures (such as on the instrument panel) for a long time, otherwise the remote control may be damaged.*

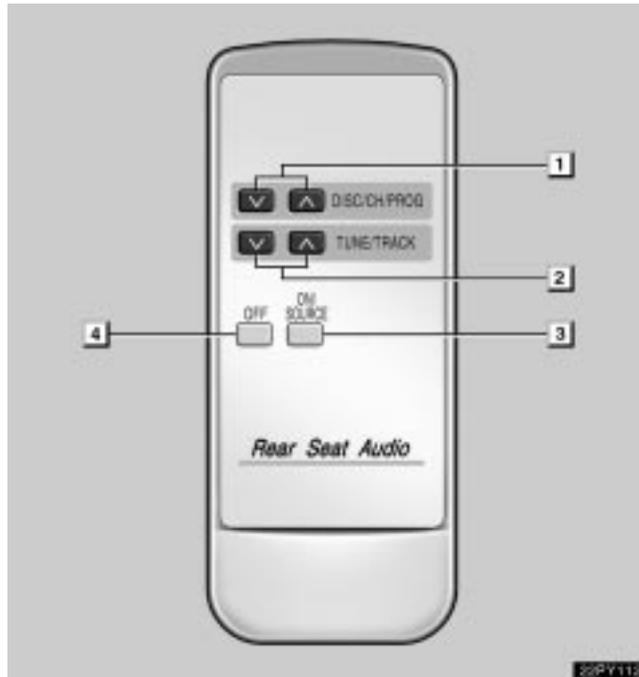
The remote control can be stowed in the holder when it is not in use. The holder can be hooked on the back of the driver's or front passenger's seatback.

**⚠ CAUTION**

To reduce the chance of injury in case of an accident or a sudden stop while driving, stow the remote control in the holder when it is not in use.

## AUDIO

### Quick reference for your remote control



- ▶ **1** "DISC/CH/PROG" buttons
- 2** "TUNE/TRACK" buttons
- 3** "ON/SOURCE" button
- 4** "OFF" button

### Using your rear seat audio system: some basics

The following instructions are for the rear passengers. Please let the rear passengers read and follow the instructions when the rear passengers use the rear audio system.

This section describes some of the basic features of the Lexus audio system. Some information may not pertain to your system.

Your audio system adjusts to the optimum volume and tone quality automatically. While the system is adjusting the audio sound, the audio sound fades out and then fades in.

Your audio system works when the ignition switch is in the "ACC" or "ON" position.

You can enjoy the rear seat entertainment system with commercial headphone. See "Headphone input jacks" on page 308 for details.

You can also enjoy the rear seat entertainment system with a wireless headphone. The wireless headphone can be used within rear seat. If the signal becomes weak, the headphone will mute. For details, refer to the manufacturer's instructions.

With some wireless headphone generally available in the market, it may be difficult to catch sound properly. Lexus recommends the use of Lexus genuine wireless headphone.

You can purchase a wireless headphone at a Lexus dealer.

 **CAUTION**

- Do not drive with using the headphone. Otherwise, you may be hard to hear the sound from the outside while using the headphone and may cause an accident.
- With DVD player:  
Conversational speech on some DVDs is recorded at a low volume to emphasize the impact of sound effects. If you adjust the volume assuming that the conversations represent the maximum volume level that the DVD will play, you may be startled by louder sound effects or when you change to a different audio source. Be sure to adjust the volume with this in mind.  
Make sure the volume is not increased, before you turn on the headphone.

**NOTICE**

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

## AUDIO

---

### Turning the system on and off



Push "ON/SOURCE" button to turn on the rear seat audio system.

Use "ON/SOURCE" button to select an audio mode when the rear seat audio system is on. Each time you push this button, the system changes between the radio, cassette player and CD player.

When you change the mode, the display indicates which mode is selected.

When a cassette tape and CDs are not loaded in the front audio system, only a radio mode can be selected in the rear seat audio system.

If you push "ON/SOURCE" button on rear seat audio system remote control to select the cassette tape player mode or CD player mode in that case, a beep sounds from front audio system and "INVALID" flashes on the screen for 6 seconds, and then the rear audio system returns to the radio mode.

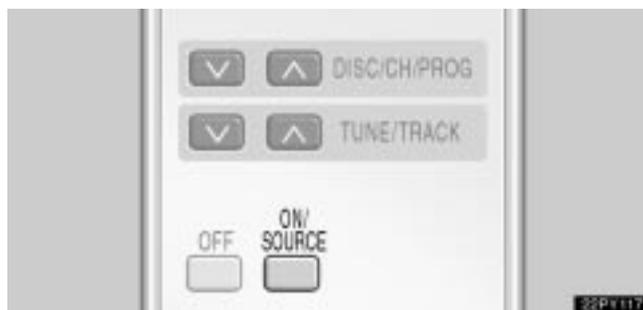
If you push "ON/SOURCE" button while receiving an emergency broadcast, a beep sounds and "INVALID" appears on the screen to indicate that no button can be operated.



Push the "OFF" button to turn off the rear audio system.

## Radio operation

### (a) Listening to the radio



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

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

If the front audio system receives a traffic announcement (TA) while the rear seat audio system is in the radio mode, “TRAF” will flash on the screen and the rear seat audio system will turn off. When the front audio receives a traffic announcement (TA), the rear seat audio system cannot select the AM/FM mode.

### (b) Selecting a station

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



**Seek tuning:** Push and hold the “V” or “^” (TUNE/TRACK) button. The radio will begin seeking up or down for a station of the nearest frequency and will stop on reception. Each time you push the button, the stations will be searched out one after another.

**Manual tuning:** Quickly push and release the “V” or “^” (TUNE/TRACK) button. The radio will step up or down to another frequency.

**To scan the preset stations:** Push the “V” or “^” (DISC/CH/PROG) button. 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.

You can scan only the preset stations for the band of the front audio system. (For instructions, see “(b) Presetting a station” on page 273.)

## AUDIO

---

### Cassette tape player operation

#### (a) Playing a cassette tape



#### Push the “ON/SOURCE” button to choose tape mode.

The player will automatically start. At this time, “TAPE” appears on the display.

You can play a cassette tape when a cassette tape is loaded in the front audio system.

**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.

#### (b) Manual program selection



**“Program” button:** Push the “∨” or “∧” (DISC/CH/PROG) button to select the other side of a cassette tape. The display indicates which side is currently selected. (“∧” indicates the top side, “∨” indicates the bottom side.)

**“Rewind” button:** Push and hold the “∨” (TUNE/TRACK) button until “REW” appears on the display.

To stop rewinding, push the same button.

**“Fast forward” button:** Push and hold the “∧” (TUNE/TRACK) button until “FF” will appears on the display.

To stop fast forwarding, push the same button.



**“Automatic program selection” button:** The automatic program selection feature allows you to program your cassette player to skip forward or backward to locate the song you want to hear. You can skip up to 9 programs at a time.

Push the “^” (TUNE/TRACK) button to skip forward. “FF” and the number will appear on the display. Push the button until the number you want to skip appears on the display. After that, the player will automatically skip forward.

When the end of the tape is reached, the player automatically reverses sides and resumes normal play.

Push the “v” (TUNE/TRACK) button to skip backward. Push the button until “REW” and the number you want to skip appear on the display.

- If you set “REW 1”, the player will rewind to the beginning of the current program.
- When counting the number of programs you want to rewind, remember to count the current program as well. For example, if you want to rewind to a song that is two before the song you are listening to, push this button until “REW 3” appears on the display.

When the beginning of the tape is reached, the player automatically resumes normal play.

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

**“Automatic program selection” feature:** This feature may not work well with some spoken word, live or classical recordings.

## AUDIO

---

### CD player operation

#### (a) Playing a CD



Push the “ON/SOURCE” button to choose CD mode.

“CD” appears on the display.

You can play a CD when a CD is loaded in the front audio system.

The CDs set in the front audio system 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.

#### (b) Selecting a desired CD



**Searching for a desired CD:**

Push the “∨” or “∧” (DISC/CH/PROG) 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.

**(c) Selecting a desired track**

**“TRACK” button:** Use for direct access to a desired track.

Push the “∨” or “∧” (TUNE/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 “∧” (TUNE/TRACK) 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 “∨” (TUNE/TRACK) and hold it to reverse the CD. When you release the button, the CD player will resume playing.

**(d) If the player malfunctions**

If the player or another unit equipped with the player malfunctions, your audio system will display one of the four 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

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### Replacing remote control battery

For replacement, use a CR2025 lithium battery or equivalent.

#### **NOTICE**

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

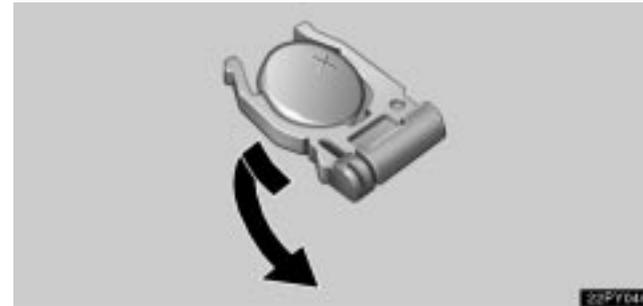


#### **CAUTION**

**Special care should be taken that small children do not swallow the removed battery or components.**



1. Pull the case out while pushing the lock release button to the side.



2. Remove the discharged battery.
3. Put in a new battery with the positive (+) side up.
4. Put in the case securely.

## AUDIO

---

### NOTICE

- *Make sure that the positive side of the remote control battery is facing correctly.*
- *Do not replace the battery with wet hands. Water may cause rust.*
- *Do not touch or move any components inside of the remote control, or it may interfere with proper operation.*
- *Be careful not to bend the electrode of the remote control battery insertion and that dust or oil does not adhere to the transmitter case.*
- *Close the battery case securely.*

After replacing the battery, check that the remote control operates properly. If the remote control still does not operate properly, contact your Lexus dealer.

### Headphone input jacks



To use the jack, push the lid.

You can enjoy the rear seat audio system with commercial headphone.



**To use the headphones, connect them to the jack.**

The key must be in the “ACC” or “ON” position.



**To adjust the volume of the headphones, turn the knob. Turn right to increase the volume. Turn left to decrease the volume.**

The maximum volume depends on the type of headphones.

With some headphone generally available in the market, it may be difficult to catch sound properly. Lexus recommends the use of Lexus genuine headphone.

Please contact your Lexus dealer for further details.

**Wireless headphone:** You can also enjoy the rear seat audio system with a wireless headphone. For details, ask your Lexus dealer.

**CAUTION**

**Adjust the volume when you connect the headphones to the jack. Loud sounds may have a significant impact on the human body.**

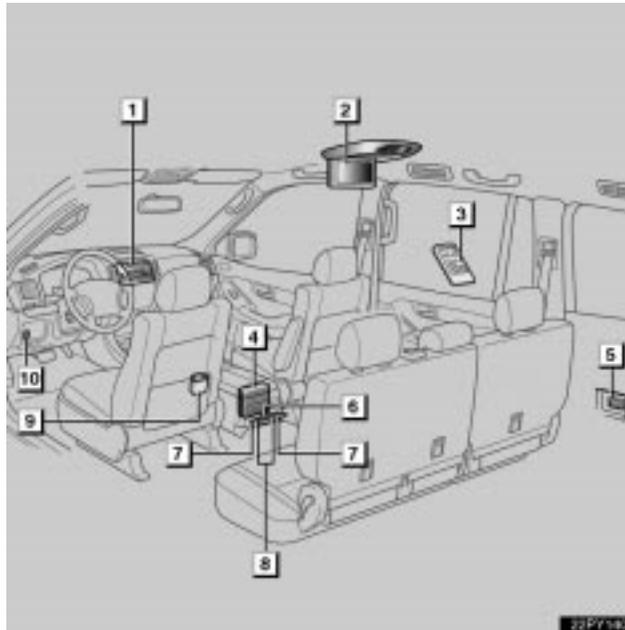
## AUDIO

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### **NOTICE**

*The headphone input jack lid must be closed before you tumble the second seat.*

## REAR SEAT ENTERTAINMENT SYSTEM



- ▶ **1** *Front audio system*
- 2** *Rear seat entertainment system display*
- 3** *Rear seat entertainment system remote control*
- 4** *DVD player*
- 5** *Power outlet*
- 6** *Input terminal adapter*
- 7** *Headphone volume control dials*
- 8** *Headphone input jacks*
- 9** *Remote control holder*
- 10** *Power outlet main switch*

## AUDIO

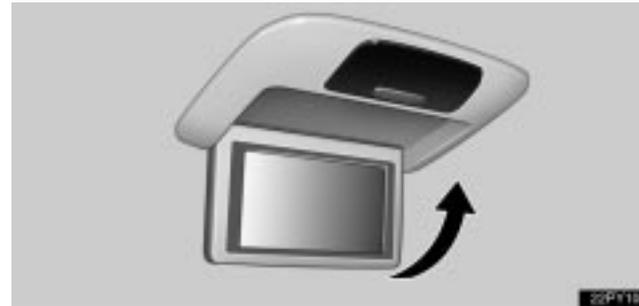
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### Display



**To use the display, push the lock release button and lower the display until you hear a click.**

You can adjust the display to your desired angle.



**To close, push up the display until you hear a click.**

The illumination of the screen is automatically turned off when the display is closed. However, the rear seat entertainment system is not turned off.

### CAUTION

**To reduce the chance of injury in case of an accident or sudden stop while driving, close the display when it is not in use.**

**NOTICE**

- *The screen should be cleaned with a dry soft cloth. If the screen is pushed by hand or wiped with a hard cloth, the surface of the screen may be scratched.*
- *Benzene or alkaline solutions may damage the coated surface of the screen.*
- *To prevent the battery from being discharged, do not turn on the rear seat entertainment system longer than necessary when the engine is not running.*

## AUDIO

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### Rear seat entertainment system remote control

The rear seat entertainment system can be operated with the rear seat entertainment system remote control. The system cannot be operated by touching the switches on the screen directly.

#### **NOTICE**

*Keep the remote control away from direct sunlight, high heat and high humidity. These conditions could cause the case to deform or the battery to explode or leak.*



#### **CAUTION**

**Do not disassemble or modify the remote control. It may cause an accident, fire or electric shock.**

(a) Before using the remote control (for new vehicle owners)



A battery is already set in the remote control with an insulating sheet, which prevents the battery from being discharged. Before using the remote control, remove the insulating sheet.

(b) Using the remote control



To use the rear seat entertainment system remote control, direct the signal output portion of the remote control to the signal reception portion of the rear seat entertainment system display.

The remote control does not operate properly when the signal reception portion of the display is exposed to direct sunlight. Block the display from direct sunlight.

## AUDIO

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### **NOTICE**

*Observe the followings, otherwise the remote control may be damaged.*

- *Do not drop or strongly knock the remote control against hard objects.*
- *Do not sit on or place heavy objects on the remote control.*

(c) Remote control holder



The remote control can be stowed in the holder when it is not in use. The holder can be hooked on the back of the driver's or front passenger's seatback.

 **CAUTION**

To reduce the chance of injury in case of an accident or a sudden stop while driving, stow the remote control in the holder when it is not in use.

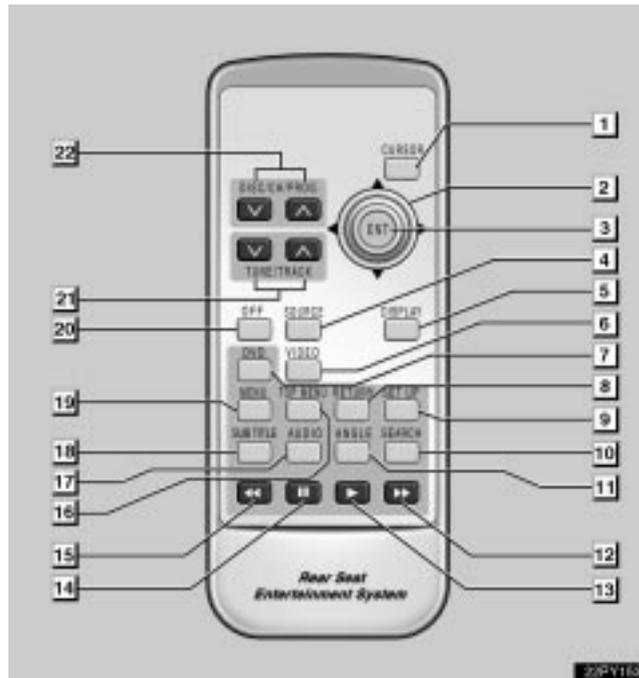
## AUDIO

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### **NOTICE**

*Do not leave the remote control exposed to high temperatures (such as on the instrument panel) for a long time, otherwise the remote control may be damaged.*

Quick reference for your remote control



## AUDIO

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- 1** **“CURSOR” button:**  
Indicates the control switches on the screen when the DVD player is operated.
- 2** **Joy stick:**  
Select a control switch, mode switch on the screen or the menu for the CD.
- 3** **“ENT” button:**  
Input the selected switch or the selected menu for the CD.
- 4** **“SOURCE” button:**  
Turn on the rear seat entertainment system and selects the mode.
- 5** **“DISPLAY” button:**  
Adjust the color, tone, contrast and brightness of the screen.
- 6** **“VIDEO” button:**  
Turn on the video mode when your personal audio device is connected.
- 7** **“DVD” button:**  
Turn on the DVD mode.
- 8** **“RETURN” button:**  
Skip to the predetermined scene for the CD.
- 9** **“SET UP” button:**  
Indicate the initial set up screen when the DVD player is operated.
- 10** **“SEARCH” button:**  
Indicate the title search screen when the DVD player is operated.
- 11** **“ANGLE” button:**  
Select the angle of the screen when the DVD player is operated.
- 12** **“▶▶” button:** Fast forwards a screen when the DVD player is operated.
- 13** **“▶” button:** Play a screen when the DVD player is operated.
- 14** **“||” button:** Pause a screen when the DVD player is operated.
- 15** **“◀◀” button:** Reverse a screen when the DVD player is operated.
- 16** **“TOP MENU” button:**  
Indicate the title selection screen for DVD video when the DVD player is operated.
- 17** **“AUDIO” button:**  
Indicate the changing audio screen when the DVD player is operated.
- 18** **“SUB TITLE” button:**  
Indicate the changing subtitle screen when the DVD player is operated.
- 19** **“MENU” button:**  
Indicate the menu screen for DVD video when the DVD player is operated.
- 20** **“OFF” button:**  
Turn off the rear seat entertainment system.
- 21** **“TUNE/TRACK” buttons:**  
Operate the front audio system or select the track/chapter when the DVD player is operated.
- 22** **“DISC/CH/PROG” buttons:**  
Skip directly to a desired preset station, CD, track or chapter.

### Using your audio system: some basics

**The following instructions are for the rear passengers. Please let the rear passengers read and follow the instructions when the rear passengers use the rear seat entertainment system.**

This section describes some of the basic features of the rear seat entertainment system. Some information may not pertain to your system.

Your audio system adjusts to the optimum volume and tone quality automatically. While the system is adjusting the audio sound, the audio sound fades out and then fades in.

The rear seat entertainment system is designed for the rear passengers to enjoy audio and DVD video separately from the front audio system.

The rear seat entertainment system can be operated when the ignition key is in the "ACC" or "ON" position.

The rear passengers can enjoy all modes (AM and FM radio, cassette tape player, CD player with changer and DVD player) on the rear seat entertainment system only if a cassette tape and a CD are loaded in the front audio system.

The rear seat entertainment system can play DVD video, audio CD, video CD, CD text, dts-CD or DVD audio only when a disc is loaded in the DVD player.

You can enjoy videos and sound when your personal audio system is connected to the input terminal adapter on the rear console box. For details, refer to the manufacturer's instructions.

You can enjoy the rear seat entertainment system with commercial headphone. See "Headphone input jacks" on page 380 for details.

You can also enjoy the rear seat entertainment system with a wireless headphone. The wireless headphone can be used within rear seat. If the signal becomes weak, the headphone will mute. For details, refer to the manufacturer's instructions.

With some wireless headphone generally available in the market, it may be difficult to catch sound properly. Lexus recommends the use of Lexus genuine wireless headphone.

You can purchase a wireless headphone at a Lexus dealer.

## AUDIO

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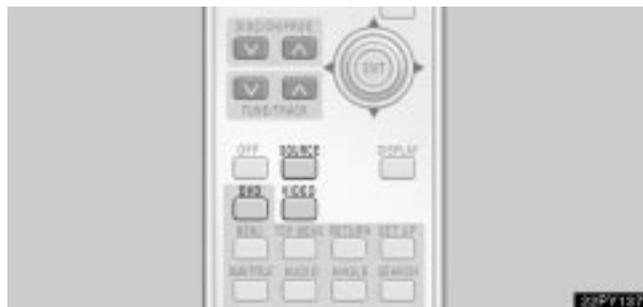


### CAUTION

- Do not drive with using the headphone. Otherwise, you may be hard to hear the sound from the outside while using the headphone and may cause an accident.
- With DVD player:  
Conversational speech on some DVDs is recorded at a low volume to emphasize the impact of sound effects. If you adjust the volume assuming that the conversations represent the maximum volume level that the DVD will play, you may be startled by louder sound effects or when you change to a different audio source. Be sure to adjust the volume with this in mind.  
Make sure the volume is not increased, before you turn on the headphone.

### NOTICE

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

**Turning the system on and off****To turn on the system, push the “SOURCE” button.**

The screen indicates which mode can be selected. Push the “DVD” or “VIDEO” button when the connected DVD player or your personal audio machine is on. The rear seat entertainment system will be turned on.

The rear seat entertainment system can select all the modes.

When a cassette tape, a CD, a DVD video CD, an audio CD, a video CD, a CD text, a dts-CD or a DVD audio disc is not loaded on the front audio system or the DVD player, only the radio mode can be selected on the rear seat entertainment system.

**To turn off the system, push the “OFF” button.**

When the front audio system is turned off, the rear audio system and the DVD player will be turned off simultaneously.

## AUDIO

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### Front audio system operation

All the modes of the front audio system can be operated on the rear seat entertainment system.

When the same mode is selected on the front and rear audio systems simultaneously, the system can be operated on the front audio system.

If the radio mode is selected on the front and rear audio systems at the same time, AM and FM modes cannot be changed on the rear seat audio system.

### Selecting the mode



Use the joy stick to select the mode. Push the “ENT” button to enter the mode.



The mode display which is selected by the joy stick is colored blue. When the “ENT” button is pushed, the mode display changes to green. If the mode display is gray, it cannot be selected.

The “Speaker sound” on the mode display is selected on the front audio system.

When you select a mode, the screen indicates which is selected.

## Radio operation

### (a) Listening to the radio



#### ▶ AM mode



#### ▶ FM mode

Using joy stick and the "ENT" button to select either AM or FM mode.

"AM", "FM1" or "FM2" appears on the screen.

If the front audio system receives a traffic announcement (TA) while the rear seat audio system is in the radio mode, "TRAF" will flash on the screen and the rear seat audio system will turn off. When the front audio receives a traffic announcement (TA), the rear seat audio system cannot select the AM/FM mode.

## AUDIO

---

### (b) Selecting a station

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



**Seek tuning:** Push and hold the “▼” or “▲” (TUNE/TRACK) button. The radio will seek 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 one after another.

**Manual tuning:** Quickly push and release the “▼” or “▲” (TUNE/TRACK) button. Each time you push the button, the radio will step up or down to another frequency. If you push and hold the button, and the radio will go into the seek mode.



**To scan the preset stations:** You can scan only the preset stations for the band of the front audio system. Push the “▼” or “▲” (DISC/CH/PROG) button. The radio will tune in the next preset station up or down the band. The station frequency will appear on the screen.

## Cassette tape player operation

### (a) Playing a cassette tape



Using joy stick and the “ENT” button to select the cassette tape mode.

“TAPE” appears on the display.

**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.

### (b) Manual program selection



**“Program” button:** Push the “V” or “^” (DISC/CH/PROG) button to select the other side of a cassette tape. The screen indicates which side is currently selected. (“^” indicates the top side, “V” indicates the bottom side.)

## AUDIO

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**“Rewind” button:** Push the “∨” (TUNE/TRACK) button to rewind a tape. “REW” appears on the display.

To stop rewinding, push the same button.

**“Fast forward” button:** Push the “∧” (TUNE/TRACK) button to fast forward a cassette tape. “FF” appears on the display.

To stop fast forwarding, push the same button.

### (c) Automatic program selection



**“Automatic program selection” button:** The automatic program selection feature allows you to program your cassette player to skip forward or backward to locate the song you want to hear. You can skip up to 9 programs at a time.

Push the “∧” (TUNE/TRACK) button to skip forward. “FF” and the number will appear on the display. Push the button until the number you want to skip appears on the display. After that, the player will automatically skip forward.

When the end of the tape is reached, the player automatically reverses sides and resumes normal play.

Push the “V” (TUNE/TRACK) button to skip backward. Push the button until “REW” and the number you want to skip appear on the display.

- If you set “REW 1”, the player will rewind to the beginning of the current program.
- When counting the number of programs you want to rewind, remember to count the current program as well. For example, if you want to rewind to a song that is two before the song you are listening to, push this button until “REW 3” appears on the display.

When the beginning of the tape is reached, the player automatically resumes normal play.

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

This feature may not work well with some spoken word, live or classical recordings.

## CD player operation

### (a) Playing a CD



**Using joy stick and the “ENT” button to select the CD mode.**

“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.

## AUDIO

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### (b) Selecting a desired CD



**Searching for a desired CD:** Push the “▼” and “▲” (DISC/CH/PROG) 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.

### (c) Selecting a desired track



**To select a desired track:** Push the “▼” or “▲” (TUNE/TRACK) button until the number of the track you want to listen to appears on the screen. If you want to return to the beginning of the current track, quickly push the “▼” (TUNE/TRACK) button one time.

**“Fast forward” button:** Push the “▲” (TUNE/TRACK) 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 “▼” (TUNE/TRACK) button and hold it to reverse the CD. When you release the button, the CD player will resume playing.

### Replacing remote control battery

For replacement, use a CR2025 lithium battery or equivalent.

#### **NOTICE**

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



#### **CAUTION**

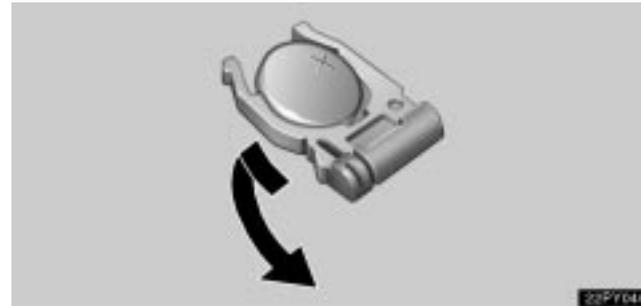
**Special care should be taken that small children do not swallow the removed battery or components.**

## AUDIO

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1. Pull the case out while pushing the lock release button to the side.



2. Remove the discharged battery.
3. Put in a new battery with the positive (+) side up.
4. Put it in the case securely.

**NOTICE**

- *Be sure that the positive side of the remote control battery is facing correctly.*
- *Do not replace the battery with wet hands. Water may cause rust.*
- *Do not touch or move any components inside of the remote control, or it may interfere with proper operation.*
- *Be careful not to bend the electrode of the remote control battery insertion and that dust or oil does not adhere to the transmitter case.*
- *Close the battery case securely.*

After replacing the battery, check that the remote control operates properly. If the remote control still does not operate properly, contact your Lexus dealer.

**DVD player operation**

**The DVD player can play audio CDs, DVD video discs, CD texts, dts-CDs, DVD audio discs and video CDs.**

For appropriate discs for this player, see "Audio/video system operating hints" on page 383.

The DVD player works when the ignition key is in the "ACC" or "ON" position.

To turn on the DVD player, a disc must be loaded in the player.

To turn off the player, eject the disc.

**(a) Inserting the disc**

## AUDIO

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1. Push the center of the rear console box lid.



2. Push this button to open the cover.



3. Pull the lid forward.



**4. Insert a disc with the label side backward and close the lid.**

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

If the label faces forward, the disc cannot be played. In this case, "DISC CHECK" appears on the screen.

If a disc which is not playable is inserted, "DISC CHECK" will also appear on the screen. For appropriate discs for this player, see "Audio/video system operating hints" on page 383.

**NOTICE**

*Never try to disassemble or oil any part of the DVD player. Do not insert anything other than a disc into the slot.*

**5. Close the cover and console box.**



The indicator light turns on while the disc is loaded.

The player will play the track or chapter, and it will play from the beginning of the track or chapter again after it reaches the end.



**CAUTION**

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

**(b) Ejecting the disc**

## AUDIO

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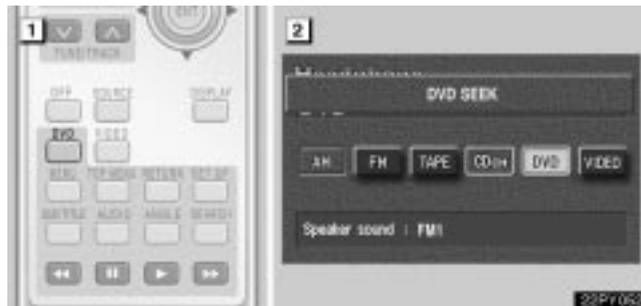


Pull the lid forward to open the DVD player. Push the disc eject button to eject a disc.



### **NOTICE**

*Do not place anything on the opened cover. It could damage the cover.*

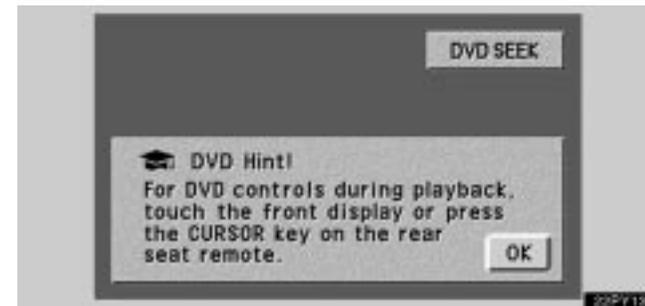
**(c) Selecting the DVD mode**

- ▶ **1 Remote control button**
- 2 Mode selection screen**

To select the DVD mode, push the “DVD” button on the remote control.

You can also select the DVD mode on the mode selection screen mentioned above.

“DVD” appears on the screen.



The “DVD Hint!” screen appears when the DVD mode is first selected after you turn the ignition key to the “ACC” or “ON” position.

Push the “OK” switch when you read the message.

## AUDIO

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### (d) DVD player operation switches



The DVD player can be operated with the remote control buttons directly.



The player can also be operated with the switches on the screen.

To operate the switches on the screen, select the switch by the joy stick and push the "ENT" button. You cannot select the switches on the screen by touching them directly.

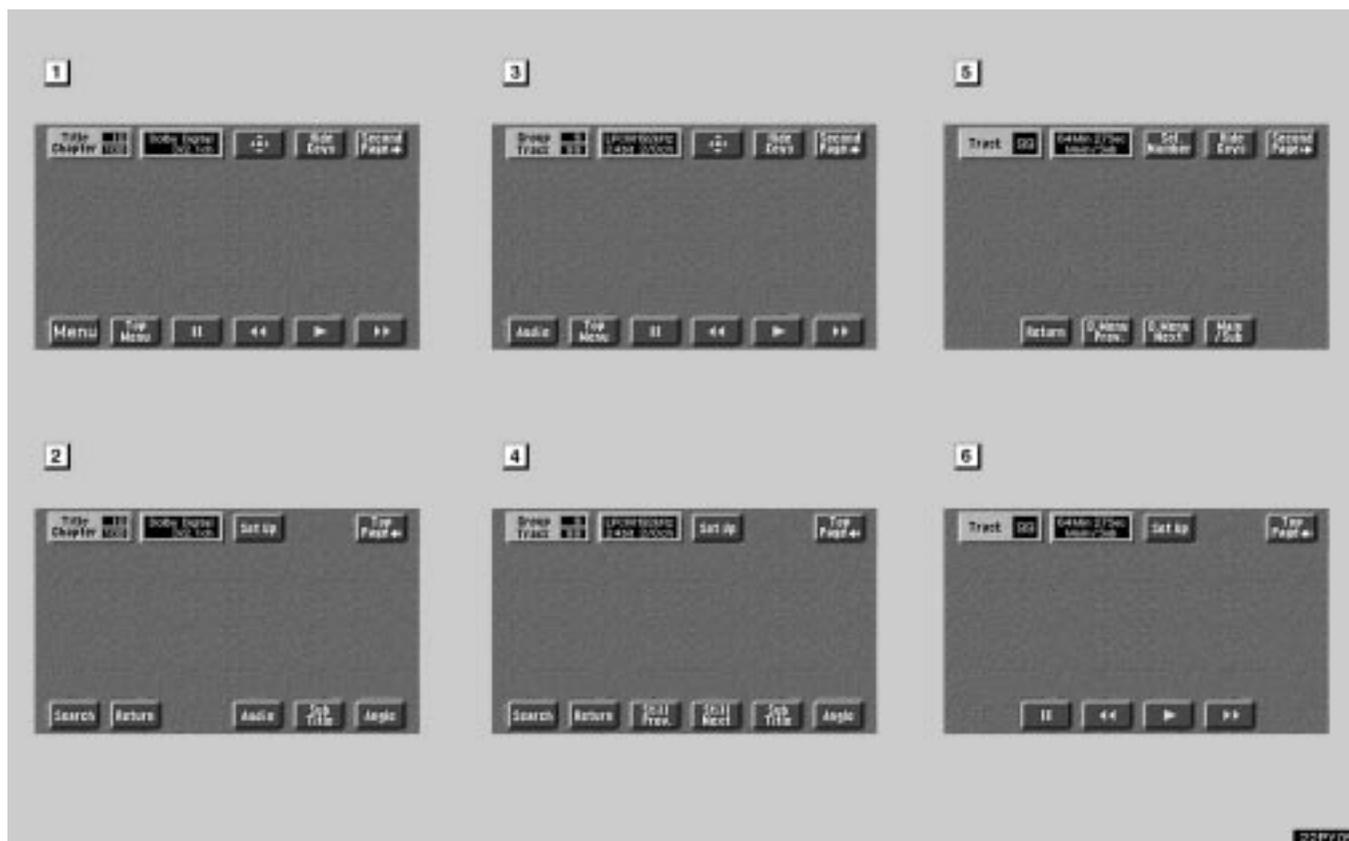
When the switch is selected by the joy stick, the outline of the switch changes to blue. Push the "ENT" button, and the switch will be highlighted in green.

**(e) Turning the operation switches on and off**



To turn on the operation switches, push the “CURSOR” button on the remote control.

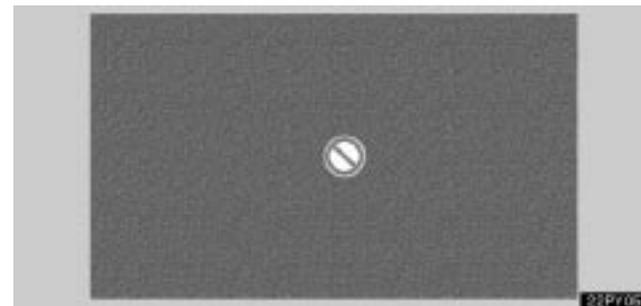
## AUDIO



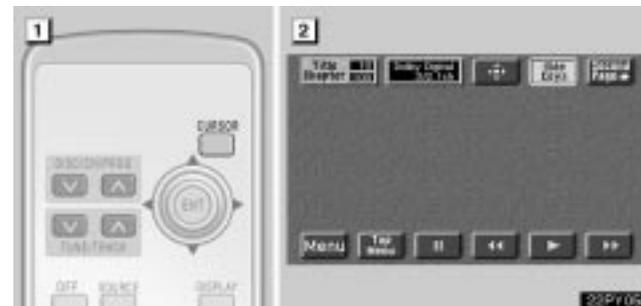
- 1 Top page (DVD video operation switch)
- 2 Second page (DVD video operation switch)
- 3 Top page (DVD audio operation switch)
- 4 Second page (DVD audio operation switch)
- 5 Top page (video CD)
- 6 Second page (video CD)

There are operation switches on the “Top Page” and “Second Page” screens.

To change the screen, push the “Top Page” or “Second Page” switch on the screen.



If “” appears on the screen when you select a switch, it indicates that the switch cannot work.



- ▶ 1 Remote control button
- 2 Screen switch

To turn off the switches on the screen, push the “CURSOR” button on the remote control once again or push the “Hide Keys” on the screen.

## AUDIO

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### DVD video/DVD audio player operation

**NOTE:** The playback condition of some DVD discs may be determined by a DVD software producer. This DVD player plays a disc as the software producer intended. So, some functions may not work properly. Be sure to read the instruction manual for the DVD disc separately provided. For the detailed information about DVD video discs, see “DVD video disc information” on page 375.

#### Precautions for DVD video discs

When recording on a DVD video, DVD audio, video CD or audio tracks may not record in some cases while the menu is displayed. As audio will not play in this case, verify that the video tracks are playing and then activate playback.

When playback of a disc is completed:

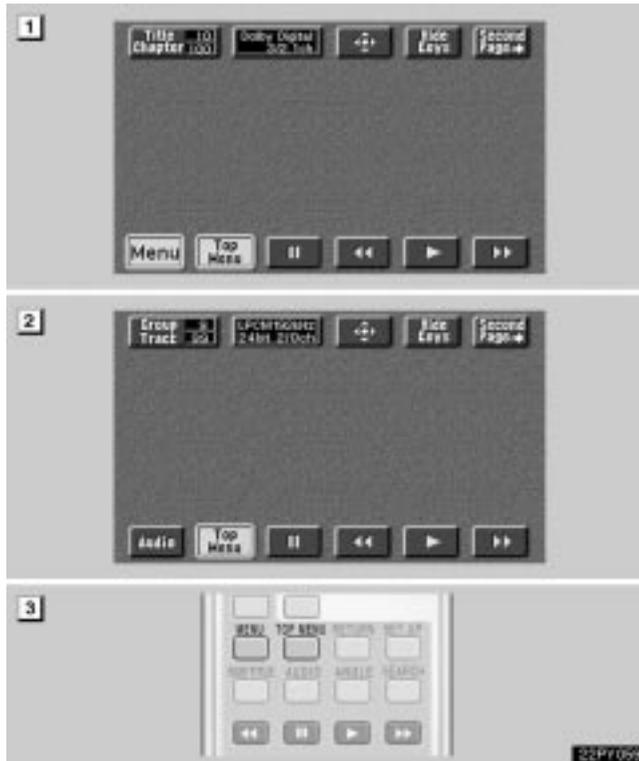
- If an audio CD is playing, the first track starts.
- If a DVD video, DVD audio or video CD is playing, playback will stop or the menu screen will be displayed.

The title/chapter number and playback time display may not appear while playing back certain DVD video discs.



Conversational speech on some DVDs is recorded at a low volume to emphasize the impact of sound effects. If you adjust the volume assuming that the conversations represent the maximum volume level available for the DVD, you may be startled by louder sound effects or when you change to a different audio source. Loud sounds may have a significant impact on the human body or pose a driving hazard. Keep this in mind when you adjust the volume.

(a) Turning the menu screen for the disc on or off



- ▶ 1 For DVD video
- ▶ 2 For DVD audio
- ▶ 3 Remote control button

DVD video: To turn on the menu screen for the disc, push the “Top Menu” or “Menu” switch on the screen, or the “MENU” or “TOP MENU” button on the remote control.

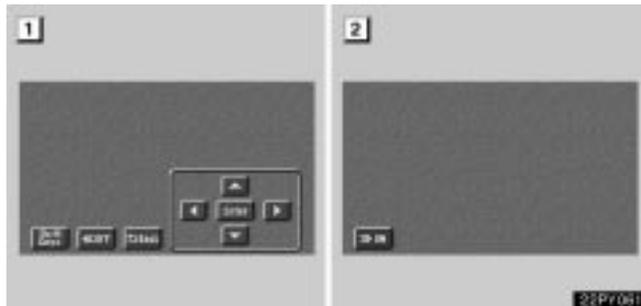
DVD audio: To turn on the menu screen for the disc, push the “Top Menu” switch on the screen or the “TOP MENU” button on the remote control.

For the operation of the menu screen, see the separate manual for the DVD disc.



To turn on the selecting switch, push the “Selecting” switch.

## AUDIO



- ▶ **1** *Selecting switch on screen*
- 2** *Selecting switch off screen*

To select the menu for the disc, push the “◀”, “▲”, “▶” or “▼” switches on the screen. Push the “Enter” switch to select the menu for the disc.

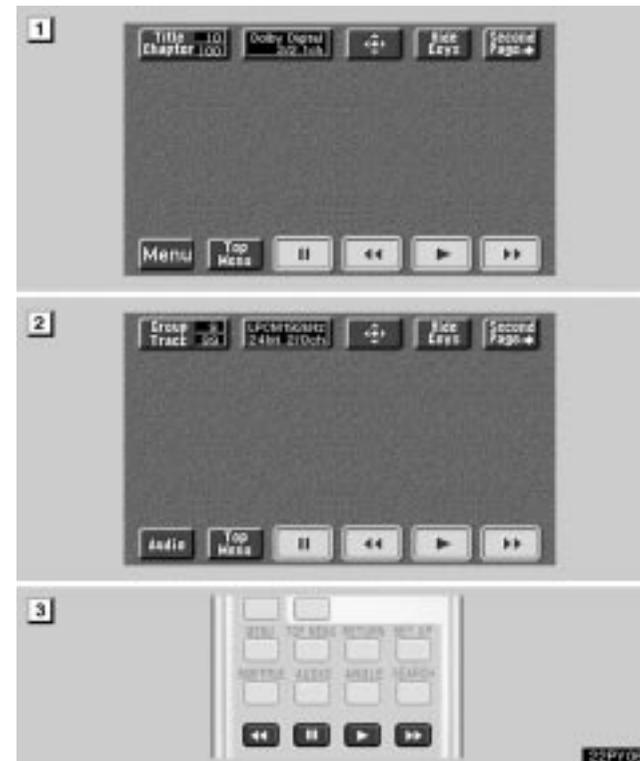
You can also select the menu for the disc by the joy stick and the “ENT” button on the remote control when the control switches are not indicated on the screen.

Push the “Shift Keys” on the screen, and the switches (“◀”, “▲”, “▶”, “▼”, “Enter” and “Shift Keys” switches) will move up and down.

To turn off the switch, push the “OFF” switch on the screen. To turn on the switch again, push the “ON” switch on the screen.

To return to the previous screen, push the “Back” switch on the screen.

(b) Operating the “||”, “▶”, “◀◀” and “▶▶” switches/buttons





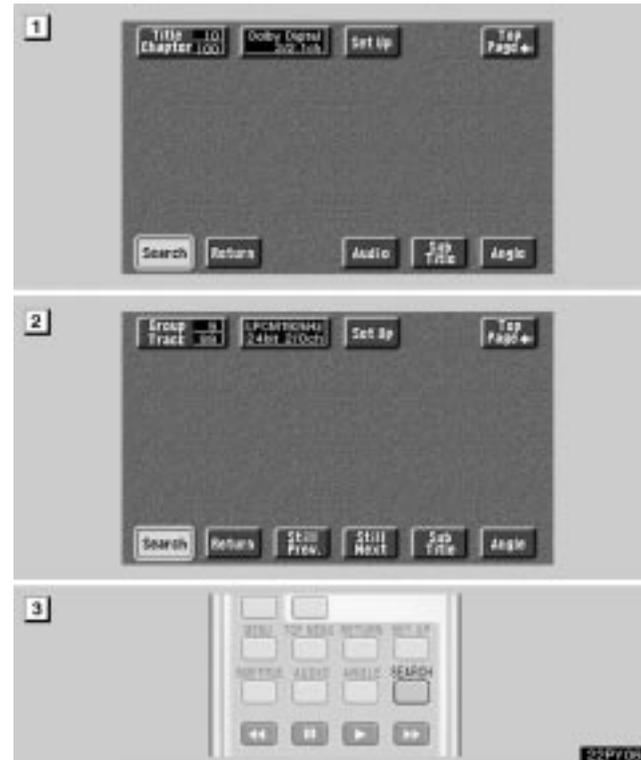
## AUDIO

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To skip to the predetermined screen, push the “Return” switch on the screen or the “RETURN” button on the remote control. The DVD player starts playing from the beginning of the predetermined screen.

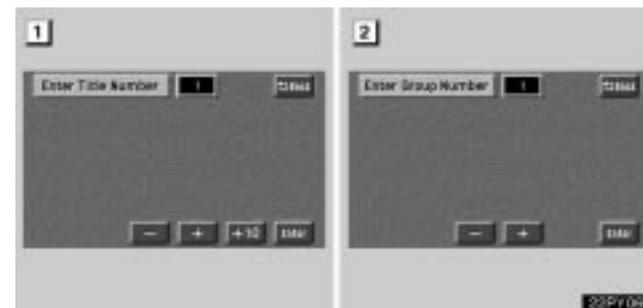
For further details of the predetermined screen, see the separate manual for the DVD disc.

### (d) Selecting the title/group



- **1** For DVD video      **2** For DVD audio  
**3** Remote control button

To display the searching title (DVD video) or group (DVD audio) screen, push the “Search” switch on the screen or the “SEARCH” button on the remote control.



► **1** For DVD video      **2** For DVD audio

**DVD video:** Select the title number by using the “–”, “+” and “+10” switches and push the “Enter” switch to enter the number. The player starts playing disc for that title number. The selected title number will appear on the screen.

Push the “Back” switch to return to the menu screen.

**DVD audio:** Enter the group number by using the “–” and “+” switches. The selected group number will appear on the screen. Push the “Enter” switch. The player starts playing the disc from the entered group number.

Push the “Back” switch to return to the previous screen.

## AUDIO

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(e) Selecting the bonus group (DVD audio only)



Enter the bonus group number on the searching group screen and push the “Enter” switch on the screen. The “Enter Key Code” screen will appear. To enter the number of the group you want to play, push the group number.

If you enter the wrong number, push the “Clear” switch on the screen to delete the number.

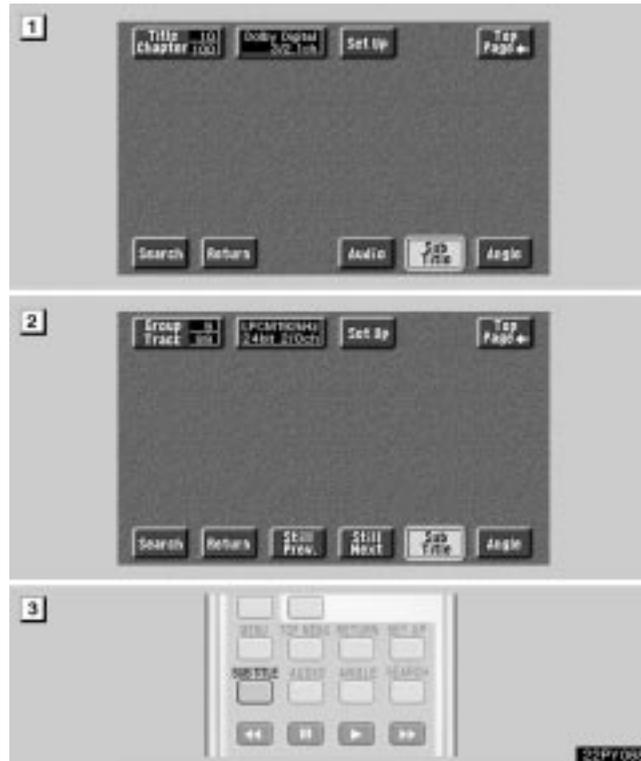
Push the “Enter” switch on the screen. The player starts playing the disc from the selected bonus group number.

(f) Changing the still picture (DVD audio only)



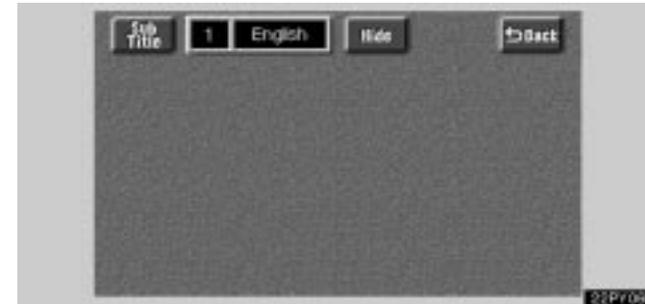
Push the “Still Prev.” or “Still Next” switch on the screen to forward or reverse the still pictures.

(g) Changing the subtitle language



- ▶ **1** For DVD video      **2** For DVD audio
- 3** Remote control button

Push the “Sub Title” switch on the screen or the “SUB TITLE” button on the remote control, and the changing subtitle language screen will appear.



Each time you push the “Sub Title” switch, another language stored on the disc is selected.

To turn off the subtitles, push the “Hide” switch.

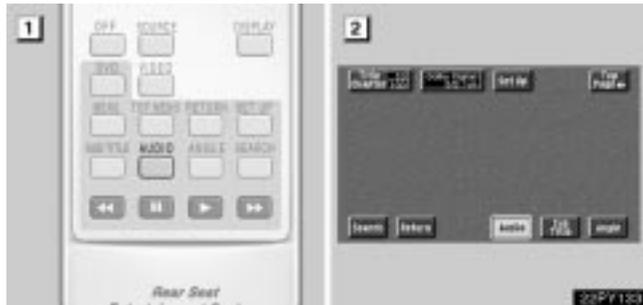
Push the “Back” switch to return to the previous screen.

The selected subtitle language will appear on the screen.

## AUDIO

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### (h) Changing audio language



- ▶ **1** Remote control button
- 2** Screen switch

DVD video only —

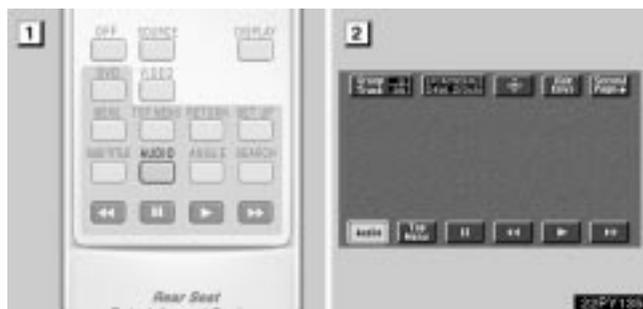
Push the “Audio” switch on the screen or the “AUDIO” button on the remote control, and the changing audio language screen will appear.



Each time you push the “Audio” switch, another language stored on the disc is selected.

The selected audio language will appear on the screen.

Push the “Back” switch to return to the previous screen.

**(i) Changing audio format**

- ▶ **1 Remote control button**
- 2 Screen switch**

DVD audio only —

Push the “Audio” switch on the screen or the “AUDIO” button on the remote control and the changing audio format screen will appear.

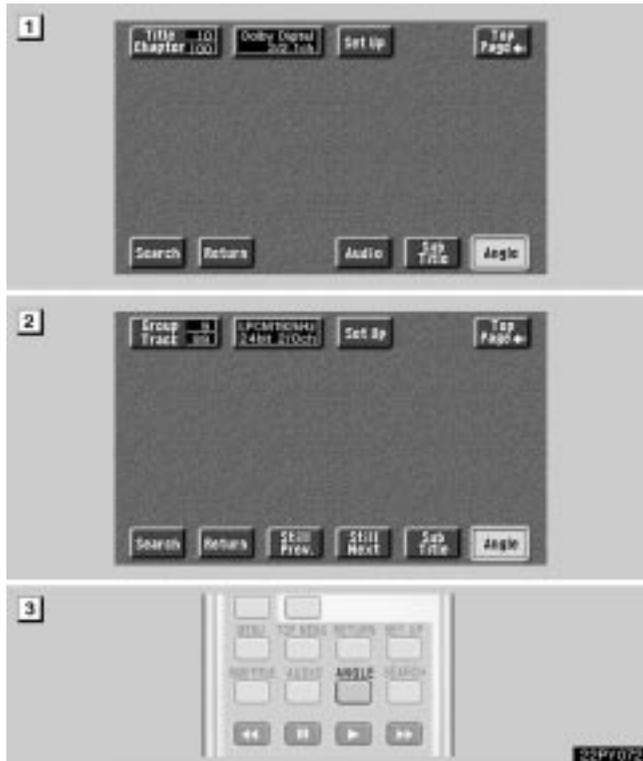


Each time you touch the “Audio” switch, another audio format stored on the disc is selected.

Push the “Back” switch to return to the previous screen.

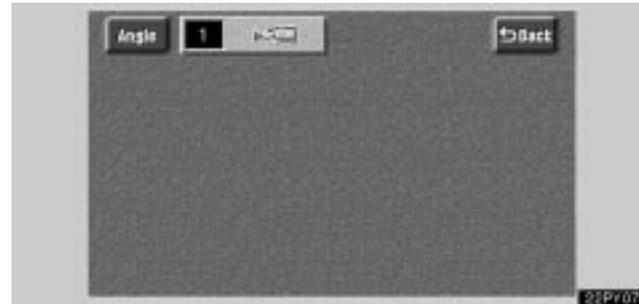
## AUDIO

### (j) Changing angle screen



- ▶ **1** For DVD video      **2** For DVD audio  
**3** Remote control button

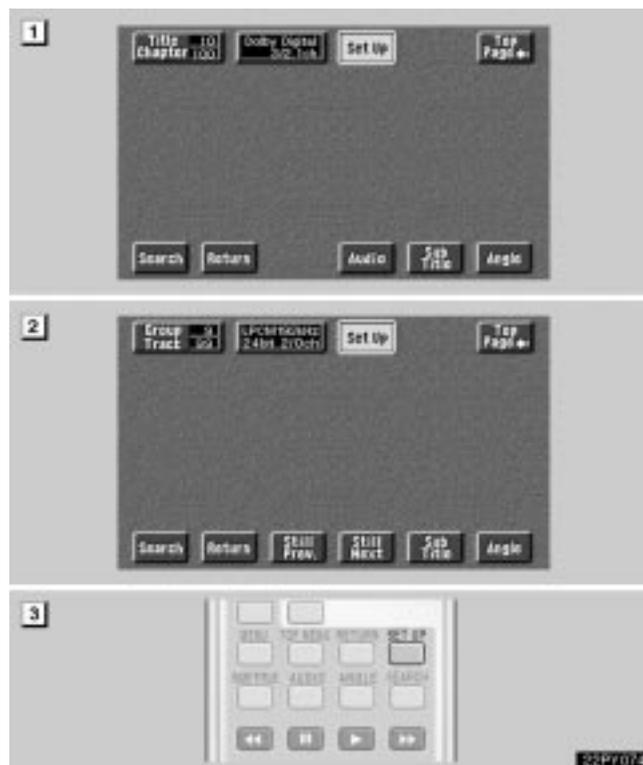
Push the “Angle” switch on the screen or the “ANGLE” button on the remote control, and the changing angle screen will appear.



The angle can be selected for discs that are multi-angle compatible when the “” mark appears on the screen. Each time you push the “Angle” switch, the angle changes. The angle number which you can select will appear on the screen.

Push the “Back” switch to return to the previous screen.

(k) Changing the initial setting



- ▶ **1** For DVD video      **2** For DVD audio
- 3** Remote control button

Push the “Set Up” switch on the screen or the “SET UP” button on the remote control, and the initial setting screen will appear. You can change the initial setting.

After the setting is done, the player plays from the beginning of the chapter or the track.



There are initial setting switches on the “Setup Menu 1” screen ( **1** ) and “Setup Menu 2” screen ( **2** ).

To change the screen, push the “Top Page” or “Second Page” switch on the screen.

After you change the initial setting, push the “Enter” switch. The initial setting switch will be turned off and return to the picture previously.

When the “Initial Setting” switch on “Setup Menu 2” is pushed, all menus are initialized.

## AUDIO

### (I) Changing the audio language



Push the “Audio Lang.” switch on the “Setup Menu 1” screen (1) and the “Select Audio Language” screen (2) appear.

Select the language you want to hear on the screen.

To return to the “Setup Menu 1” screen, push the “Back” switch.

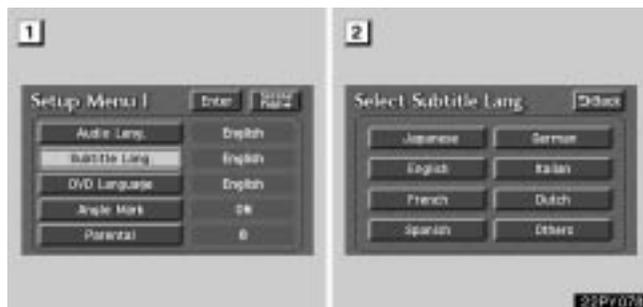
If you cannot find a language you want to hear, push the “Others” switch. The “Enter Audio Lang. Code” screen will appear.



To enter the code of the language you want to hear, push the number of the language code. For details about the language codes, see the language code list. If you enter a wrong number, push the “Clear” switch to delete the number.

If numbers which are not on the list are entered and the “Enter” switch is pushed, the “Incorrect Code” screen will appear. Push the language code you want to hear again.

To return to the “Select Audio Language” screen, push the “Back” switch.

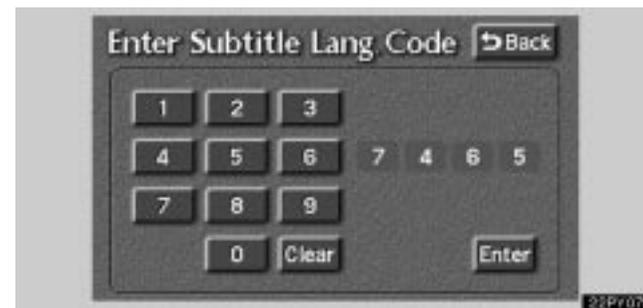
**(m) Changing the subtitle language**

Push the “Subtitle Lang.” switch on the “Setup Menu 1” screen ( [1] ) and the “Select Subtitle Lang.” screen ( [2] ) appear.

Select the language you want to read on the screen.

To return to the “Setup Menu 1” screen, push the “Back” switch.

If you cannot find a language you want to read, push the “Others” switch. The “Enter Subtitle Lang. Code” screen will appear.



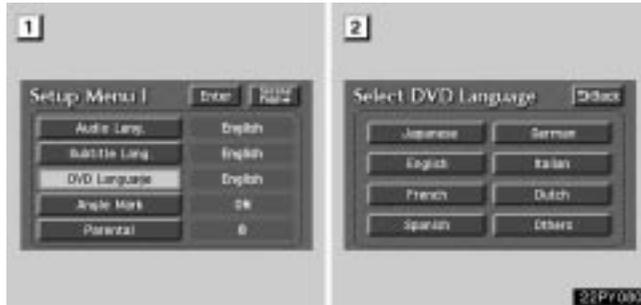
To enter the code of the language you want to read, push the number of the language code. For details about the language codes, see the language code list. If you enter a wrong number, push the “Clear” switch to delete the number.

Push the “Enter” switch on the screen. If numbers which are not on the list are entered and the “Enter” switch is pushed, the “Incorrect code” screen will appear. Push the language code you want to read again.

To return to the “Select Subtitle Lang.” screen, push the “Back” switch on the screen.

## AUDIO

### (n) Changing the DVD language



Push the “DVD Language” switch on the “Setup Menu 1” screen ( [1] ) and “Select DVD Language” screen ( [2] ) appear.

Select the language you want to read on the screen.

If you cannot find a language you want to read, push the “Others” switch. The “Enter DVD Language Code” screen will appear.

To return to the “Setup Menu 1” screen, push the “Back” switch.

If you cannot find a language you want to read, push the “Others” switch. The “Enter DVD Language Code” screen will appear.



To enter the code of the language you want to read, push the number of the language code. For details about the language codes, see the language code list. If you enter a wrong number, push the “Clear” switch to delete the number.

Push the “Enter” switch on the screen. If numbers which are not on the list are entered and the “Enter” switch is pushed, the “Incorrect code” screen will appear. Push the language code you want to read again.

To return to the “Select DVD Language” screen, push the “Back” switch on the screen.

**(o) Turning the angle mark on or off**

**The angle mark can be turned on for discs that are multi-angle compatible.**

Each time you push the "Angle Mark" switch on the screen, the angle mark turns on or off alternately.

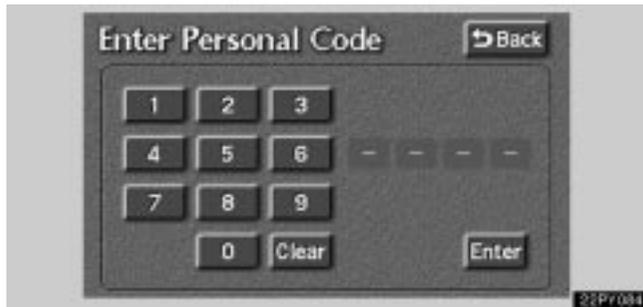
**(p) Setting level of viewer restrictions**

**You can restrict the play back screen by setting the viewer restrictions. You can prevent the restriction with a password. Some discs do not supply a restriction.**

To set the level of viewer restriction, push the "Parental" switch on the "Setup Menu 1" screen. The "Enter Personal Code" screen will appear.

## AUDIO

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Push the number for the password and the “Enter” switch. The “Select Restriction Level” screen will appear.

If you enter a wrong number, push the “Clear” switch to delete the number.

You cannot change the setting without inputting the password. When you forget or change the password, push the “Clear” switch ten times to initialize the password.

To return to the “Setup Menu 1” screen, push the “Back” switch.



Push a parental level (1 — 8). The smaller the level number, the stricter the age limit. Push the “Back” switch to return to the “Setup Menu 1” screen.

**(q) Setting the display mode**

Each time you push the “Display Mode” switch on the “Setup Menu 2” screen, the display mode is changed from wide mode to auto mode.

Code	Language
1001	Japanese
0514	English
0618	French
0405	German
0920	Italian
0519	Spanish
2608	Chinese
1412	Dutch
1620	Portuguese
1922	Swedish

**(r) Language code list**

## AUDIO

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1821	Russian
1115	Korean
0512	Greek
0101	Afar
0102	Abkhazian
0106	Afrikaans
0113	Amharic
0118	Arabic
0119	Assamese
0125	Aymara
0126	Azerbaijani
0201	Bashkir
0205	Byelorussian
0207	Bulgarian
0208	Bihari
0209	Bislama
0214	Bengali
0215	Tibetan
0218	Breton
0301	Catalan
0315	Corsican

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0319	Czech
0325	Welsh
0401	Danish
0426	Bhutani
0515	Esperanto
0520	Estonian
0521	Basque
0601	Persian
0609	Finnish
0610	Fiji
0615	Faroese
0625	Frisian
0701	Irish
0704	Scots–Gaelic
0712	Galician
0714	Guarani
0721	Gujarati
0801	Hausa
0809	Hindi
0818	Croatian
0821	Hungarian

## AUDIO

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0825	Armenian
0901	Interlingua
0905	Interlingue
0911	Inupiak
0914	Indonesian
0919	Icelandic
0923	Hebrew
1009	Yiddish
1023	Javanese
1101	Georgian
1111	Kazakh
1112	Greenlandic
1113	Cambodian
1114	Kannada
1119	Kashmiri
1121	Kurdish
1125	Kirghiz
1201	Latin
1214	Lingala
1215	Laothian
1220	Lithuanian

**AUDIO**

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1222	Latvian
1307	Malagasy
1309	Maori
1311	Macedonian
1312	Malayalam
1314	Mongolian
1315	Moldavian
1318	Marathi
1319	Malay
1320	Maltese
1325	Burmese
1401	Nauru
1405	Nepali

1415	Norwegian
1503	Occitan
1513	(Afan) Oromo
1518	Oriya
1601	Punjabi
1612	Polish
1619	Pashto, Pushto
1721	Quechua

## AUDIO

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1813	Rhaeto–Romance
1814	Kirundi
1815	Romanian
1823	Kinyarwanda
1901	Sanskrit
1904	Sindhi
1907	Sangho
1908	Serbo–Croatian
1909	Sinhalese
1911	Slovak
1912	Slovenian
1913	Samoan
1914	Shona
1915	Somali
1917	Albanian
1918	Serbian
1919	Siswati
1920	Sesotho
1921	Sundanese
1923	Swahili
2001	Tamil

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2005	Telugu
2007	Tajik
2008	Thai
2009	Tigrinya
2011	Turkmen
2012	Tagalog
2014	Setswana
2015	Tonga
2018	Turkish
2019	Tsonga
2020	Tatar
2023	Twi
2111	Ukrainian
2118	Urdu
2126	Uzbek
2209	Vietnamese
2215	Volapük
2315	Wolof
2408	Xhosa
2515	Yoruba
2621	Zulu

## AUDIO

### (s) Selecting the chapter/track



To select the chapter/track, push the “∨” or “∧” (TUNE/TRACK) button on the remote control until the number of the chapter/track you want to select appears on the screen.

### (t) Using the control screen



► **1** For DVD video      **2** For DVD audio

When playing a disc, push the “DVD” button on the remote control. The control screen will appear on the screen.

Details of the specific switches, controls and features are described below.

“**PICTURE**” switch: Push the “PICTURE” switch to turn off the control screen and return to the picture previously displayed.

“**RPT**” switch (DVD audio only): Push the “RPT” switch while the track is playing. When the track ends, it will automatically replay. To turn off the repeat feature, push this switch again.

“**RAND**” switch (DVD audio only): Push the “RAND” switch. The player will play the tracks on the disc in random order. To turn off the random feature, push this switch again.

**“SCAN” switch (DVD audio only):** Push the “SCAN” switch. The player will scan all the tracks on the disc you are listening to. To stop scanning, push this switch again. If the player scanned all the tracks on the disc, it will stop scanning.

**“▲” and “▼” switches:** Push and hold the “▲” or “▼” switch to fast forward or reverse a disc. When you release the switch, the DVD player will resume playing.

### **(u) Error messages**

If the player malfunctions, your audio system will display one of the three following error messages.

**If “DISC CHECK” appears on the screen:** It indicates that the disc is dirty, damaged or it was inserted upside down. Clean the disc or insert it correctly.

**If “REGION CODE ERROR” appears on the screen:** It indicates that the DVD region code is not set properly.

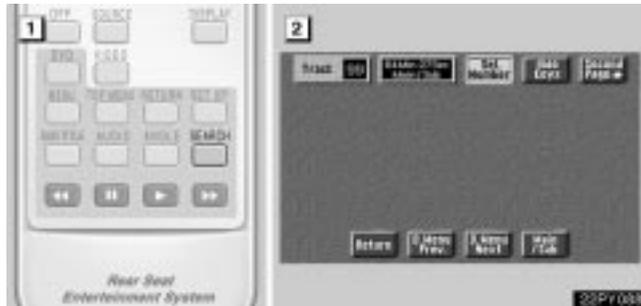
**If “DVD ERROR” appears on the screen:** There is a problem inside the player. Eject the disc. Set the disc again.

**If the malfunction still exists,** take your vehicle to your Lexus dealer.

## AUDIO

### Video CD/audio CD/CD text player operation

#### (a) Selecting the disc menu number (video CD only)



- ▶ **1 Remote control button**
- 2 Screen switch**

Push the “SEARCH” button on the remote control or the “Sel. Number” switch on the screen, and the disc menu number search screen will appear.

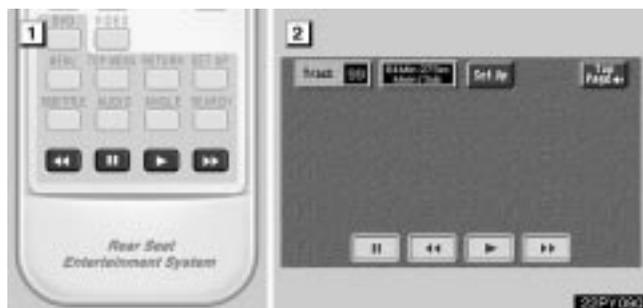


Enter the disc menu number by using the “-”, “+” and “+10” switches and push the “Enter” switch. The player starts playing the disc from the entered disc menu number. The entered disc menu number will appear on the screen.

Push the “Back” switch to return to the menu screen.

Move up and down the switches by pushing the “Shift keys” on the screen.

(b) Operating the “||”, “▶”, “◀◀” and “▶▶” switches/buttons



- ▶ **1 Remote control button**
- ▶ **2 Screen switch**

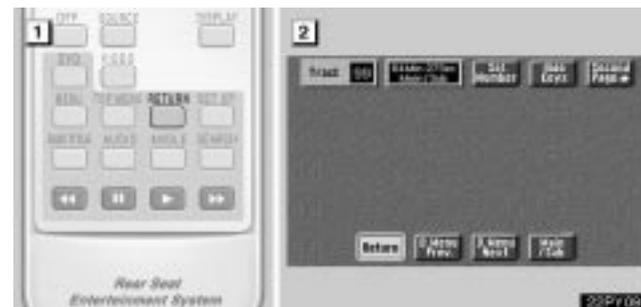
**“||” switch/button:** Push this switch/button to pause the disc.

**“▶” switch/button:** Push this switch/button to cancel the pause and return to normal playing.

**“◀◀” and “▶▶” switches/buttons:** Push this switch/button to fast forward or reverse. If you want to return to the beginning of the current track, release the switch/button.

Video CD only: Push the “▶▶” switch/button while pausing, the video CD plays the slow-motion video replay.

(c) Turning on the disc menu (video CD only)



- ▶ **1 Remote control button**
- ▶ **2 Screen switch**

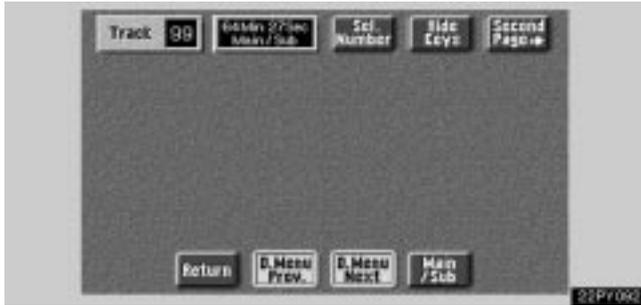
Push the “RETURN” button on the remote control or the “Return” switch on the screen to turn on the menu screen for the disc.

For the operation of the menu screen, see the manual for the video CD.

## AUDIO

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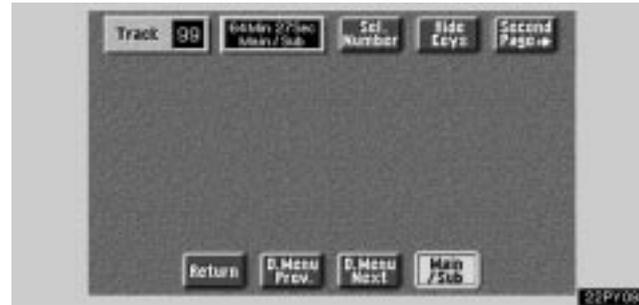
(d) Changing menu page or track (video CD only)



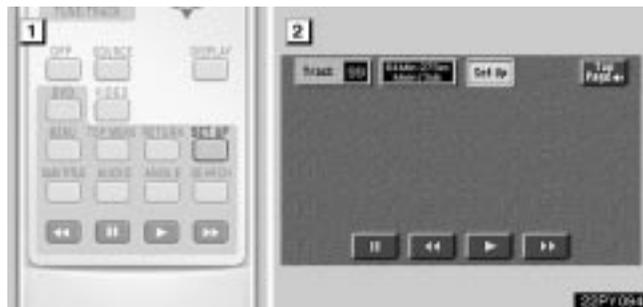
Push the “D. Menu Next” or “D. Menu Prev.” switch while the disc menu is displayed. The next or previous page will appear on the screen.

Push the “D. Menu Next” or “D. Menu Prev.” switch while the player is playing video. The next or previous track will be searched and played.

(e) Changing a multiplex transmission (video CD only)



Push the “Main/Sub” switch to change a multiplex transmission. The mode changes from Main/Sub to Main to Sub and back to Main/Sub by pushing the “Main/Sub” switch.

**(f) Changing the initial setting (video CD only)**

- ▶ **1** Remote control button
- 2** Screen switch

Push the “SET UP” button on the remote control or the “Set Up” switch on the screen, and the initial setting screen will appear. You can change the initial setting. (See “(k) Changing the initial setting” on page 353 for details.)

After the setting is done, the player plays from the beginning of the chapter or the track.

**(g) Using the control screen**

- ▶ **1** For video CD
- 2** For audio CD
- 3** For CD text

## AUDIO

---

**When playing a disc, push the “DVD” button on the remote control. The control screen will appear on the screen.**

CD text only — The CD title and track title will appear on the screen when pushing the “DVD” button.

Details of the specific switches, controls and features are described below.

**“PICTURE” switch (video CD only):** Push the “PICTURE” switch to turn off the control screen and return to the picture previously displayed.

**“RPT” switch (audio CD and CD text):** Push the “RPT” switch while the track is playing. When the track ends, it will automatically replay. To turn off the repeat feature, push this switch again.

**“RAND” switch (audio CD and CD text):** Push the “RAND” switch. The player will play the tracks on the CD in random order. To turn off the random feature, push this switch again.

**“SCAN” switch (audio CD and CD text):** Push the “SCAN” switch. The player will scan all the tracks on the CD. To stop scanning, push this switch again. When the player has scanned all the tracks on the CD, it will stop scanning.

**“▲” and “▼” switches:** Push the “▲” or “▼” switch to fast forward or reverse the disc. When you push the switch again, the DVD player will resume playing.

### (h) Error messages

If the player malfunctions, your audio system will display one of the three following error messages.

**If “DISC CHECK” appears on the screen:** It indicates that the disc is dirty, damaged or it was inserted upside down. Clean the disc or insert it correctly.

**If “REGION CODE ERROR” appears on the screen:** It indicates that the DVD region code is not set properly.

**If “DVD ERROR” appears on the screen:** There is a problem inside the player. Eject the disc. Set the disc again.

**If the malfunction still exists,** take your vehicle to your Lexus dealer.

### Screen adjustment

You can adjust the color, contrast, tone and brightness of the screen.



Push the “DISPLAY” button on the remote control ( 1 ) and then the “Display” screen ( 2 ) will appear.

The screen may turn purple to deflect the sunlight. This is not a malfunction.

	“+” or “GREEN”	“-” or “RED”
COLOR	Strengthens the green color	Strengthens the red color
CONTRAST	Strengthens the contrast	Weakens the contrast
TONE	Strengthens the tone	Weakens the tone
BRIGHTNESS	Brightens	Darkens



Each time you push the “+” or “-” switch, you can adjust the color, contrast, tone and brightness of the screen.

## AUDIO

---

After adjusting the screen, push the “OK” switch to return to the previous screen.

### Selecting the video mode

The audio machine connected to the input terminal adapter can be played in the video mode.



To select the video mode, push the “VIDEO” button on the remote control ( **1** ). You can also select the video mode on the mode selection screen ( **2** ) mentioned above.

## DVD video disc information

### (a) DVD player and DVD video discs

**This DVD player conforms to NTSC color TV formats. DVD video discs conforming to other formats such as PAL or SECAM cannot be used.**

**Region codes:** Some DVD video discs have a region code indicating where you can use. If the DVD video disc is not labeled "ALL" or "1", you cannot use it in this DVD player. If you attempt to play an inappropriate DVD video disc in this player, "REGION CODE ERROR" appears on the screen. Even if the DVD video disc does not have a region code, in some cases you cannot use it.

### Marks shown on DVD video discs:

	Indicates NTSC format of color TV.
	Indicates the number of audio tracks.
	Indicates the number of language subtitles.
	Indicates the number of angles.
	Indicates the screen to be selected. Wide screen: 16:9 Standard: 4:3
	Indicates regions in which this video disc can be played. ALL: all countries Number: region code

## AUDIO

---

### (b) DVD video disc glossary

**DVD video discs:** Digital Versatile Disc that holds video. DVD video discs have adopted “MPEG2”, one of the world standards of digital compression technologies. The picture data is compressed by 1/40 on average and stored. Variable rate encoded technology in which the volume of data assigned to the picture is changed depending on the picture format has also been adopted. Audio data is stored using PCM and Dolby digital, which enables higher quality of sound. Furthermore, multi-angle and multi-language features will also help you enjoy the more advanced technology of DVD video.

**Viewer restrictions:** This feature limits what can be viewed in conformity with the level of restrictions of the country. The level of restrictions varies depending on the DVD video disc. Some DVD video discs cannot be played at all, or violent scenes are skipped or replaced with other scenes.

Level 1: DVD video discs for children can be played.

Level 2 — 7: DVD video discs for children and G-rated movies can be played.

Level 8: All types of DVD video discs can be played.

**Multi-angle feature:** You can enjoy the same scene at different angles.

**Multi-language feature:** You can select the language of the subtitles and audio.

**Region codes:** Region codes are provided on DVD players and DVD discs. If the DVD video disc does not have the same region code as the DVD player, you cannot play the disc on the DVD player. For region codes, see page 375.

**Audio:** This DVD player can play liner PCM, Dolby digital, dts and MPEG audio format DVD. Other decoded type cannot be played.

**Title and chapter:** Video and audio programs stored on DVD video discs are divided in parts by title and chapter.

**Title:** The largest unit of the video and audio programs stored on DVD video discs. Usually, one piece of a movie, one album, or one audio program is assigned as a title.

**Chapter:** A unit smaller than a title. A title comprises plural chapters.

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“dts” is a trademark of Digital Theater Systems, Inc.

### Input terminal adapter

The rear entertainment system plays videos and sound when your audio system is connected to the input terminal adapter on the rear console box. For details, refer to the manufacturer’s instructions.



To use the input terminal adapter, push the lid.

## AUDIO

---



**To use the input terminal adapter, open the cover.**

The input terminal adapter is composed of 3 input terminal adapters.

“**VIDEO**” : Image input adapter

“**MONO L**” : Audio input adapter

“**R**” : Audio input adapter

### **NOTICE**

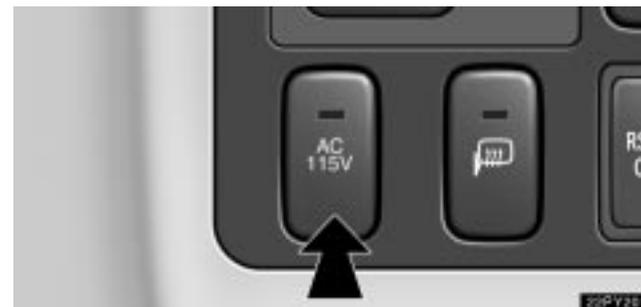
- *Close the input terminal adapter lid when the input terminal adapter is not in use. Inserting a foreign object other than the appropriate plug that fits the adapter may cause electrical failure or short circuit.*
- *The input terminal lid must be closed before you fold up the second seat.*

**Power outlet (115 VAC)**

**This power outlet is designed for use as a power supply for the audio device connected to the input terminal adapter.**

The key must be in the "ON" position for the power outlet to be used.

The maximum capacity for this power outlet is 115 VAC/100W. If you attempt to use an appliance that requires more than 115 VAC or 100W, the protection circuit will activate and cut the power supply. The power supply will restart automatically when you use an appliance that operates within the 115 VAC/100W limits.

**► Main switch**

**To use the power outlet, push the main switch on the instrument panel.**

An indicator light will illuminate to indicate that the power outlet is ready for use.

Push the main switch once again to turn the power outlet off. When the power outlet is not in use, make sure that the main switch is turned off.

## AUDIO

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### NOTICE

- *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.*

The power outlet is not designed for the following electric appliances even though their power consumption is under 115 VAC/100W. These appliances may not operate properly.

- **Appliances with high initial peak wattage:** Cathode-ray tube type televisions, compressor-driven refrigerators, electric pumps, electric tools, etc.
- **Measuring devices which process precise data:** Medical equipment, measuring instruments, etc.
- **Other appliances requiring an extremely stable power supply:** Microcomputer-controlled electric blankets, touch sensor lamps, etc.

Certain electrical appliances may cause radio noise.

### Headphone input jacks



To use the jack, push the lid.



**You can enjoy the rear seat entertainment system with commercial headphones.**

To use the headphones, connect them to the jack.

The key must be in the "ACC" or "ON" position.



**To adjust the volume of the headphones, turn the knob. Turn right to increase the volume. Turn left to decrease the volume.**

The maximum volume depends on the type of headphones.

With some headphone generally available in the market, it may be difficult to catch sound properly. Lexus recommends the use of Lexus genuine headphone.

Please contact your Lexus dealer for further details.

**Wireless headphone:** You can also enjoy the rear seat entertainment system with a wireless headphone. For details, ask your Lexus dealer.

 **CAUTION**

**Adjust the volume when you connect the headphones to the jack. Loud sounds may have a significant impact on the human body.**

## AUDIO

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### **NOTICE**

*The headphone input jack lid must be closed before you tumble the second seat.*

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## AUDIO/VIDEO SYSTEM OPERATING HINTS

### **NOTICE**

*To ensure correct audio/video system operation:*

- *Be careful not to spill beverages over the system.*
- *Do not put anything other than a cassette tape or CD into the slot.*
- *Do not put anything other than a DVD video, DVD audio, video CD, dts-CD and audio CD into the DVD player.*
- *The use of a cellular phone inside or near the vehicle may cause a noise from the speakers of the system which you are listening to. However, this does not indicate a malfunction.*

## AUDIO

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### 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, DVD player and CDs

- Your CD player and DVD player are intended for use with 12 cm (4.7 in.) CDs only.
- Extremely high temperatures can keep your CD player and DVD player from working. On hot days, use the air conditioning to cool the vehicle interior before you use the players.
- Bumpy roads or other vibrations may make your CD player and DVD player skip.

## AUDIO

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- If moisture gets into your CD player and DVD player, the players may not play even though they appear to be working. Remove the CD from the player and wait until it dries.

 **CAUTION**

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

### CD player



- 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  
SACDs  
dts-CDs

**DVD player**

Audio CDs	
DVD video discs	
DVD audio discs	
Video CDs	

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

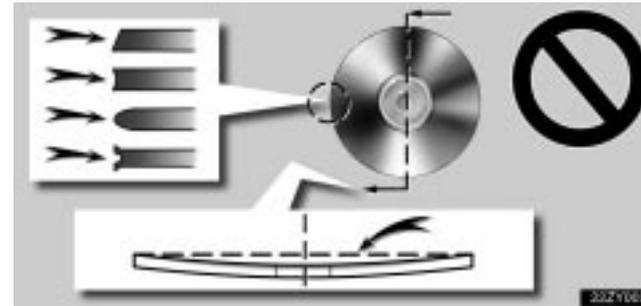
SACDs  
 Copy-protected CDs  
 CD-Rs (CD-Recordable)  
 CD-RWs (CD-Re-writable)  
 CD-ROMs  
 DVD-Rs  
 DVD+Rs  
 DVD-RWs  
 DVD+RWs  
 DVD-ROMs  
 DVD-RAMs

## AUDIO

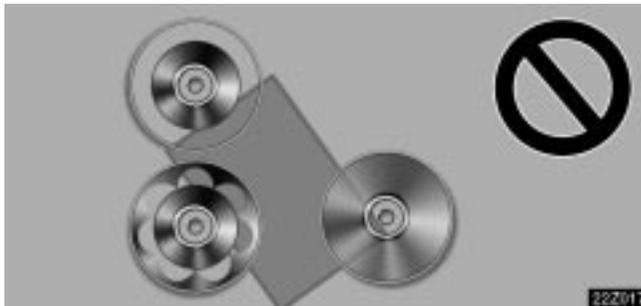
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► *Special shaped CDs*



► *Low quality CDs*



► *Transparent/translucent CDs*



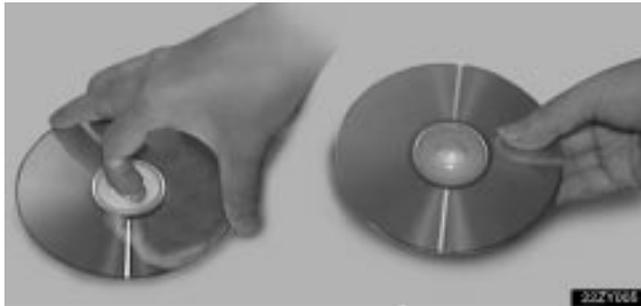
► *Labeled CDs*

**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.*

## AUDIO

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► **Correct**

► **Wrong**

- Handle CDs carefully, especially when you are inserting them. 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.)
- Remove CDs from the CD player when you are not listening to them. Store them in their plastic cases away from moisture, heat, and direct sunlight.



**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 circles). Dry it with another soft, lint-free cloth. Do not use a conventional record cleaner or anti-static device.

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# SECTION 3-1

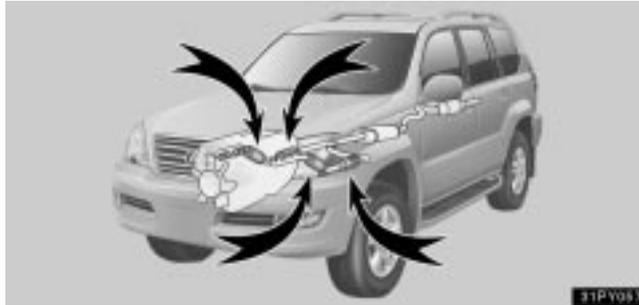
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## STARTING AND DRIVING

### Starting and driving

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## THREE-WAY CATALYTIC CONVERTERS



Three-way catalytic converters are emission control devices installed in the exhaust system.

The purpose is to reduce pollutants in the exhaust gas.

### CAUTION

- Keep people and combustible materials away from the exhaust pipe while the engine is running. The exhaust gas is very hot.
- Do not idle or park your vehicle over anything that might burn easily such as grass, leaves, paper or rags.

## STARTING AND DRIVING

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### **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, electric 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 back door closed while driving. An open or unsealed back door may cause exhaust gases to be drawn into the vehicle.

## STARTING AND DRIVING

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- 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 back door closed. Have the cause immediately located and corrected.

## STARTING AND DRIVING

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### BEFORE STARTING THE ENGINE

1. Check the area around the vehicle before entering it.
2. Adjust seat position, seatback angle, head restraint height and steering wheel angle.
3. Adjust the inside and outside rear view mirrors.
4. Lock all doors.
5. Fasten seat belts.

Remember to check that the service reminder indicators function when turning the key to "ON", and check the fuel gauge to see that you have sufficient fuel.

#### **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.***

### IGNITION SWITCH



**"START" — Starter motor on. The key will return to the "ON" position when released.**

For starting tips, see page 401.

**"ON" — Engine on and all accessories on.**

This is the normal driving position.

**“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 key 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 14.

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.

Approximately five hours after the engine is turned off, you may hear sound coming from underneath the luggage compartment for several minutes. This is normal operation and does not indicate a malfunction. (See “Leak detection pump” on page vi.)

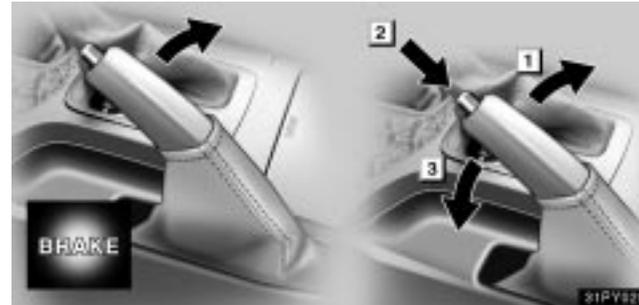
If, in an emergency, you must turn the engine off while the vehicle is moving, turn the key only to “ACC”.

## STARTING AND DRIVING

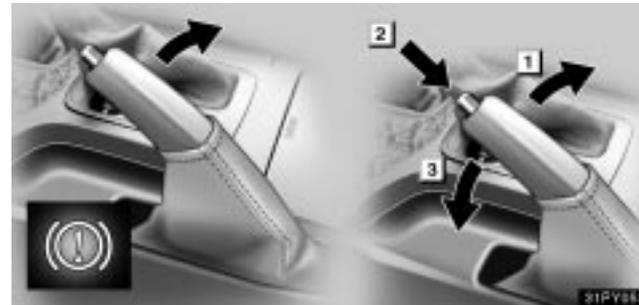
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If is not a malfunction if the needles on all meters and gauges move slightly when the key is turned tp the “ACC”, “ON” or “START” position.

### PARKING BRAKE



► *U.S.A.*



► *Canada*

**To set:** Pull up the lever. For better holding power, first depress the brake pedal and hold it while setting the parking brake.

**To release:** Pull up the lever slightly (1), press the lock release button (2), and lower the lever (3).

Before leaving your vehicle, firmly apply the parking brake. For better holding power, first depress the brake pedal and hold it while setting 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

### Cranking hold function

Once you turn the ignition key to “START” position and release it, the cranking hold function continues to crank the engine in “ON” position until it starts.

The function stops cranking the engine after about 25 seconds maximum if the engine has not started yet. When you crank the engine again, wait a few seconds and restart it.

If you hold the key in “START” position, the function will keep cranking for about 30 seconds maximum.

### 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 AND DRIVING

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### 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, turn the ignition key to “START” position, then release it.

#### **NOTICE**

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

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...**

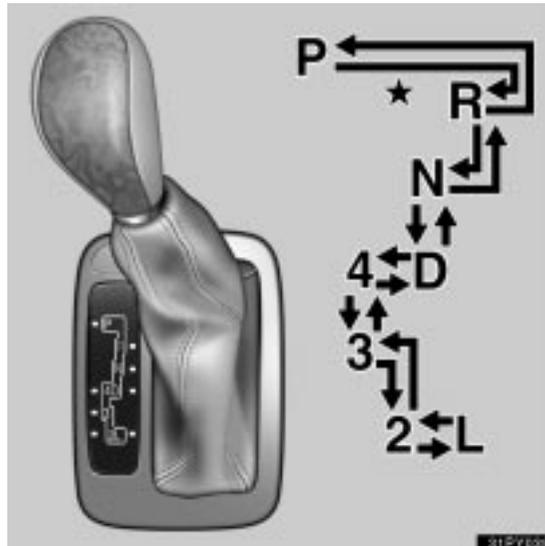
Simply restart it, using the correct procedure given in normal starting.

#### **If the engine will not start...**

See “If your vehicle will not start” on page 491.

## 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 beside the selector lever and 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 421.

- 3, 2: Position for more powerful engine braking
- L: Position for maximum engine braking

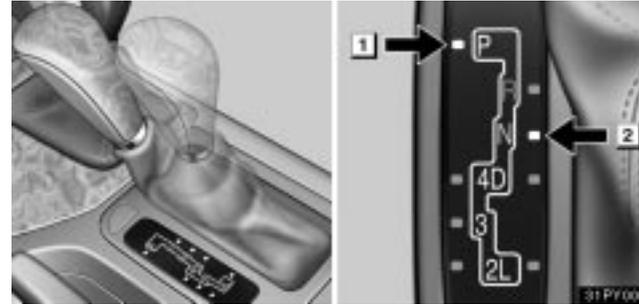
## STARTING AND DRIVING

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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
- (h) Driving in second start mode

### (a) Normal driving

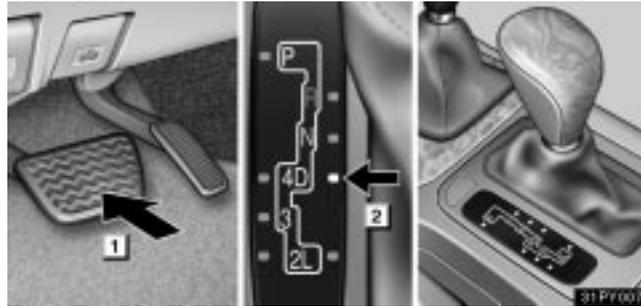


► **1** “P” (Park) position    **2** “N” (Neutral) position

**1. Start the engine as instructed in “How to start the engine” on page 401.**

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”.

## STARTING AND DRIVING



► **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.

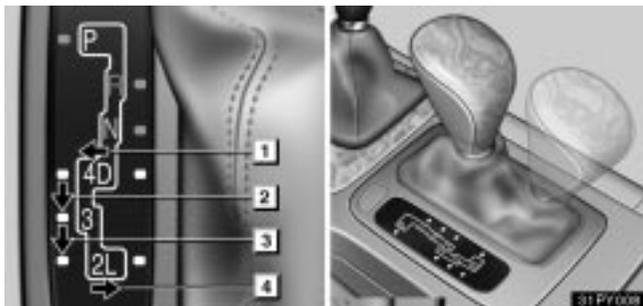
When the lever is in the “4” position, the automatic transmission system will select the most suitable gear for the running conditions such as hill climbing, hard towing, etc.

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”.

## STARTING AND DRIVING

### (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 421.

- 2 Shift into the “3” position. The transmission will downshift to third gear when the vehicle speed is or becomes lower than the speed listed below and stronger engine braking will be enabled.

Transfer	“H”	135 km/h	(84 mph)
	“L”	52 km/h	(32 mph)

- 3 Shift into the “2” position. The transmission will downshift to second gear when the vehicle speed is or becomes lower than the speed listed below and more powerful engine braking than that of “3” position will be enabled.

Transfer	“H”	89 km/h	(55 mph)
	“L”	34 km/h	(21 mph)

- 4 Shift into the “L” position. The transmission will downshift to first gear when the vehicle speed is or becomes lower than the speed listed below and maximum engine braking will be enabled.

Transfer	“H”	39 km/h	(24 mph)
	“L”	15 km/h	(9 mph)

### 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.

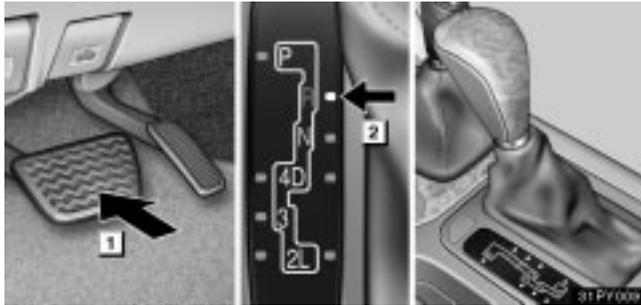
With the selector lever in “L”, the transmission is engaged in first gear.

<b>NOTICE</b>		
<ul style="list-style-type: none"> <li>• <b>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 below for your reference:</b></li> </ul>		
<b>Transmission</b>	<b>Transfer</b>	
	<b>“L”</b>	<b>“H”</b>
“3”	60 km/h (37 mph)	154 km/h (96 mph)
“2”	41 km/h (25 mph)	105 km/h (65 mph)
“L”	24 km/h (15 mph)	61 km/h (38 mph)
<ul style="list-style-type: none"> <li>• <b>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.</b></li> </ul>		

## STARTING AND DRIVING

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### (d) Backing up



► **1** Brake pedal **2** "R" (Reverse) position

### **NOTICE**

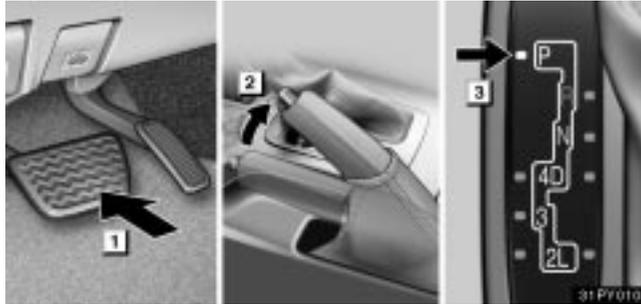
***Never shift into reverse while the vehicle is moving.***

When the shift lever is shifted into "R" position, the outside rear view mirrors automatically down to help backing up. For details, see page 232.

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.

Vehicles with rear view monitor system —  
When the selector lever is shifted into "R" position with the ignition switch in the "ON" position, rear view monitor system will activate. For instructions, see "Rear view monitor system" on page 415.

(e) Parking



- ▶ **1** Brake pedal
- ▶ **2** Parking brake lever
- ▶ **3** "P" (Park) position

1. Bring the vehicle to a complete stop.
2. Apply the parking brake fully.
3. With the brake pedal held down with your foot, shift the selector lever to the "P" position.

**!** CAUTION

While the vehicle is moving, never attempt to move the selector lever into "P" under any circumstances. Serious mechanical damage and loss of vehicle control may result.

(f) Good driving practice

- If the transmission repeatedly shifts up and down between the 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.

## STARTING AND DRIVING

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- When towing a trailer, in order to maintain efficient engine braking and electrical charging performance, do not use overdrive.



### **CAUTION**

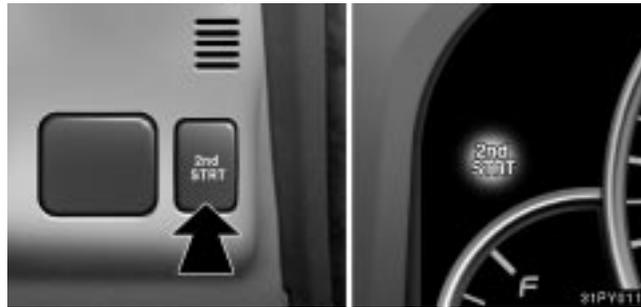
**Always keep your foot on the brake pedal while stopped with the engine running. This prevents the vehicle from creeping.**

### **NOTICE**

***Always use the brake pedal or 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 524.

**(h) Driving in second start mode**

In the second start mode, the transmission system shifts up from second gear. Use this mode when starting your vehicle in sand, mud, ice or snow.

To set the second start mode, push the “2nd STRT” switch. In the second start mode, the “2nd STRT” indicator light comes on. To cancel the second start mode, push the “2nd STRT” switch once again.

**FOUR-WHEEL DRIVE SYSTEM****(a) Four-wheel drive control**

Use the four-wheel drive control lever and center differential lock switch to select the following transfer and center differential modes.

The “H” and “L” position of the four-wheel drive control lever provides either lock or unlock mode of the center differential depending on the center differential lock switch position.

Use the center differential lock system if your wheels get stuck in a ditch, or when you are driving on a slippery or bumpy surface. When the center differential is locked, the vehicle stability control system is automatically turned off and the center differential lock and “VSC OFF” indicator lights come on because the function that controls engine performance interferes with the process of freeing your wheels.

## STARTING AND DRIVING

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### NOTICE

***As soon as the center differential lock switch is turned on, the "VSC OFF" indicator light comes on. After the wheels are out of the ditch or off the slippery or bumpy surface, turn the center differential lock switch off. Make sure the center differential lock indicator light and vehicle stability control system off indicator light turn off.***

**"H" (high speed position, center differential unlocked):** Lever at "H", center differential lock switch left out

Use this for normal driving on all types of roads, from dry hard-surfaced roads to wet, icy or snow-covered roads. This position gives greater economy, quietest ride, least wear and better vehicle control.

**"H" (high speed position, center differential locked):** Lever at "H", center differential lock switch pushed in

Use this for greater traction when you experience a loss of power, such as wheel slipping, in the center differential unlock mode.

**"N" (neutral position):** Lever at "N"

No power is delivered to the wheels. The vehicle must be stopped.

**"L" (low speed position, center differential unlocked):** Lever at "L", center differential lock switch left out

Use this for maximum power and traction. Use this for climbing or descending steep hills, off-road driving, and hard pulling in sand or mud.

In this mode, the braking feeling that occurs when the wheels are negotiating a sharp corner is further reduced than in the "L" (low position, center differential locked) mode.

**"L" (low speed position, center differential locked):** Lever at "L", center differential lock switch pushed in

Use this for maximum power and traction. Use this for hard pulling in situations the vehicle cannot negotiate even in the "L" (low speed position, center differential unlocked) mode. Also, using this mode when driving down steep off-road inclines will help contribute to increased vehicle stability.

## STARTING AND DRIVING

The indicator light tells when the differential lock is engaged. Note that the differential is not still locked as long as the indicator light remains off.

When the operation is not completed, the indicator blinks. If the indicator light does not go off when you push out the center differential lock switch, drive straight ahead while accelerating or decelerating, or drive in reverse.

The center differential lock system operation is not completed within 5 seconds while the cruise control system is set, cancel the cruise control system. To cancel the cruise control system, see "Cruise control" on page 419.

If the indicator light does not go off when you push out the center differential lock switch, drive straight ahead while accelerating or decelerating, or drive in reverse.

See "(b) Shifting procedure" for further instructions.

### (b) Shifting procedure

**To shift between unlock and lock modes in "H",** push the center differential lock switch.

**To shift between unlock and lock modes in "L",** push the center differential lock switch.

**To shift between "H" and "L",** stop the vehicle, put the transmission into "N" and move the four-wheel drive control lever.



### CAUTION

**Never move the four-wheel drive control lever if wheels are slipping. Stop the slipping or spinning before shifting.**

## STARTING AND DRIVING

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### **NOTICE**

*For normal driving on dry and hard surface roads, unlock the center differential. To prevent damage to the center differential lock system, do not push the center differential lock switch when the vehicle is cornering or when its wheels are spinning freely off the ground. If the indicator light does not go off when unlocking the center differential, drive straight ahead while accelerating or decelerating, or drive in reverse.*

## REAR VIEW MONITOR SYSTEM

The rear view monitor system assists the driver by displaying an image of the rear of the vehicle while backing up. The displayed image on the screen is a horizontally reversed mirror image of the inside rear view mirror.

To display the rear view image on the screen, place the selector lever in the "R" position when the ignition switch is in the "ON" position.

If you move the selector lever out of the "R" position, the screen returns to the previous screen. Operating another function of the navigation system will display another screen.

The rear view monitor system is a supplemental device intended to assist back up. When backing up, be sure to check behind and all around the vehicle visually.



### CAUTION

- Never depend on the rear view monitor system entirely when backing up. Always make sure your intended path is clear.  
Use caution just as you would when backing up any vehicle.
- Never back up while looking only at the screen. The image on the screen is different from actual conditions. Depicted distances between objects and flat surfaces will differ from actual distances. If you back up while looking only at the screen, you may hit a vehicle, a person or an object. When backing up, be sure to check behind and all around the vehicle visually and with mirrors before proceeding.
- Do not use the system when the back door is not completely closed.
- If the back of the vehicle is hit, the position and mounting angle of the camera may change. Be sure to have the camera's position and mounting angle checked at your Lexus dealer.
- If the temperature changes rapidly, such as when hot water is poured on the vehicle in cold weather, the system may not operate normally.

## STARTING AND DRIVING

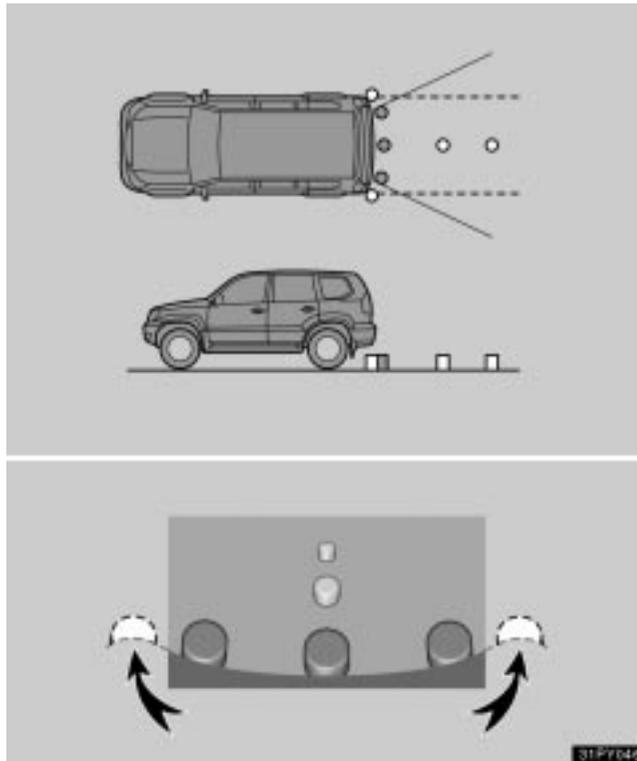
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- If the camera lens becomes dirty, it cannot transmit a clear image. If water droplets, snow, or mud adhere to the lens, rinse with water and wipe with a soft cloth. If the lens is extremely dirty, wash it with a mild cleanser and rinse.
- The displayed image may become darker and moving images may be slightly distorted when the system is cold. When backing up, be sure to check behind and all around the vehicle visually and with mirror before proceeding.

### AREA DISPLAYED ON SCREEN

Image is displayed approximately level on screen.

## STARTING AND DRIVING



► **Corners of bumper**

- The area covered by the camera is limited. Objects which are close to either corner of the bumper or under the bumper cannot be seen on the screen.
- The area displayed on the screen may vary according to vehicle orientation or road conditions.



If the above screen appears on the display, the back door is open. When backing up the vehicle, make sure the back door is securely closed.

## STARTING AND DRIVING

### THE REAR VIEW MONITOR SYSTEM CAMERA



The rear view monitor system camera is located on the back door as shown in the illustration. The camera uses a special lens. The distance of the image that appears on the screen differs from the actual distance.

In the following cases, it may become difficult to see the images on the screen, even when the system is functioning.

- In the dark (for example, at night)
- When the temperature near the lens is extremely high or low
- When water droplets are adhering to the camera, or when humidity is high (for example, when it rains)
- When foreign matter (for example, snow or mud) adheres to the camera lens
- When the sun or the beam of headlights is shining directly into the camera lens



If a bright light (for example, sunlight reflected off the vehicle body) is picked up by the camera, the smear effect\* peculiar to the camera may occur.

\*: Smear effect — A phenomenon that occurs when a bright light (for example, sunlight reflected off the vehicle body) is picked up by the camera; when transmitted by the camera, the light source appears to have a vertical streak above and below it.

## CRUISE CONTROL

The cruise control allows you to cruise the vehicle at a desired speed over about 40 km/h (25 mph) with your foot off the accelerator pedal.

Your cruising speed can be maintained although a slight speed change may occur when driving up or down a gradient, within the limits of engine performance. On steeper hills, a greater speed change will occur so it is better to drive without the cruise control.

### CAUTION

- To help maintain maximum control of your vehicle, do not use the cruise control when driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads.
- Avoid vehicle speed increases when driving downhill. If the vehicle speed is too fast in relation to the cruise control set speed, cancel the cruise control then downshift the transmission to use engine braking to slow down.

### Turning the system on



To operate the cruise control, push the “ON–OFF” button. This turns the system on. The indicator light in the instrument cluster shows that you can now set your desired cruising speed. Another push on the switch will turn the system completely off.

When the ignition key is turned off, the “ON–OFF” button is also automatically turned off. To use the cruise control again, push the “ON–OFF” button again to turn it on.

### CAUTION

To avoid accidental cruise control engagement, keep the “ON–OFF” button off when not using the cruise control.

## STARTING AND DRIVING

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### Setting operation



► **Each function is described below.**

#### **1** Setting at a desired speed.

The transmission must be in “D” or “4” before you set the cruise control speed.

Bring the vehicle to the desired speed, press the control lever downward in the “- SET” direction and release it. This sets the vehicle at that speed. Now you may take your foot off the accelerator pedal. If you need acceleration — for example, when passing — depress the accelerator pedal enough for the vehicle to exceed the set speed. When you release the accelerator pedal, the vehicle will return to the speed set prior to the acceleration.

#### **2** Cancelling the preset speed

You can cancel the preset speed by either of the following:

- Pulling the control lever in the “CANCEL” direction.
- Depressing the brake pedal.
- Pushing the “ON-OFF” button.

If the vehicle speed falls below about 40 km/h (25 mph), the preset speed will be automatically cancelled.

If the vehicle speed drops 16 km/h (10 mph) below the preset speed, the preset speed will also automatically be cancelled.

If the preset speed automatically cancels out for other than these reasons, have your vehicle checked by your Lexus dealer at the earliest opportunity.

#### **3** Resetting to a faster speed

Press the control lever upward in the “+ RES” direction and hold it. Release the lever when the desired speed is attained. While the lever is held upward, the vehicle will gradually gain speed.

When the difference between the actual vehicle speed and the set speed is less than 5 km/h (3 mph), the set speed can be increased 1.6 km/h (1 mph) each time by pressing the control lever upward in the “+ RES” direction quickly.

However, a quicker way to reset is to accelerate the vehicle and then press the control lever downward in the “- SET” direction.

### **4 Resetting to a slower speed**

Press the control lever downward in the “– SET” direction and hold it. Release the lever when the desired speed is attained. While the lever is held downward, the vehicle speed will gradually decrease.

When the difference between the actual vehicle speed and the set speed is less than 5 km/h (3 mph), the set speed can be lowered 1.6 km/h (1 mph) each time by pressing the control lever downward in the “– SET” direction quickly.

However, a quicker way to reset is to depress the brake pedal and then press the control lever downward in the “– SET” direction.

Even if you downshift the transmission from the “D” position to “4” position with the cruise control on, engine braking will not be applied because the cruise control is not cancelled. To decrease the vehicle speed, reset to a slower speed with the cruise control lever or depress the brake pedal. If you use the brake pedal, cruise control is cancelled.

### **5 Resuming the preset speed**

If the preset speed is cancelled by pulling the control lever or by depressing the brake pedal, pushing the lever up in the “+ RES” direction will restore the speed set prior to cancellation.

### **Cruise control failure warning**

If the “CRUISE” indicator light in the instrument cluster flashes when using the cruise control, push the “ON–OFF” button to turn the system off and then push it again to turn it on.

If any of the following conditions then occurs, there is some trouble in the cruise control system.

- The indicator light does not come on.
- The indicator light flashes again.
- The indicator light goes out after it comes on.

If this is the case, contact your Lexus dealer and have your Lexus inspected.

## STARTING AND DRIVING

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### REAR HEIGHT CONTROL AIR SUSPENSION



This rear height control air suspension controls the vehicle height depending on the vehicle driving condition. Select your desired height among the “HI” (high), “N” (normal) and “LO” (low) modes with the height select switch.

#### (a) Vehicle height modes

**“N” (normal) mode:** The vehicle height in this mode is standard. Regardless of the number of occupants or the luggage loading condition, the vehicle height is always automatically adjusted to a fixed height in any mode while the engine is running.

This mode is suitable for ordinary driving.

**“HI” (high) mode:** The vehicle height is about 40 mm (1.6 in.) higher at the rear than the “N” mode height.

This mode is suitable when driving on the bumpy roads and through water.

However, when the vehicle speed exceeds about 30 km/h (19 mph) or over in the “HI” mode, the “N” mode is automatically selected.

#### CAUTION

**The “HI” mode should be used for severe off-road driving condition only. As the vehicle’s center of gravity is higher in this setting, the vehicle may become unstable when turning abruptly resulting in accident.**

**“LO” (low) mode:** The vehicle height is about 20 mm (0.8 in.) lower at the rear than the “N” mode height.

This mode allows you easy access to the vehicle (getting in and out) and easy loading and unloading operation.

This mode is available when the vehicle speed is under about 12 km/h (7 mph).

**NOTICE**

*Use the “LO” mode when the vehicle is stopped. Otherwise, when the vehicle speed exceeds about 12 km/h (7 mph), “N” mode is selected automatically. So be careful when you drive in any place where the overhead height is limited.*

**(b) Vehicle height mode changing condition**

To change the vehicle height, it is necessary to meet the following conditions.

- The engine should be running.
- The height control “OFF” indicator light should go off.

	“LO” mode	“N” mode	“HI” mode
Under about 12 km/h (7 mph)	Yes	Yes	Yes
Under about 30 km/h (19 mph)	No	Yes	Yes
About 30 km/h (19 mph) or over	No	Yes	No

- When selecting a mode, there is a vehicle speed limit. Refer to the following table.

Yes = The mode can be selected.

No = The mode cannot be selected.

## STARTING AND DRIVING

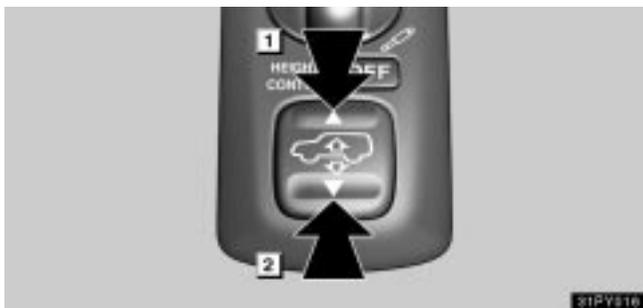
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**In the following cases, the rear height control suspension will not operate.**

- The underbody of the vehicle has touched the surface on bumpy roads.
- The area around the rear suspension is coated with ice.

If the vehicle is moved to its usual location or the ice is removed and the height select switch is pressed, the vehicle height control cannot be operated. In this case, turn off and restart the engine, then push the control switches.

### (c) Vehicle height adjustment



► **1 Higher**      **2 Lower**

**To change the mode, push the height select switch on either side of “▲” (higher) or “▼” (lower).**

The height control indicator light indicates which mode is selected. (See “(e) Height control indicator light” described below.)

#### • **Selecting the “HI” mode**

Push the height select switch on the “▲” side when the vehicle speed is under about 30 km/h (19 mph).

**To change the “N” mode to “HI”:** Push the switch once.

**To change the “LO” mode to “HI”:** Push the switch twice. It takes about 30 seconds until the “LO” mode changes to the “HI” mode.

#### • **Selecting the “N” mode**

**To change the “HI” mode to “N”:** Push the height select switch on the “▼” side once.

**To change the “LO” mode to “N”:** Push the height select switch on the “▲” side once.

#### • **Selecting the “LO” mode**

Push the height select switch on the “▼” side while the vehicle is stopped.

**To change the “N” mode to “LO”:** Push the switch once.

**To change the “HI” mode to “LO”:** Push the switch twice.

Even if the engine is stopped while the vehicle height is being lowered, the operation continues for up to 25 seconds. If within this 25 seconds, any of the side doors or the back door is opened, operation will continue for a further 15 seconds.

**NOTICE**

- *If the vehicle height is changed frequently when the vehicle is heavily loaded, the compressor may overheat causing the vehicle height adjustment operation to stop.*
- *Before you lower the vehicle height with the height select switch, check under the vehicle to make sure nothing to damage the vehicle or no one to be injured is there and that the underbody of the vehicle does not touch the ground.*
- *After unloading, the height of a vehicle equipped with the rear height control air suspension becomes slightly higher than the normal vehicle height. Take sufficient care where the overhead height is restricted.*
- *Do not select the "LO" mode in the bumpy roads. If the underbody of the vehicle touches the rugged road surface, the vehicle may be damaged.*

## STARTING AND DRIVING

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### (d) Turning off the rear height control air suspension



To turn off the rear height control air suspension with the vehicle stopped, push the “HEIGHT CONTROL OFF” switch. The height control “OFF” indicator light comes on and the vehicle height is fixed in the same mode as the height control switch is pushed.

This status is memorized in the system even after the engine is stopped.

If you push the switch again, the height control “OFF” indicator light goes out and the rear height control air suspension is turned on.

Even after the rear height control air suspension is turned off with the “HEIGHT CONTROL OFF” switch, if the vehicle speed exceeds 30 km/h (19 mph), the rear height control air suspension automatically selects the “N” mode.

### CAUTION

If you drive through deep water over about 700 mm (28 in.) in depth, put the vehicle height in the “HI” mode with the height select switch and then turn off the rear height control air suspension by pushing the “HEIGHT CONTROL OFF” switch.

**NOTICE**

- *When jacking up or installing tire chains, be sure to turn off the rear height control air suspension with the "HEIGHT CONTROL OFF" switch and stop the engine. Otherwise, the vehicle height may change because of the automatic leveling function resulting in accident.*
- *If your vehicle must be towed, put the vehicle height in the "N" mode and turn off the rear height control air suspension. Otherwise, the vehicle height may change because of the automatic leveling function resulting in accident.*
- *If your vehicle gets ditched, turn off the rear height control air suspension with the "HEIGHT CONTROL OFF" switch. Otherwise, the vehicle height may change because of the automatic leveling function resulting in accident.*

## STARTING AND DRIVING

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### (e) Height control indicator lights



- ▶ **1** *Height control indicator lights*
- ▶ **2** *Height control "OFF" indicator light*

When the ignition switch is turned on, all the indicator lights come on. Only the indicator light showing the present mode remains on and all other lights go off after a few seconds. This means the system operates correctly.

When you change the vehicle height mode, the indicator lights change as follows:

#### **When changing the vehicle height from the "N" mode to "HI":**

1. The "N" mode indicator light goes off and the "HI" mode indicator light blinks.
2. After the vehicle height control reaches the "HI" mode, the "HI" mode indicator light remains on.

**If the underbody of the vehicle has touched the surface on bumpy roads or the area around the rear suspension is coated with ice, the height control suspension will not operate and the indicator lights change as follows:**

1. The present mode indicator light goes off and the selected mode indicator light blinks.
2. The selected mode indicator light goes off. (The vehicle height does not change.) The present mode indicator light comes on again.

**Height control "OFF" indicator light:** When the ignition switch is turned on, this light comes on. If it goes out after a few seconds, the rear height control air suspension operates correctly. If you push the "HEIGHT CONTROL OFF" switch, the rear height control air suspension is turned off. The height control "OFF" indicator light comes on.

In the following cases, there is a problem somewhere in the rear height control air suspension. Although there is no problem to continue normal driving, have the rear height control air suspension checked by your Lexus dealer as soon as possible.

- The height control "OFF" indicator light does not come on when the ignition switch is turned on.
- The height control "OFF" indicator light blinks.

**(f) Parking and stopping tips**

If you immediately stop the engine to park the vehicle after off-road driving, the vehicle height is lowered slightly as the vehicle becomes cool. When parking, make sure there is nothing that will be in contact with the underbody of the vehicle. When you start the engine, the vehicle returns to the previous height.

If you park the vehicle for a long time, the vehicle height may be gradually lowered. When parking for a long time, make sure there is nothing that will be in contact with the underbody of the vehicle. When you start the engine, the vehicle returns to the previous height.

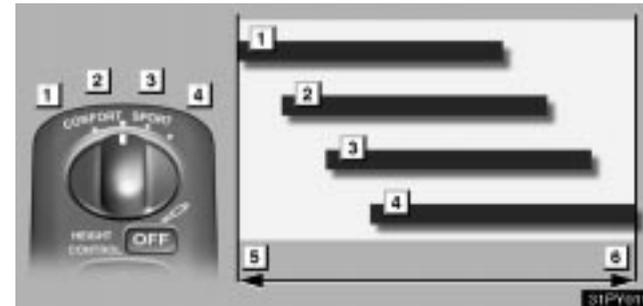
If you stop the engine, the vehicle height may change in accordance with the change in the temperature. When you start the engine, the vehicle returns to the previous height.

**(g) Rear height control failure warning**

If there is a problem somewhere in the rear height control air suspension, the "N" mode is automatically selected. If this occurs, the height control "OFF" indicator light blinks and the vehicle height control cannot be activated until the malfunction is corrected. If this is the case, bring your vehicle to your Lexus dealer as soon as possible and have it checked.

**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 driving on a bumpy road*
- 2** *For ordinary driving such as in the city traffic*
- 3** *For moderate high speed driving*
- 4** *For sporty type driving such as on winding mountain roads and high speed driving*
- 5** *Soft*
- 6** *Firm*

## STARTING AND DRIVING

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We recommend you to select the mode **2** for ordinary driving. The damping effect will be changed automatically to provide good riding comfort.

When your vehicle is loaded heavily or you are driving in an unpaved road, the mode **3** or **4** will be recommended. To provide good vehicle stability, the damping effect will be harder than for ordinary driving mode.

With the four-wheel drive control lever at "L", the damping effect suitable for off-road driving will be provided in any mode.

## ACTIVE TRACTION CONTROL SYSTEM

**The active traction control system automatically helps prevent the spinning of 4 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 to the 4 wheels cannot be maintained, even though the traction control system is in operation. Do not drive the vehicle under any speed or maneuvering conditions which may cause the vehicle to lose traction control. In situations where the road surface is covered with ice or snow, your vehicle should be fitted with snow tires or tire chains. Always drive at an appropriate and cautious speed for the present road conditions.**



### ► *Slip indicator light*

**Leave the system on during the ordinary driving so that it can operate when needed.**

You may hear a sound in the engine compartment for a few seconds when the engine is started or just after the vehicle begins to move. This means that the active traction control system is in the self-check mode, but does not indicate a malfunction.

When the active traction control system is operating, the following conditions occur:

- The system controls the spinning of the 4 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.

The brake actuator temperature increase during continuous operation of the following systems.

- Active traction control system
- Vehicle stability control system
- Downhill assist control system
- Hill-start assist control

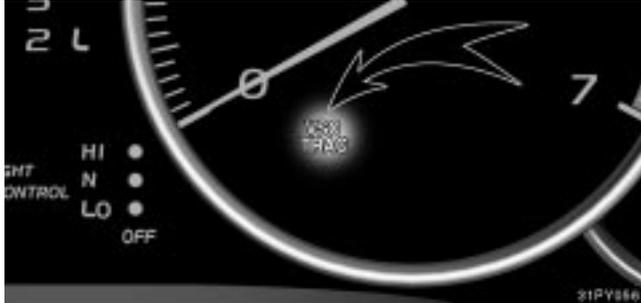
If the brake actuator temperature becomes too high while any of the systems is operating, a buzzer will start to sound intermittently to indicate that the active traction control system can no longer operate. In this case, immediately stop your vehicle at a safe place.

If the system continues to operate, the buzzer sound changes from intermittent to continuous. (The continuous buzzer sounds for about 3 seconds.) At the time, the slip indicator light will come on and the active traction control system temporarily stops operating in order to protect the brake actuator. (Although the active traction control system does not operate, there is no problem to continue your driving.) The system will be automatically restored after a short time and the slip indicator light goes out.

## STARTING AND DRIVING

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### “VSC TRAC” warning light



This light warns that there is a problem somewhere in the following.

- Active traction control system
- Vehicle stability control system
- Downhill assist control system
- Hill-start assist control

When the system is normal and the ignition key is turned to “ON”, the warning light will come on and will go off after a few seconds. It is not a malfunction that the warning light may stay on for 60 seconds after the ignition key is turned to the “ON” position.

Depressing the brake pedal repeatedly may turn on the light. It is normal if it goes out after a few seconds.

If the “VSC TRAC” warning light and slip indicator light comes on while driving, the active traction control system does not work. However, as normal braking operates when being 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.

## 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 output of the brakes or engine to help prevent the vehicle from skidding when cornering on a slippery road surface or operating steering wheel abruptly.

This system activates when the vehicle speed about more than 15 km/h (9mph).

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 stability 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 and an alarm sounds, special care should be taken while driving.

- Only use tires of specified size. The size, manufacturer, brand and tread pattern for all 4 tires should be the same. If you use the tires other than specified, or different type or size, the vehicle stability control system may not function correctly. When replacing the tires or wheels, contact your Lexus dealer.
- In situations where the road surface is covered with ice or snow, your vehicle should be fitted with snow tires or tire chains.



### ► Slip indicator light

If the vehicle is going to skid during driving, the slip indicator light blinks and an alarm sounds intermittently. Special care should be taken while driving.

## STARTING AND DRIVING

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If the brake pedal is depressed while the vehicle stability control system is active, the brake pedal will become hard at an earlier position than usual. However, the brakes will respond to the pedal force if depressed further.

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.



**Pushing the center differential lock switch automatically turns the vehicle stability control system off. At this time, the "VSC OFF" indicator comes on with the center differential lock indicator light.**

"VSC 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 center differential lock switch to turn off the system.

In the following cases, contact your Lexus dealer:

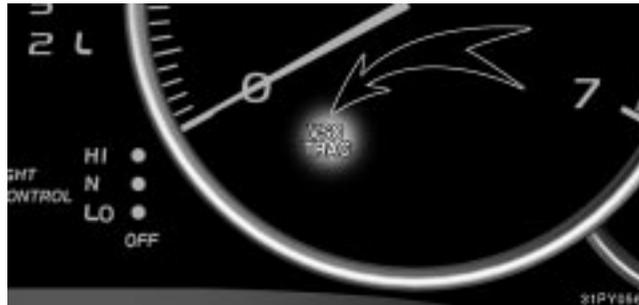
- The indicator light does not come on when the ignition key is turned "ON".
- The indicator light remains on after the ignition is turned on.

- The indicator light comes on when the system is on while driving.

**NOTICE**

*Make sure that the center differential lock indicator light goes off before normal driving.*

**“VSC TRAC” warning light**



This light warns that when there is a problem somewhere in the following.

- Vehicle stability control system
- Active traction control system
- Downhill assist control system
- Hill-start assist control

When the system is normal and the ignition key is turned to “ON”, the warning light will come on and will go off after a few seconds. It is not a malfunction that the warning light may stay on for 60 seconds after the ignition key is turned to the “ON” position.

Depressing the brake pedal repeatedly may turn on the light. It is normal if they go out after a few seconds.

If the light comes on while driving, the vehicle stability control system does not work. However, as normal braking operates when being 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”.

## STARTING AND DRIVING

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- The warning light comes on while driving.

### DOWNHILL ASSIST CONTROL SYSTEM

The downhill assist control system is a system that assists the deceleration of the engine brake when you drive down a steep hill. When you are driving down a hill with the four-wheel drive control lever in the “L” position, push the “DAC” switch to limit the vehicle’s acceleration. If the vehicle is traveling at a speed of 25 km/h (15 mph) or less, you can descend at a constant speed.

#### CAUTION

Do not rely excessively on the downhill assist control system. It may not be able to maintain a low speed over road surfaces or off-road surfaces on which sliding can easily occur, such as extremely steep slopes or icy or muddy roads.

#### Turning on the system

1. Shift the four-wheel drive control lever to the “L” position.

The system will not operate if the four-wheel drive control lever is in the “H” position.

2. In order to make full use of the engine brake, putting the transmission in “L” or “2” is recommended.

The system will operate even if the transmission selector lever is in “D”, “4”, “3” or “N”. However, when it is in “L” or “2” the engine brake can also be utilized enabling the system to operate more effectively.



3. Push the “DAC” switch to turn the system on. The downhill assist control system indicator light on the instrument panel will come on.

## STARTING AND DRIVING

If the downhill assist control system indicator light flashes, the transmission selector lever may be in “N” or four-wheel drive control lever may be in the “H” position.

If the indicator light does not come on when the switch is pushed, contact your Lexus dealer.



### ► *Slip indicator light*

With the vehicle traveling at a speed of 25 km/h (15 mph) or less, release your foot from the accelerator or brake pedal to activate the system. The vehicle will descend the hill at a low speed. While the system is operating, the slip indicator light on the instrument panel will flash and the stop lights and high mounted stoplight will be lit.

If you push the “DAC” switch to turn the system off while it is in operation, the system will stop operating gradually. The downhill assist control system indicator light will flash to alert the driver. To continue driving at a low speed, push the “DAC” switch to turn the system on.

The slip indicator light and downhill assist control system indicator light come on for a few seconds when the ignition key is turned to “ON”. If any of the indicator lights does not come on when the ignition is turned on, contact your Lexus dealer.

The brake actuator temperature increases during continuous operation of the following systems.

- Active traction control system
- Vehicle stability control system
- Downhill assist control system
- Hill-start assist control

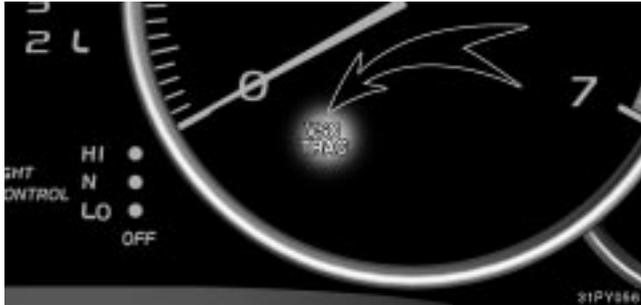
If the brake actuator temperature becomes too high while any of the systems is operating, a buzzer will start to sound intermittently to indicate that the downhill assist control system can no longer operate. In this case, stop your vehicle immediately at a safe place.

If the system continues to operate, the buzzer sound changes from intermittent to continuous. (The continuous buzzer sounds for about 3 seconds.) At this time, the slip indicator light will come on and the downhill assist control system stops operating temporarily in order to protect the brake actuator. (Although the downhill assist control system does not operate, it is no problem to continue your driving.) The system will be automatically restored after a short time and the slip indicator light goes out.

## STARTING AND DRIVING

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### “VSC TRAC” warning light



If there is any abnormality in the system, the “VSC TRAC” warning light will come on. When the “DAC” switch is pushed, the downhill assist control system indicator light also flash.

If the “VSC TRAC” warning light comes on, there may be an abnormality in any of the following systems in addition to the downhill assist control system.

- Hill-start assist control
- Active traction control system
- Vehicle stability control system

When the system is normal and the ignition key is turned to “ON”, the warning light will come on and will go off after a few seconds. It is not a malfunction that the warning light may stay on for 60 seconds after the ignition key is turned to the “ON” position.

Depressing the brake pedal repeatedly may turn on the light. It is normal if it goes out after a few seconds.

If the “VSC TRAC” warning light and slip indicator light comes on while driving, the system does not work. However, as normal braking operates when being applied, it 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.

## HILL-START ASSIST CONTROL

The hill-start assist control assists you in starting to move up a steep or slippery hill. When you start to move up the hill slope, the system helps to prevent the vehicle from rolling backward in the interval while you move your foot from the brake pedal to the accelerator pedal.

### CAUTION

- Do not rely excessively on the hill-start assist control. The vehicle may not be able to start smoothly on road surfaces or off-road surfaces such as extremely steep slopes or icy roads, on which sliding can occur very easily.
- Do not use the hill-start assist control to stop the vehicle. The hill-start assist control is not designed as a function for stopping the vehicle on a uphill slope.

The hill-start assist control will operate for 5 seconds maximally when all of the following conditions apply.

- When the transmission is in any of positions “D”, “4”, “3”, “2” or “L”
- When the brake pedal is not depressed

The system is designed to operate when the vehicle is starting on an uphill slope; therefore, if the transmission is in “P” or “N” it will not operate. It will not operate either if the vehicle starts to move in reverse on a slope with the transmission in the “R”.



### ► Slip indicator light

When the hill-start assist control is operating, the slip indicator light flashes and an alarm sounds intermittently. At the same time, the stop lamps and high mounted stoplight are lit.

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.

## STARTING AND DRIVING

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### Keep in mind the following when driving.

- The hill–start assist control operates for 5 seconds maximally. If both the brake and accelerator pedals remain undepressed for longer than 5 seconds, the buzzer will sound at more frequent intervals and the system will gradually stop operating.
- The hill–start assist control is not designed as a function for stopping the vehicle on a uphill slope. When stopping the vehicle, be sure to depress the brake pedal.

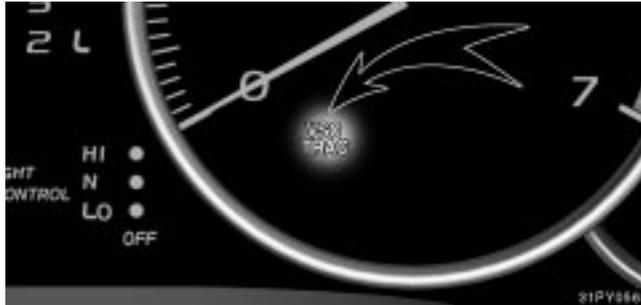
The brake actuator temperature increases during continuous operation of the following systems.

- Active traction control system
- Vehicle stability control system
- Downhill assist control system
- Hill–start assist control

If the brake actuator temperature becomes too high while any of the systems is operating, a buzzer will start to sound intermittently to indicate that the hill–start assist control can no longer operate. In this case, stop your vehicle immediately at a safe place.

If the system continues to operate, the buzzer sound changes from intermittent to continuous. (The continuous buzzer sounds for about 3 seconds.) At this time, the slip indicator light will come on and the hill–start assist control stops operating temporarily in order to protect the brake actuator. (Although the hill–start assist control does not operate, it is no problem to continue your driving.) The system will be automatically restored after a short time and the slip indicator light goes out.

### “VSC TRAC” warning light



**If there is any abnormality in the system, the “VSC TRAC” warning light will come on.**

If the system malfunctions, the “VSC TRAC” warning light will come on.

If the “VSC TRAC” warning light comes on, there may be an abnormality in any of the following systems in addition to the hill-start assist control.

- Downhill assist control system
- Active traction control system
- Vehicle stability control system

When the system is normal and the ignition key is turned to “ON”, the warning light will come on and will go off after a few seconds. It is not a malfunction that the warning light may stay on for 60 seconds after the ignition key is turned to the “ON” position.

Depressing the brake pedal repeatedly may turn on the light. It is normal if it goes out after a few seconds.

If the “VSC TRAC” warning light and slip indicator light comes on while driving, the system does not work. However, as normal braking operates when being applied, it 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.

## STARTING AND DRIVING

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### BRAKE SYSTEM

This brake system has 2 independent hydraulic circuits. If either circuit should fail, the other will still work. However, the pedal will be harder to press, and your stopping distance will increase. Also, the brake system warning light may come on.



#### CAUTION

**Do not drive your vehicle with only a single brake system. Have your brakes fixed immediately.**

#### Brake booster

The brake booster uses brake fluid pressurized by the pump to power-assist the brakes. If the brake booster fails during driving, the brake system warning light comes on and buzzer sounds continuously. In this case, the brakes may not work properly. If they do not work well, depress the brake pedal firmly. If the brake system warning light comes on, immediately stop your vehicle and contact your Lexus dealer.

The brake system warning light may stay on for about 60 seconds after the ignition key is turned to the "ON" position. It is normal if the light turns off after a while.

Depressing the brake pedal repeatedly may turn on the brake system warning light and buzzer. It is normal if the light goes out and the buzzer stops sounding after a few seconds.

You may hear a small sound in the engine compartment after the engine is started or the brake pedal is depressed repeatedly. This is a pump pulsating sound of the brake system, and it is not a malfunction.



#### CAUTION

- **Do not pump the brake pedal if the engine stalls. Each push on the pedal uses up your brake fluid pressure reserve.**
- **Even if the power assist is completely lost, the brakes will still work. But you will have to push the pedal hard, much harder than normal. And your braking distance will increase.**

#### Anti-lock brake system

**The anti-lock brake system is designed to automatically help prevent lock-up of the wheels during a sudden brake 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 to the 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.

## STARTING AND DRIVING

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- Driving over the steps such as the joints on the road.
- Driving on roads where the road surface is pitted or has other differences in surface height.

Install all 4 tires of specified size at appropriate pressure: The anti-lock brake system detects vehicle speeds using the speed sensors for respective wheels' turning speeds. The use of tires other than specified may fail to detect the accurate turning speed resulting in a longer stopping distance.

### “ABS” warning light



- **1** U.S.A.      **2** Canada

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 active traction control system and the vehicle stability control system do/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 system. 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.

 <b>CAUTION</b>
<p><b>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.</b></p> <p><b>In this case, not only the anti-lock brake system will fail but also the vehicle will become extremely unstable during braking.</b></p>

Either of the following conditions may occur, but do not indicate a malfunction:

- The light may stay on for about 60 seconds after the ignition key is turned to the “ON” position. It is normal if it turns off after a while.
- Depressing the brake pedal repeatedly may turn on the light. It is normal if it turns off after a few seconds.

### Brake assist system

**When you slam the brakes on, the brake assist system judges as an emergency stop and provides more powerful braking for a driver who cannot hold down the brake pedal firmly.**

When you slam the brakes on, more powerful braking will be applied. At this time, you may hear a sound in the engine compartment and feel the vibrations of the brake pedal. This does not indicate a malfunction.

The brake assist system becomes operative after the vehicle has accelerated to a speed in excess of approximately 10 km/h (6 mph). It stops operating when the vehicle decelerates to a speed below approximately 5 km/h (3 mph).

The brake assist system may not work for about 60 seconds after the engine is started.

For an explanation of this system's warning light, see “ABS warning light” on page 67.

### 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.

## TIRE PRESSURE WARNING SYSTEM

The tire pressure warning system is designed to provide warning when tire inflation pressure of one or more of your tires (including the spare tire) is low. The low tire pressure warning light comes on to inform you that low tire inflation pressure may hamper driving.



► **Low tire pressure warning light**

This light comes on when the ignition key is turned to the “ON” position. It goes off after a few seconds. This indicates that the tire pressure warning system is functioning properly.

If the low tire pressure warning light comes on or blinks, do the following.

If the warning light comes on:

Stop your vehicle in a safe place as soon as possible and check that the inflation pressure of all tires (including the spare tire) is as specified on the tire and loading information label. (See “Checking tire inflation pressure” on page 574.) If the warning light comes on even after tire inflation pressure adjustment, you may have a flat tire. If you have a flat tire, replace it with the spare tire. For details, see “If you have a flat tire” on page 497.

The warning light goes off a few minutes after air is put into the deflated tire.

This warning light may turn on due to natural causes such as natural air leaks or tire pressure changes caused by temperature. In this case, adjusting the tire pressure will turn off the warning light.

 CAUTION

When the low tire pressure warning light comes on, observe the following instructions:

- Depending on the conditions, reduce to an appropriate speed as soon as possible.
- Adjust the tire pressure to the specified level as soon as possible.
- Avoid abrupt steering wheel maneuvering and braking. Tire deterioration may reduce steering wheel control and brake effectiveness. This may lead to serious injury or death.
- The tire pressure warning system may not activate immediately if sudden bursts of air leakage occur.

## STARTING AND DRIVING

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### NOTICE

- *Do not use liquid sealants for a flat tire as air pressure sensors will be damaged.*
- *When the tires must be repaired or replaced, have them repaired or replaced by the nearest Lexus dealer or authorized tire dealer. The tire pressure sensors will be affected by the installation or removal of tires.*
- *The tire pressure warning system is not to be used as a substitute for regular inspections. Be sure to check the air pressure in the tires on a regular basis.*
- *When the tires must be replaced, replace the grommets for air pressure sensors as well.*

If the warning light blinks:

The tire pressure warning system may be malfunctioning. Contact your Lexus dealer.

### System malfunction

The tire pressure warning system does not function properly under certain circumstances. In the following cases, the low tire pressure warning light may not come on even if the tire inflation pressure is low, or it may come on when the tire inflation pressure is actually normal.

- Electric devices or facilities using similar radio wave frequencies are nearby.
- A radio set to similar frequencies is in use.
- A lot of snow or ice covers the vehicle, in particular, around the wheels or wheel housings.
- The tires are not equipped with an air pressure sensor.
- Tire chains are used.

## STARTING AND DRIVING

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- Non-genuine Lexus wheels are used.
- Although the tires are equipped with air pressure sensors, the selector switch (see page 455.) is set to other tire setting.



### CAUTION

- The use of non-genuine wheels will cause the air pressure sensors to transmit the electronic code in different manner, resulting in the system failure.
- The use of different type of tires with genuine wheels may also cause the malfunction of the system.

## STARTING AND DRIVING

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For vehicles sold in U.S.A.



### CAUTION

When the tire pressure monitoring system warning light is lit, one or more of your tires is significantly under-inflated. You should stop and check your tires as soon as possible, and inflate them to the proper pressure as indicated on the vehicle's tire information placard. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability. Each tire, including the spare, should be checked monthly when cold and set to the recommended inflation pressure as specified in the vehicle placard and owner's manual.

## STARTING AND DRIVING

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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.

## STARTING AND DRIVING

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**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.

## STARTING AND DRIVING

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### Replacing tires and wheels

**When replacing the wheels, be sure to install air pressure sensors on the wheels.**

There are 3 ways to set up the air pressure sensors:

- (a) Remove the sensor from the old wheel and install it to the new wheel.
- (b) Keep the same wheel with air pressure sensor and replace only the tire.
- (c) Use a new wheel and sensor.

You have to register an ID code for a new sensor. Up to 2 sets of codes can be registered. As one ID for the originally installed sensor is registered at "MAIN" of the selector switch, use the "2nd" position to register an ID for the new sensor.

You do not need to re-register the ID code for any other replacements. For the use of the originally installed tires, put the selector switch at "MAIN" and for the use of tires set purchased later, put the switch at "2nd". For the sensor selector switch, see page 455.

### CAUTION

- **Have the tires, wheels or sensors replaced and ID codes registered by a Lexus dealer. If you need sensors, purchase from a Lexus dealer.**
- **The use of non-genuine wheels will cause the air pressure sensors to transmit the electronic code in different manner, resulting in the failure of the system.**

### Selector switch



► **1** *Main position*      **2** *2nd position*

The selector switch is located in the lower part of the driver's side instrument panel.

The ID code is given in the sensor. To activate the air pressure warning system, it is necessary to register the ID code of the sensor on the selector switch in the vehicle.

2 sets of ID codes can be registered. The code of the tires originally installed on the vehicle is registered on the switch at "MAIN". Have a new tires set with new air pressure sensors registered at "2nd" by Lexus dealer.

ID codes should be registered by Lexus dealer. Once registered, change the setting position each time you purchase tires and wheels. Re-registration is not required.

When purchasing new tires, consult your Lexus dealer.

**CAUTION**

When the tires whose ID code is registered at "MAIN" are used, the system does not work properly with the selector switch set at "2nd". If the tires whose ID code is registered at "2nd" are stored nearby, the system will detect their tire pressure (and vice versa).

## **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.

## LIMITED-SLIP DIFFERENTIAL

Your Lexus is equipped with a limited-slip center differential (transfer).

If one wheel — either front or rear — begins to spin, the transfer (limited-slip center differential) is designed to aid traction by automatically transmitting driving force to the wheels on the other drive axle. It transmits driving force to the front wheels if a rear wheel spins, and to the rear wheels if a front wheel spins.

 **CAUTION**

**Do not start or run the engine while your vehicle is supported by a jack. The vehicle could be driven off the jack and could pose a danger or result in serious injury.**

**NOTICE**

***Use only a spare tire of the same size, construction and load capacity as the original tires on your Lexus because damage to the limited-slip differential could possibly occur with another tire type.***

## **SECTION 3-2**

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### **STARTING AND DRIVING**

#### **Driving tips**

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## OFF-ROAD VEHICLE PRECAUTIONS



This vehicle belongs to the utility vehicle class, which has higher ground clearance and narrower tread in relation to the height of its center of gravity to make it capable of performing in a wide variety of off-road applications. Specific design characteristics give it a higher center of gravity than ordinary passenger cars. This vehicle design feature causes this type of vehicle to be more likely to rollover. And, utility vehicles have a significantly higher rollover rate than other types of vehicles. An advantage of the higher ground clearance is a better view of the road allowing you to anticipate problems. It is not designed for cornering at the same speeds as ordinary passenger cars any more than low-slung sports cars designed to perform satisfactorily under off-road conditions. Therefore, sharp turns at excessive speeds may cause rollover.

### CAUTION

Always observe the following precautions to minimize the risk of serious personal injury or damage to your vehicle:

- In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Therefore, the driver and all passengers should fasten their seat belts whenever the vehicle is moving.
- Avoid sharp turns or abrupt maneuvers, if at all possible. Failure to operate this vehicle correctly may result in loss of control or vehicle rollover causing death or serious injury.
- Loading cargo on the roof luggage carrier will make the center of the vehicle gravity higher. Avoid high speeds, sudden starts, sharp turns, sudden braking or abrupt maneuvers, otherwise it may result in loss of control or vehicle rollover due to failure to operate this vehicle correctly.
- Always slow down in gusty crosswinds. Because of its profile and higher center of gravity, your vehicle is more sensitive to side winds than an ordinary passenger car. Slowing down will allow you to have better control.

## DRIVING TIPS

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- When driving off-road or in rugged terrain, do not drive at excessive speeds, jump, make sharp turns, strike objects, etc. This may cause loss of control or vehicle rollover causing death or serious injury. You are also risking expensive damage to your vehicle's suspension and chassis.
- Do not drive horizontally across steep slopes. Driving straight up or straight down is preferred. Your vehicle (or any similar off-road vehicle) can tip over sideways much more easily than forward or backward.

## 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.

## DRIVING TIPS

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### 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 406.
- 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.
- If you drive through deep water over about 500 mm (20 in.) in depth, put the vehicle height in the HI (High) mode with the active height select switch and then turn off the active height control suspension by pushing the height control switch. Drive your vehicle at 30 km/h (19 mph) or lower speed.

## DRIVING TIPS

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### OFF-ROAD DRIVING PRECAUTIONS

When driving your vehicle off-road, please observe the following precautions to ensure your driving enjoyment and to help prevent the closure of areas to off-road vehicles.

- a. Drive your vehicle only in areas where off-road vehicles are permitted to travel.
- b. Respect private property. Get owner's permission before entering private property.
- c. Do not enter areas that are closed. Honor gates, barriers and signs that restrict travel.
- d. Stay on established roads. When conditions are wet, driving techniques should be changed or travel delayed to prevent damage to roads.

For owners in U.S. mainland, Hawaii and Puerto Rico:

To obtain additional information pertaining to driving your vehicle off-road, consult the following organizations.

- State and Local Parks and Recreation Departments
- State Motor Vehicle Bureau
- Recreational Vehicle Clubs
- U.S. Forest Service and Bureau of Land Management

#### CAUTION

**Always observe the following precautions to minimize the risk of serious personal injury or damage to your vehicle:**

- **Drive carefully when off the road. Do not take unnecessary risks by driving in dangerous places.**
- **Do not grip the steering wheel spokes when driving off-road. A bad bump could jerk the wheel and injure your hands. Keep both hands and especially your thumbs on the outside of the rim.**
- **Always check your brakes for effectiveness immediately after driving in sand, mud, water or snow.**
- **After driving through tall grass, mud, rock, sand, rivers, etc., check that there is no grass, bush, paper, rags, stone, sand, etc. adhering or trapped on the underbody. Clear off any such matter from the underbody. If the vehicle is used with these materials trapped or adhering to the underbody, a breakdown or fire could occur.**
- **In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Therefore, the driver and all passengers should fasten their seat belts whenever the vehicle is moving.**

- **When driving off-road or in rugged terrain, do not drive at excessive speeds, jump, make sharp turns, strike objects, etc. This may cause loss of control or vehicle rollover causing death or serious injury. You are also risking expensive damage to your vehicle's suspension and chassis.**

## DRIVING TIPS

---

### **NOTICE**

- *If driving through water, such as when crossing shallow streams, first check the depth of the water and the bottom of the river bed for firmness. Drive slowly and avoid deep water.*
  - *Take all necessary safety measures to ensure that water damage to the engine or other components does not occur.*  
*Water entering the engine air intake will cause severe engine damage.*  
*Water can wash the grease from wheel bearings, causing rusting and premature failure, and may also enter the differentials, transmission and transfer case, reducing the gear oil's lubricating qualities.*
  - *Sand and mud that has accumulated in brake drums and around brake discs may affect braking efficiency and may damage brake system components.*
- 
- *Always perform a maintenance inspection after each day of off-road driving that has taken you through rough terrain, sand, mud, or water. For scheduled maintenance information, refer to the "Owner's Manual Supplement/Scheduled Maintenance".*

## 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 560 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  $-35^{\circ}\text{C}$  ( $-31^{\circ}\text{F}$ ).

For Canada — “Toyota Super Long Life Coolant” is a mixture of 55% coolant and 45% deionized water. This coolant provides protection down to about  $-42^{\circ}\text{C}$  ( $-44^{\circ}\text{F}$ ).

### **NOTICE**

***Do not use plain water alone.***

## DRIVING TIPS

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### **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 608 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 559 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.

### **NOTICE**

***Do not use engine antifreeze or any other substitute because it may damage your vehicle's paint.***

### **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.

**Do not use your parking brake when there is a possibility it could freeze.**

When parking, put the transmission into "P" and block the front wheels. Do not use the parking brake, or snow or water accumulated in and around the parking brake mechanism may freeze the parking brake, making it hard to release.

**Keep ice and snow from accumulating under the fenders.**

Ice and snow built up under your fenders can make steering difficult. During bad winter driving, stop and check under the fenders occasionally.

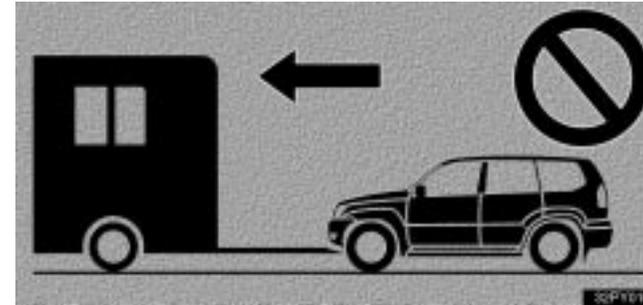
**Depending on where you are driving, we recommend you carry some emergency equipment.**

Some of the things you might put in the vehicle are tire chains, window scraper, bag of sand or salt, flares, small shovel, jumper cables, etc.

### **NOTICE**

***Do not tow your vehicle with four wheels on the ground. This may cause serious damage to your vehicle.***

## **DINGHY TOWING**



**Your vehicle is not designed to be dinghy towed (with four wheels on the ground) behind a motorhome.**

## DRIVING TIPS

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### TRAILER TOWING

Your vehicle is designed primarily as a passenger-and-load 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.

#### CAUTION

When disconnecting a trailer, put the vehicle height in the "LO" (low) mode and push the "HEIGHT CONTROL OFF" switch to turn off the rear height control air suspension. Otherwise, the vehicle height may be changed in the automatic leveling function, resulting in accident. For details see "Rear height control air suspension" on page 422.

### 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*



► *Weight distributing hitch receiver*

 **CAUTION**

- The maximum gross trailer weight (trailer weight plus cargo weight) must never exceed 2948 kg (6500 lb.) for vehicle with equipped.

If towing a trailer and cargo weighing over 907 kg (2000 lb.), Lexus recommends to use a sway control device with sufficient capacity. The combination of the gross trailer weight added to the total weight of the vehicle, occupants and vehicle cargo must never exceed a total of 5443 kg (12000 lb.).

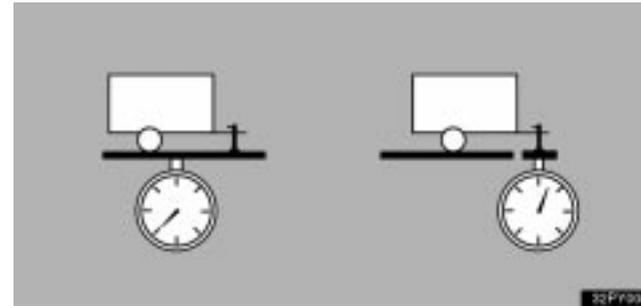
Exceeding the maximum weight of the trailer, the vehicle, or the vehicle and trailer combination, can cause an accident resulting in serious personal injuries.

- 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.

## DRIVING TIPS

- 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 front and rear Gross Axle Weight Ratings (GAWR) listed on the Certification Label.

- The trailer cargo load should be distributed so that the tongue load is 10% of the total trailer weight, not exceeding the maximum of 294 kg (650 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.



► *Total trailer weight*

► *Tongue load*

$$\frac{\text{Tongue load}}{\text{Total trailer weight}} \times 100 = 10\%$$

### Hitches

- If you wish to install a trailer hitch, you should consult with your Lexus dealer.
- Use only a hitch recommended by the hitch manufacture and the one which conforms to the total trailer weight requirement.
- If you wish to install an aftermarket hitch, the hitch must be bolted securely to the vehicle frame and installed according to the hitch manufactures' instructions.
- The hitch ball and king pin should have a light coat of grease.
- Lexus recommends the ball mount assembly be removed when not towing to prevent injury and to prevent damage in the event of a rear end collision. After removing the ball mount assembly, install the grommet to the hitch to prevent entry of dirt and mud.

## DRIVING TIPS

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### NOTICE

*Do not use axle-mounted hitches as they can cause damage to the axle housing, wheel bearings, wheels or tires. Also, never install a hitch which may interfere with the normal function of an Energy Absorbing Bumper.*

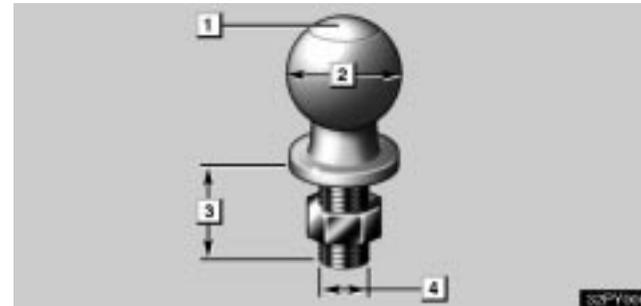
### Trailer ball

Follow these easy steps to properly determine the correct trailer ball for your application:

1. Determine the correct trailer ball size for the trailer coupler. Most couplers are stamped with the required trailer ball size. The sizes you'll most likely find stamped on the coupler are:

<u>Trailer Class</u>	<u>Typical Trailer Ball Size</u>
III	2 in.
II	2 in.
I	1 7/8 in.

2. Select the appropriate trailer ball to match or exceed the gross trailer weight rating of the trailer. The trailer ball load rating should be printed on the top of the ball.



- ▶ **1 Trailer ball load rating**
- 2 Ball diameter**
- 3 Shank length**
- 4 Shank diameter**

3. When mounted in the ball mount, the threaded ball shank must protrude beyond the bottom of the lock washer and nut at least 2 threads. The trailer ball shank must be matched to the ball mount hole diameter size.

**NOTICE**

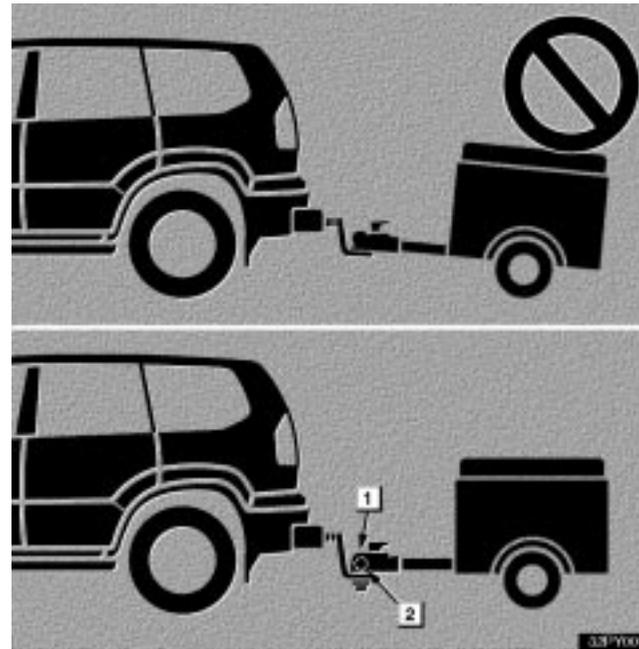
*Only use a ball mount attachment specified for the Lexus GX470.*

## DRIVING TIPS

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### Matching trailer ball height to trailer coupler height

No matter which class of tow hitch applies, for a safe trailer hookup, the trailer ball setup on must be the proper height for the coupler on the trailer.



► **1** Coupler      **2** Trailer ball

### 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, consult your Lexus dealer.

#### CAUTION

- If the total trailer weight exceeds 453 kg (1000 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.

### Service connector for towing brake controller



Your vehicle is equipped with a service connector for the towing brake controller as shown. Link the connector to the towing brake controller via the sub wire harness stored in the glove box. The detailed explanation of the sub wire harness circuit is packed together with the sub wire harness. Be sure to position the towing brake controller where it does not prevent the driver from operating the pedal. Lexus recommends that the sub wire harness be stored in the glove box when it is not in use.

## DRIVING TIPS

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### 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: 220 kPa (2.2 kgf/cm<sup>2</sup> or bar, 32 psi)

- The trailer tires should be inflated to the pressure recommended by the trailer manufacturer in respect to the total trailer weight.

### Trailer lights

Your vehicle is equipped with a wire harness stored in the rear end underbody. Use either of them to connect and operate the trailer lights. However, the 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.

### Connecting a trailer

Stop your vehicle and a trailer in line and perform the following:

1. Put the rear height control air suspension in the “LO” (low) mode. Turn the ignition switch off or push the “HEIGHT CONTROL OFF” switch to turn off the rear height control air suspension.
2. Connect a trailer.
3. Turn the ignition switch on or push the “HEIGHT CONTROL OFF” switch to turn on the rear height control air suspension. Select the “N” (normal) mode with the height select switch.

### Disconnecting a trailer

Stop your vehicle and a trailer in line and perform the following:

1. Put the rear height control air suspension in the “LO” (low) mode. (Make sure the vehicle height is in the “LO” (low) mode by pushing the height select switch on the “▼” side.)
2. Turn the ignition switch off or push the “HEIGHT CONTROL OFF” switch to turn off the rear height control air suspension.
3. Set the supporting leg of a trailer on the ground and raise the hitch by 100 mm (4 in.).
4. Turn the ignition switch on or push the “HEIGHT CONTROL OFF” switch to turn on the rear height control air suspension.

5. Wait for about 20 seconds until the rear vehicle height is lowered by the automatic leveling function.

6. Make sure the hitch is disconnected. If not, raise the hitch higher and repeat steps 2 through 5.

7. Move the vehicle forward in the “LO” (low) mode where the hitch does not touch anything in the “N” (normal) mode.

8. Put the rear height control air suspension in the “N” (normal) mode.

### 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.

## DRIVING TIPS

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### 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. Transmission must be “4” position.

## DRIVING TIPS

- 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 496.
- 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.**

## DRIVING TIPS

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### 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 keep the automatic transmission selector lever in the “D” position when engine braking is not required.** Driving with the overdrive off will reduce the fuel economy. (For details, see “Automatic transmission” on page 403.)
- **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 574.

**Total load capacity:**

With third seats	544 kg (1200 lb.)
Without third seats	454 kg (1000 lb.)

Total load capacity means combined weight of occupants, cargo and luggage. Tongue load is included when trailer towing.

**Seating capacity:**

With third seats	Total 8 (Front 2, Rear 6)
Without third seats	Total 5 (Front 2, Rear 3)

## DRIVING TIPS

---

Seating capacity means the maximum number of occupants whose estimated weight is 68 kg (150 lb.) per person. Depending on the weight of each person, the seating capacity given may exceed the total load capacity.

### **NOTICE**

***Even if the number of occupants are within the seating capacity, do not exceed the total load capacity.***

**Towing capacity:** 2948 kg (6500 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 luggage compartment 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**

- To prevent cargo and luggage from sliding forward during braking, do not stack anything in the luggage compartment higher than the seatbacks. Keep cargo and luggage low, as close to the floor as possible.

- Never allow anyone to ride in the luggage compartment. It is not designed for passengers. They should ride in their seats with their seat belts properly fastened. Otherwise, they are much more likely to suffer serious bodily injury, in the event of sudden braking or a collision.
- Do not place anything on the luggage cover 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.

## DRIVING TIPS

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### Capacity and distribution

**Cargo capacity depends on the total weight of the occupants.**

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

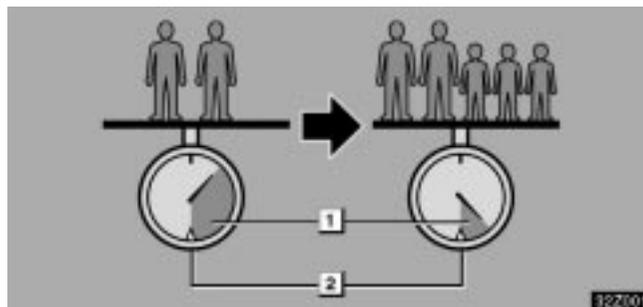
#### Steps for determining correct load limit

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 470.

**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, the available amount of cargo and luggage load capacity will be as follows:

With third seats  
 Total load capacity: 544 kg (1200 lb.)  
 $544 \text{ kg} - 166 \text{ kg} = 378 \text{ kg.}$   
 $(1200 \text{ lb.} - 366 \text{ lb.} = 834 \text{ lb.})$

Without third seats  
 Total load capacity: 454 kg (1000 lb.)  
 $454 \text{ kg} - 166 \text{ kg} = 288 \text{ kg.}$   
 $(1000 \text{ lb.} - 366 \text{ lb.} = 634 \text{ lb.})$

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:

With third seats  
 $378 \text{ kg} - 176 \text{ kg} = 202 \text{ kg.}$   
 $(834 \text{ lb.} - 388 \text{ lb.} = 446 \text{ lb.})$

Without third seats  
 $288 \text{ kg} - 176 \text{ kg} = 112 \text{ kg.}$   
 $(634 \text{ lb.} - 388 \text{ lb.} = 246 \text{ lb.})$

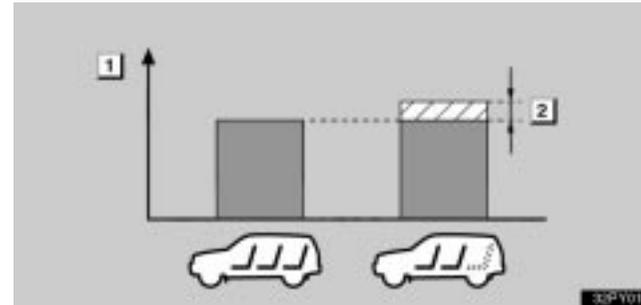
As shown in the above example, if the number of occupants increases, the cargo and luggage load equaling the combined weight of occupants who got on later must be reduced. In other words, if the increase in the number of occupants causes the excess of the total load capacity (combined weight of occupants 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 483.

## DRIVING TIPS

### 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.



- ▶ **1** *Cargo capacity*
- 2** *Weight of removed third seats*

#### Seating configuration variation

In case of removing the third seats, it is possible to load as much cargo as the weight of the removed seats.

(Cargo capacity) = (Total load capacity) – (Total weight of occupants) + (Weight of the removed third seats)

Third seats weights:

- Right side 13.7 kg (30.2 lb.)
- Left side 14.7 kg (32.4 lb.)

1

# SECTION 4

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## IN CASE OF AN EMERGENCY

### In case of an emergency

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If your vehicle will not start .....	491
If you cannot increase engine speed .....	496
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If you cannot shift automatic transmission selector lever .....	524
If you lose your keys or lock yourself out .....	525

## 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 401 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 8.

### If the engine is not turning over or is turning over too slowly —

1. Check that the battery terminals are tight and clean.
2. If the battery terminals are O.K., switch on the interior light.
3. If the light is out, dim or goes out when the starter is cranked, the battery is discharged. You may try jump starting. See "(c) Jump starting" for further instruction.

If the light is O.K., but the engine still will not start, it needs adjustment or repair. Call a Lexus dealer, Roadside Assistance or Customer Service Assistance. (See "Foreword".)

## IN CASE OF AN EMERGENCY

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### **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. 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 ignition key to “START” with the accelerator pedal fully depressed, and hold the key at this position for about 30 seconds. Then the cranking hold function stops cranking automatically, and you can try starting the engine with your foot off the accelerator pedal.

If the engine does not start, wait a few minutes and try again.

If the engine still will not start, it needs adjustment or repair. Call a Lexus dealer, Roadside Assistance or Customer Service Assistance. (See “Foreword”.)

### **(c) Jump starting**

**To avoid serious personal injury and damage to your vehicle which might result from battery explosion, acid burns, electrical burns, or damaged electronic components, these instructions must be followed precisely.**

## IN CASE OF AN EMERGENCY

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".)

### NOTICE

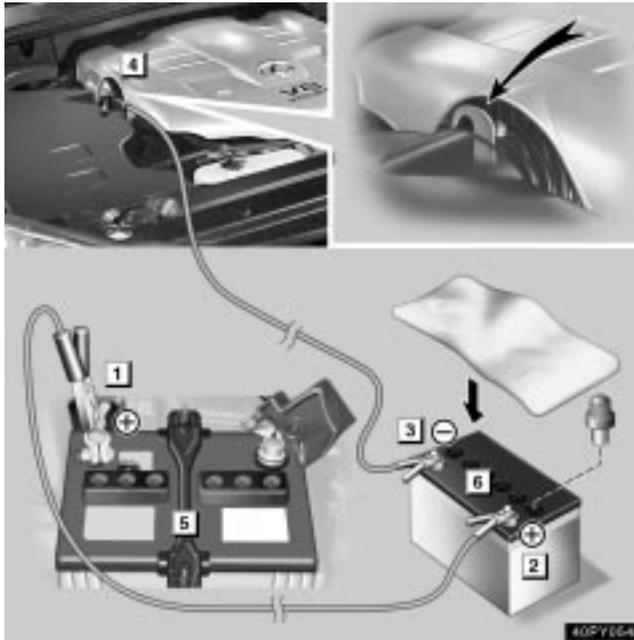
*The battery used for boosting must be 12 V. Do not jump start unless you are sure that the booster battery is correct.*



### 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.

## IN CASE OF AN EMERGENCY



- ▶ **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.

## IN CASE OF AN EMERGENCY

- 4 Connect the clamp at the other end of the negative (black) cable to a solid, stationary, unpainted metallic point (e.g. engine hanger) away from the battery. Do not connect it to or near any part that moves when the engine is cranked.

**CAUTION**

**When making the connections, to avoid serious injury, do not lean over the battery or accidentally let the jumper cables or clamps touch anything except the correct battery terminals or the ground.**

5. Charge the discharged battery with the jumper cables connected for approximately 5 minutes. At this time, run the engine in the vehicle with the booster battery at about 2000 rpm with the accelerator pedal lightly depressed.
6. Start your engine in the normal way. After starting, run it at about 2000 rpm for several minutes with the accelerator pedal lightly depressed.
7. Carefully disconnect the cables in the exact reverse order: the negative cable and then the positive cable.
8. Carefully dispose of the battery cover cloths which may now contain sulfuric acid.
9. If removed, replace all the battery vent plugs.

If the cause of your battery discharging is not apparent (for example, lights left on), you should have it checked at your Lexus dealer.

### **If the first start attempt is not successful...**

Check that the clamp on the jumper cables are tight. Recharge the discharged battery with the jumper cables connected for several minutes and restart your engine in the normal way.

If the another attempt is not successful, the battery may be depleted. Have it checked at your Lexus dealer.

## IN CASE OF AN EMERGENCY

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### 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 "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?
- Is the engine drive belt O.K.?

 CAUTION
<ul style="list-style-type: none"><li>• <b>When the engine is running, keep hands and clothing away from the moving fan and engine drive belt.</b></li><li>• <b>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.</b></li></ul>

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
<p><b>When jacking, be sure to observe the following to reduce the possibility of personal injury:</b></p> <ul style="list-style-type: none"><li>• <b>Turn off the active height control suspension by pushing the active height control switch.</b></li><li>• <b>Follow jacking instructions.</b></li></ul>

## IN CASE OF AN EMERGENCY

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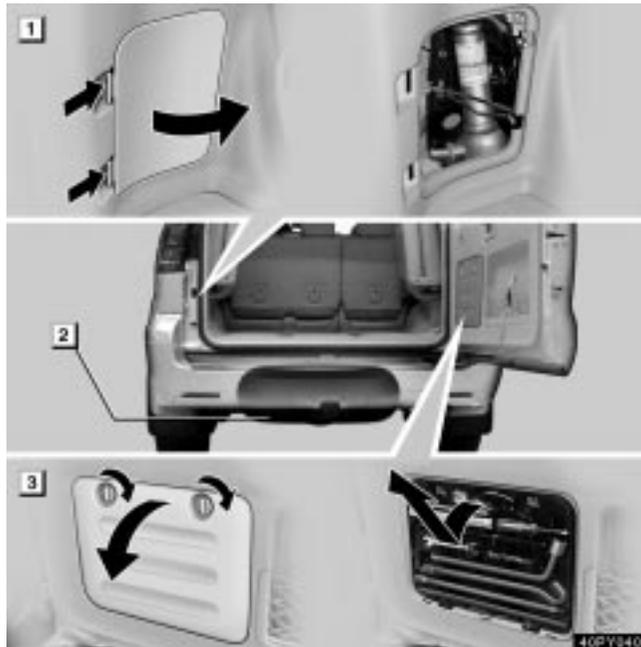
- Do not put any part of your body under a vehicle supported by a jack. Personal injury may occur.
- Do not start or run the engine while your vehicle is supported by the jack.
- Stop the vehicle on a level firm ground, firmly set the parking brake and put the transmission in "P". Block the wheel diagonally 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.*
- *When jacking up or installing tire chains, be sure to turn off the rear height control air suspension with the "HEIGHT CONTROL OFF" switch and stop the engine. Otherwise, the vehicle height may change because of the automatic leveling function resulting in accident.*

## IN CASE OF AN EMERGENCY



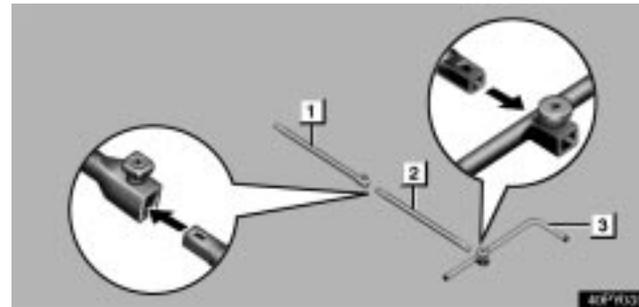
- ▶ **1** Jack
- ▶ **2** Spare tire
- ▶ **3** Tool tray

1. Get the tool, jack and spare tire.

To remove the tool tray, turn the knob counterclockwise and open the cover, then pull the tray out.

To prepare yourself for an emergency, you should familiarize yourself with the use of the jack and each tool, and their storage locations.

When storing the jack, put it into place and secure to prevent it from flying forward during a collision or sudden braking.



- ▶ **1** Jack handle extension with bolt
- ▶ **2** Jack handle extension without bolt
- ▶ **3** Jack handle

## IN CASE OF AN EMERGENCY

To remove the spare tire under the luggage compartment:

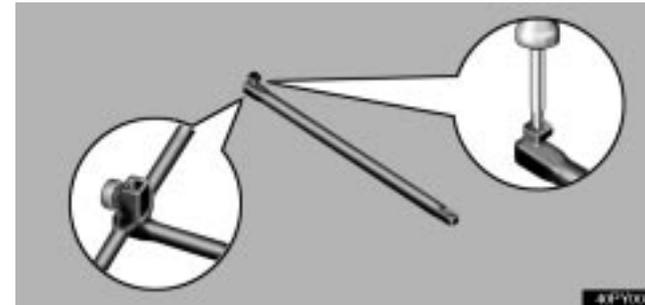
Put a jack handle and jack handle extensions together as shown in the illustration.

### CAUTION

**Make sure they are securely fixed with the screws.**

### NOTICE

***Tighten all the joints securely. Otherwise, the extension may come off and it may damage the paint or vehicle body.***



When connecting the jack handle extensions, use a Phillips-head screwdriver or jack handle to tighten the bolts on the joints as shown in the illustration. When connecting the jack handle with extension, tighten the bolt on the joint securely. Make sure the hollow meets the bolt on every joint when you tighten the bolts.

## IN CASE OF AN EMERGENCY

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▶ **1 Lower**    **2 Raise**    **3 Cloth**

To remove the spare tire:

1. Open the back door and remove the spare tire carrier lid using a flat-bladed screwdriver.
2. Insert the end of the jack handle extension into the lowering screw and put a cloth between the jack handle extension and rear bumper to protect the bumper surface.



3. Turn the jack handle counterclockwise until the spare tire completely lowered to the ground. Make sure the handle remains firmly fitted onto the jack handle extension.

## IN CASE OF AN EMERGENCY

Vehicles with kinetic dynamic suspension system — When lowering the spare tire, make sure the spare tire does not interfere with the suspension components. If interference occurs, raise the spare tire, and pull it toward the rear of the vehicle, and start again.

4. After the tire is lowered completely to the ground, remove the holding bracket.



### CAUTION

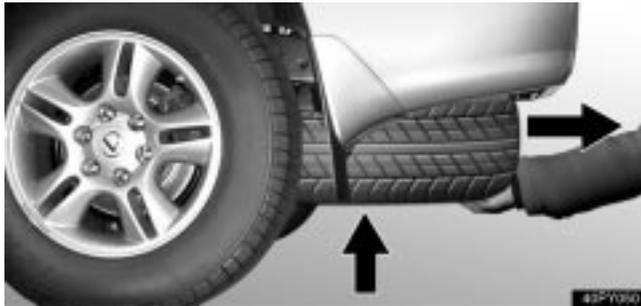
**Do not take out the spare tire from under the vehicle until it is lowered completely to the ground. When removing the spare tire, take care that fingers are not pinched between the wheel and holding bracket.**



When storing the spare tire, place it with the outer side of the wheel facing up. Then secure the tire, taking care that the tire goes straight up without catching on any other part, to prevent it from flying forward during a collision or sudden braking.

## IN CASE OF AN EMERGENCY

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Vehicles with kinetic dynamic suspension system —  
When raising the spare tire, pull the tire toward the rear of the vehicle. After raising the tire, visually check that the tire does not interfere with the suspension components. If interference occurs, lower the spare tire and start again.

**NOTICE**

- *Tighten the spare tire clamp bolt to hold the spare wheel carrier by the hook securely.*
- *Vehicles with kinetic dynamic suspension system — Make sure that the spare tire does not interfere with the suspension components when the spare tire is stowed. If interference occurs, the suspension system will be damaged.*

## IN CASE OF AN EMERGENCY

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**2. 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.



**3. Remove the wheel ornament.**

Pry off the wheel ornament, using the beveled end of the wheel ornament remover as shown.

 **CAUTION**

**Do not try to pull off the ornament by hand. Take due care in handling the ornament to avoid unexpected personal injury.**



**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.

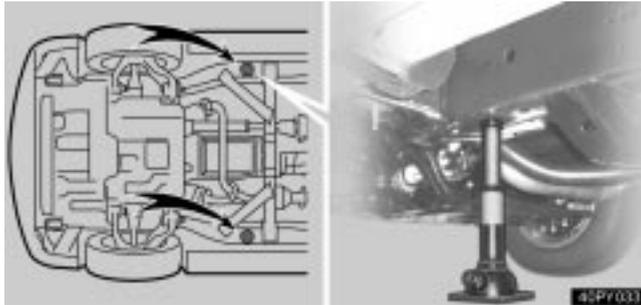


**CAUTION**

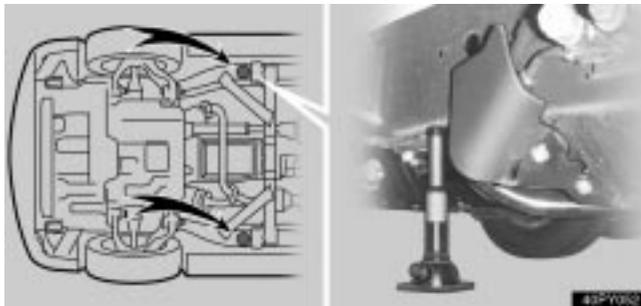
**Never use oil or grease on the bolts or nuts. The nuts may loose and the wheels may fall off, which could cause a serious accident.**

## IN CASE OF AN EMERGENCY

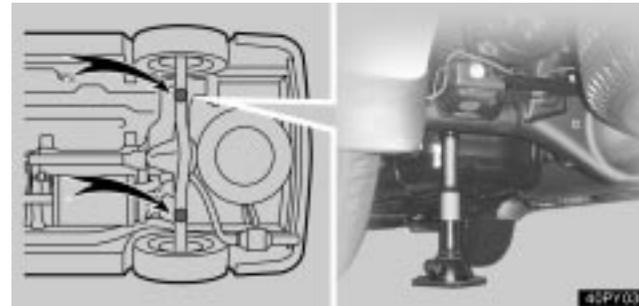
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► *Front (vehicles without kinetic dynamic suspension system)*



► *Front (vehicles with kinetic dynamic suspension system)*



► *Rear*

**5. Position the jack at the jack points as shown.**

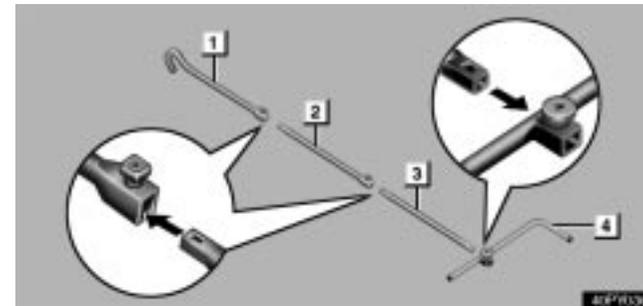
Front — Under the frame side rail

Rear — Under the rear axle housing

**NOTICE**

***Make sure to place the jack as shown in illustrations. Otherwise, your vehicle may be damaged.***

Make sure the jack is positioned on a level and solid surface.



- ▶ **1 Jack handle end**
- 2 Jack handle extension with bolt**
- 3 Jack handle extension without bolt**
- 4 Jack handle**

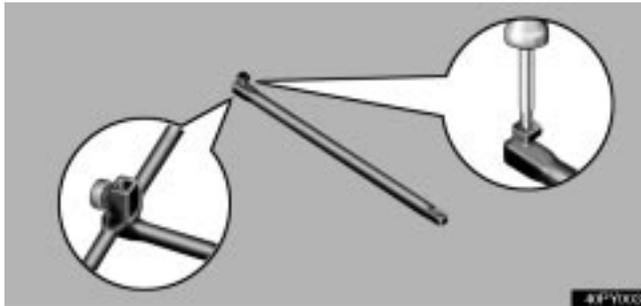
Put a jack handle, jack handle extensions and jack handle end together as shown in the illustration.

**⚠ CAUTION**

**Make sure they are securely fixed with the screws.**

## IN CASE OF AN EMERGENCY

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### **NOTICE**

***Tighten all the joints securely. Otherwise, the extension may come off and it may damage the paint or vehicle body.***

When connecting a jack handle extension with a jack handle end, use a Phillips-head screwdriver or jack handle to tighten the bolts on the joints as shown in the illustration. When connecting the jack handle with extension, tighten the bolt on the jack handle securely. Make sure the hollow meets the bolt on any joint when you tighten the bolts.



**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 extension into the jack (it is a loose fit) and turn it clockwise with the handle, making sure the handle remains firmly fitted onto the jack handle extension. 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.

Roll the spare wheel into position and 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.

## IN CASE OF AN EMERGENCY

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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.**

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.**

To lower the vehicle, turn the jack handle extension counterclockwise with the handle, making sure the handle remains firmly fitted onto the jack handle extension.

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 112 N·m (11.5 kgf·m, 83 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.

## IN CASE OF AN EMERGENCY

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### 10. Reinstall the wheel ornament.

Put the wheel ornament into position and then tap it firmly with the side or heel of your hand to snap it into place.

#### CAUTION

**Take due care in handling the ornament to avoid unexpected personal injury.**

### 11. 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.

In this situation, lock the center differential and turn off the vehicle stability control system. (For details, see “Four-wheel drive system” on page 411.)



### 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.

## IN CASE OF AN EMERGENCY

---

### **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 522.

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.



### CAUTION

When your vehicle is towed, put the vehicle height in the “N” (normal) mode and push the “HEIGHT CONTROL OFF” switch to turn off the rear height control air suspension. Otherwise, the vehicle height may be changed in the automatic leveling function, resulting in accident. For details, see “Rear height control air suspension” on page 422.

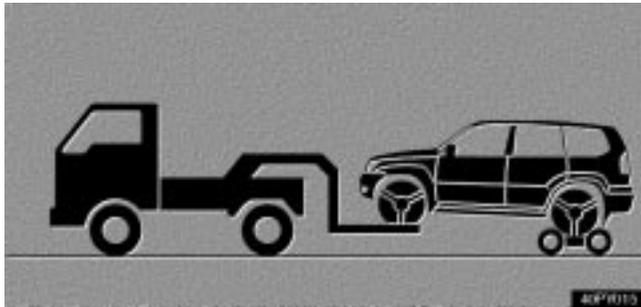
## IN CASE OF AN EMERGENCY

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### (a) Towing with a wheel lift type truck

- From front

Use a towing dolly under the rear wheels.



### **NOTICE**

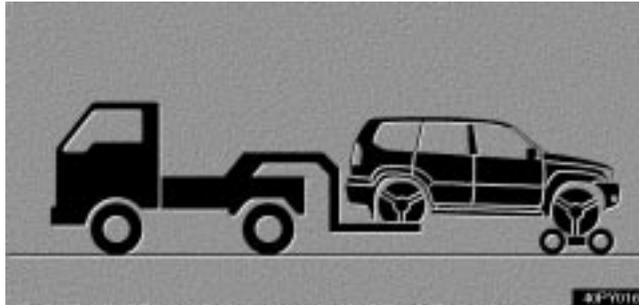
*Never tow a vehicle with an automatic transmission from the front with rear wheels on the ground, as this may cause serious damage to the transmission.*

## IN CASE OF AN EMERGENCY

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- From rear

Use a towing dolly under the front wheels.

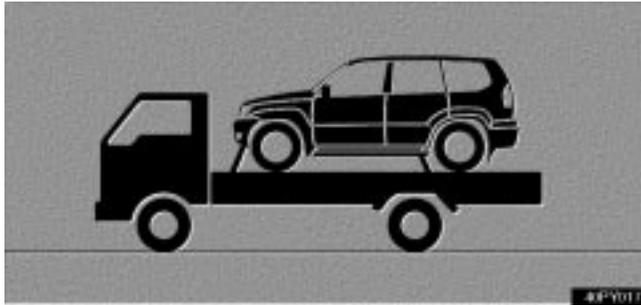


### **NOTICE**

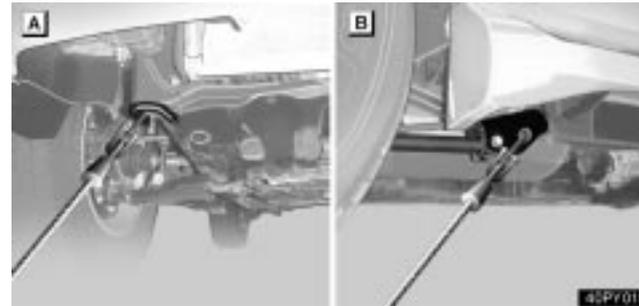
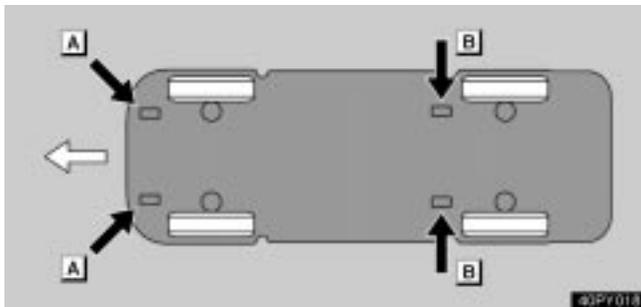
*Never tow a vehicle with an automatic transmission from the rear with front wheels on the ground, as this may cause serious damage to the transmission.*

## IN CASE OF AN EMERGENCY

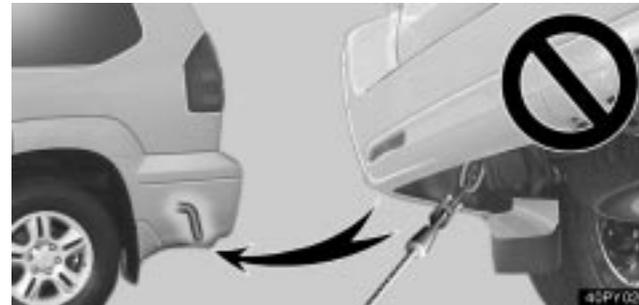
### (b) Using a flat bed truck



- 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.

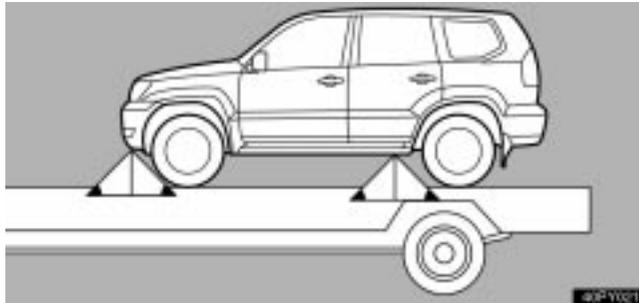


► *Rear emergency towing eyelet*

**NOTICE**

*Do not use the rear emergency towing eyelet.*

- Tie down angle

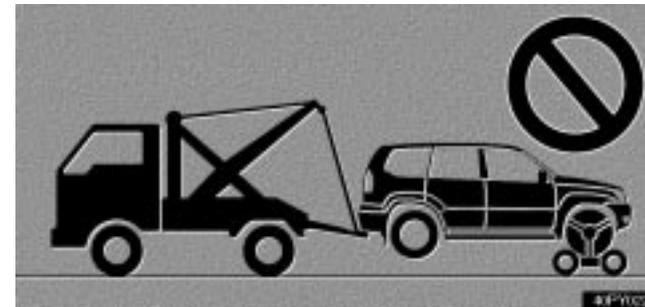


If you use chains or wires to tie down your vehicle, the angles shaded black must be at 45°.

**NOTICE**

*Do not tow with a sling type truck, either from the front or rear. This may cause body damage.*

- (c) Towing with a sling type truck



## IN CASE OF AN EMERGENCY

---

### (d) Emergency towing



#### **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.*

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.

## IN CASE OF AN EMERGENCY

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.

### 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, check that the center differential is unlocked. (The indicator light must be off with the ignition on.) Release the parking brake and put the transmission in "N". The ignition key must be in "ACC" (engine off) or "ON" (engine running).



### 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.**



### CAUTION

**If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.**

#### Emergency towing hook precautions:

- Before emergency towing, check that the eyelet is not broken or damaged and that the installation bolts are not loose.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the eyelet. Apply steady and even force.
- To avoid damaging the eyelet, do not pull from the side or at a vertical angle. Always pull straight ahead.

## IN CASE OF AN EMERGENCY

### CAUTION

If the emergency towing eyelet is used to get out when your vehicle becomes stuck in the mud, sand or other condition from which the vehicle cannot be driven out under its own power, make sure to observe the precautions mentioned below. Otherwise, excessive stress will be put on the eyelet and the towing cable or chain may break, causing serious injury or damage.

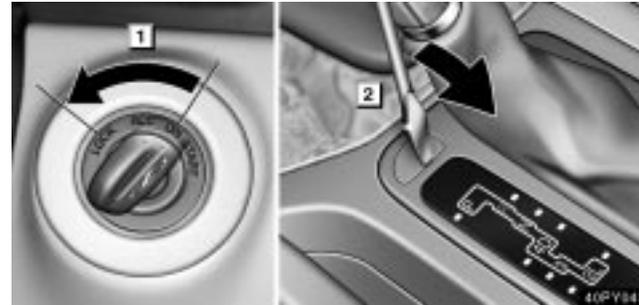
- If the towing vehicle can hardly move, do not forcibly continue the towing. Contact your Lexus dealer or a commercial tow truck service for assistance.
- Tow the vehicle as straight ahead as possible.
- Keep away from the vehicle during towing.

#### Tips for towing a stuck vehicle:

The following methods are effective to use when your vehicle is stuck in the mud, sand or other condition from which the vehicle cannot be driven out under its own power. Use extreme caution when towing the vehicle. In addition, keep away from the vehicles and towing cable or chain when towing.

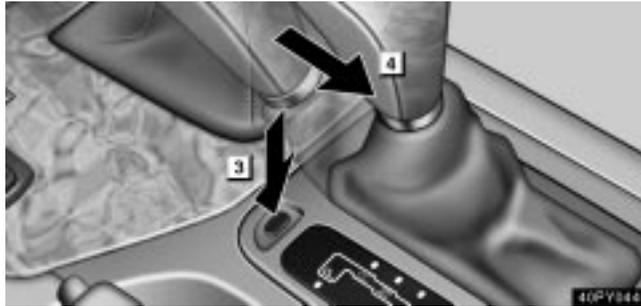
- Remove the sand and soil in the front and the back of the tires.
- Place stones or wood under the tires.

## 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 flat-bladed 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.**

Even if you lose only one key, contact your Lexus dealer to make a new key. If you lose all your master keys, you cannot make new keys; the whole engine immobilizer system must be replaced.

See the suggestion given in “Keys” on page 8.

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 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 glass cuts.

# SECTION 5

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## MAINTENANCE

### Maintenance

Maintenance requirements .....	527
General maintenance .....	528
Does your vehicle need repairing? .....	531
Emissions inspection and maintenance (I/M) programs .....	532

***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 only genuine Lexus parts be used for maintenance or for the repair of the emission control system.**

**The owner may elect to use non-Lexus supplied parts for replacement purposes without invalidating the emission control system warranty. However, use of replacement parts which are not of equivalent quality may impair the effectiveness of the emission control systems.**

**You may also elect to have maintenance, replacement, or repair of the emission control devices and system performed by any automotive repair establishment or individual without invalidating this warranty. See "Owner's Guide", "Owner's Manual Supplement" or "Warranty Booklet" for complete warranty information.**

### Where to go for service?

Lexus technicians are well-trained specialists and are kept up to date with the latest service information through technical bulletins, service tips, and in-dealership training programs. They are well informed about the operation of all the systems on your vehicle.

You can be confident that your Lexus dealer's service department performs the best job to meet the maintenance requirements of your vehicle — reliably and economically.

## MAINTENANCE

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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.



**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 618 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 560 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 563 for additional information.

### **Battery**

Check the battery condition by the indicator color. See page 608 for additional information.

### **Brake fluid level**

Make sure the brake fluid level is correct. See page 571 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 555 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 572 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 396.)

### **Vehicle interior**

**Items listed below should be checked regularly, e.g. while performing periodic services, cleaning the vehicle, etc.**

#### **Lights**

Make sure the headlights, stop lights, tail lights, turn signal lights, and other lights are working. Check headlight aim.

### **Service reminder indicators and warning buzzers**

Check that all service reminder indicators and warning buzzers function properly.

### **Steering wheel**

Check that it has the specified free play. Be alert for changes in steering condition, such as hard steering, excessive free play or strange noise.

### **Seats**

Check that all front seat controls such as seat adjusters, seatback recliner, etc. operate smoothly. Check that the head restraints move up and down smoothly and that the locks hold securely in any latched position. For folding-up second and third seats, and detachable third seat, check that the latches lock securely.

### **Seat belts**

Check that the seat belt system such as buckles, retractors and anchors operate properly and smoothly. Make sure the belt webbing is not cut, frayed, worn or damaged.

### **Accelerator pedal**

Check the pedal for smooth operation and uneven pedal effort or catching.

### **Brake pedal**

Check the pedal for smooth operation and the proper clearance and free play. Check the brake booster function.

## MAINTENANCE

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### Brakes

In a safe place, check that the brakes do not pull to one side when applied.

### Parking brake

Check that the lever 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

Check the lock release button of the selector lever for proper and smooth operation. 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.**

### 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 side doors and back door, 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 pressure with a gauge every two weeks, or at least once a month and adjust as shown on the tire pressure label. See page 574 for additional information.

### Tire surface

Check the tires carefully for cuts, damage or excessive wear. See page 589 for additional information.

### Wheel nuts

When checking the tires, make sure to check the nuts for looseness. Tighten them if necessary.

### 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 588 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.**

## MAINTENANCE

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### **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 and the malfunction indicator lamp does not come on, contact your Lexus dealer to prepare the vehicle for re-testing.

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# **SECTION 6-1**

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## **SERVICE PROCEDURES AND SPECIFICATIONS**

### **Introduction**

Vehicle identification .....	535
Theft prevention labels .....	536
Engine compartment overview .....	537
Do-it-yourself service precautions .....	540
Parts and tools .....	542

## 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.

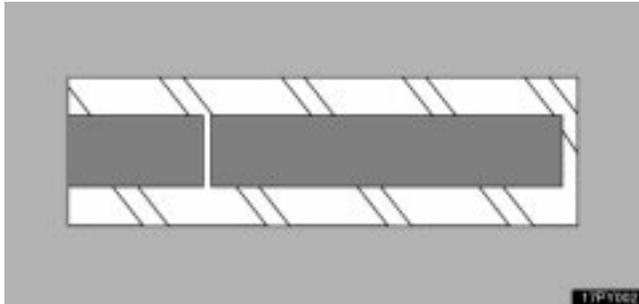


The engine number is stamped on the engine block as shown.

## INTRODUCTION

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### THEFT PREVENTION LABELS (U.S.A. ONLY)



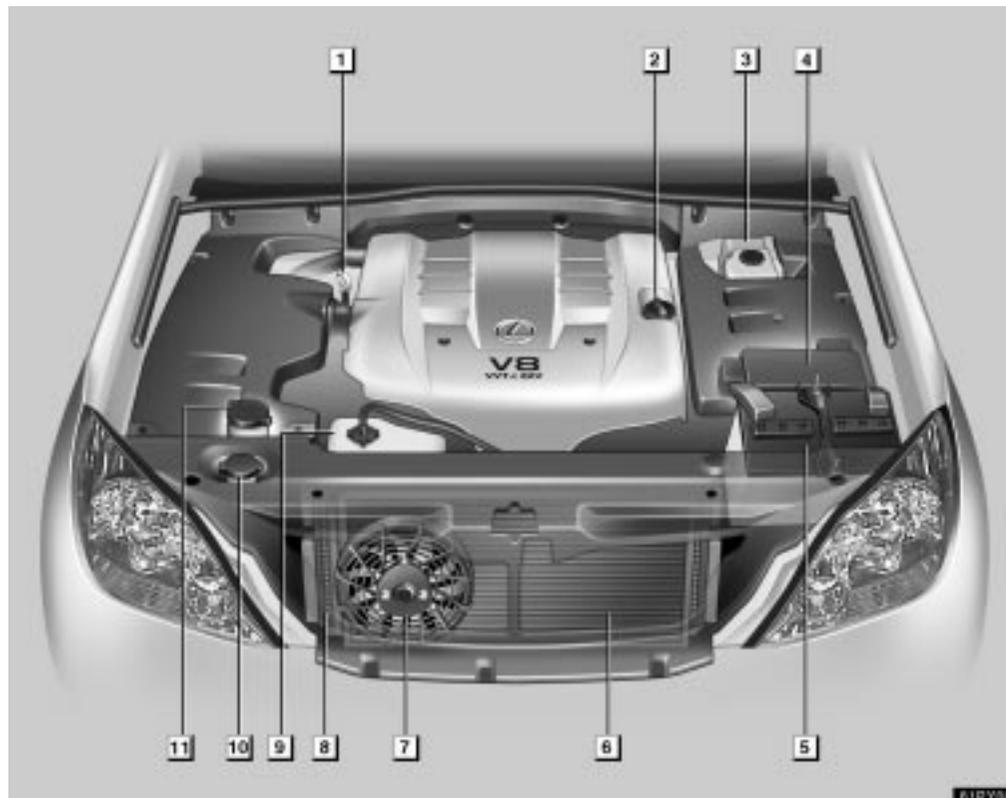
Your new vehicle carries theft prevention labels which are approximately 56 mm (2.20 in.) by 16 mm (0.63 in.).

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 Engine oil level dipstick
- 2 Engine oil filler cap
- 3 Brake fluid reservoir
- 4 Fuse box
- 5 Battery
- 6 Condenser
- 7 Electric cooling fan
- 8 Radiator
- 9 Engine coolant reservoir
- 10 Washer fluid tank
- 11 Power steering fluid reservoir

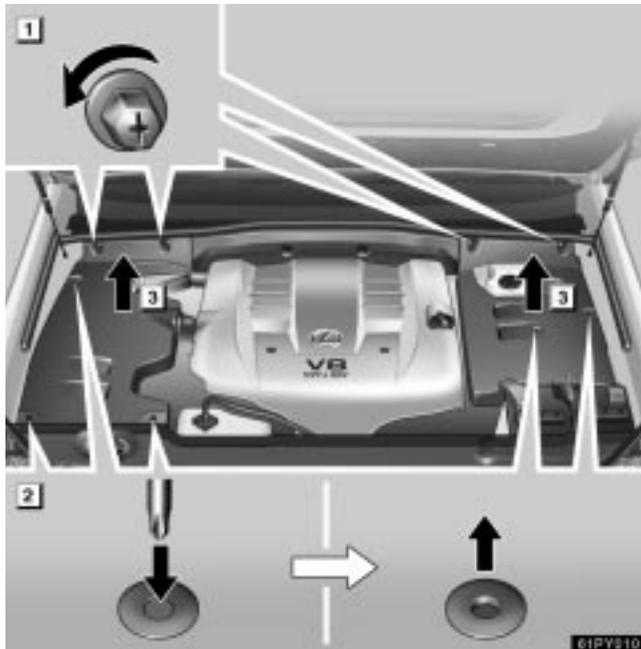
## INTRODUCTION

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### Removing the engine compartment covers

Before checking the power steering fluid or fuses in the engine compartment, remove the engine compartment covers as follows:

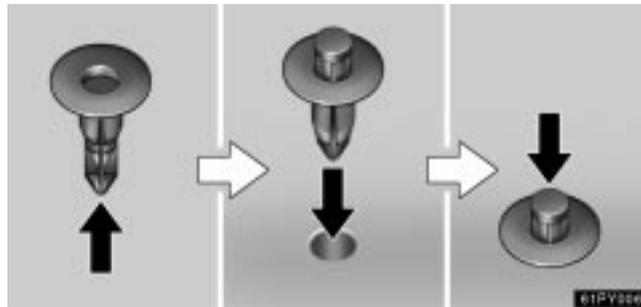
- 1 Turn the plastic nuts counterclockwise and remove them.
- 2 Push the core of the clips using a Phillips-head screwdriver and remove the clips.



3 Remove the covers.

Be careful not to lose the removed plastic nuts and clips.

**After checking the items, install the engine compartment covers and insert the plastic nuts and clips in their original positions.**



When inserting the clips, do as shown above.

**NOTICE**

***After installing the engine compartment covers, make sure the covers are securely in their original positions.***

## INTRODUCTION

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### 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 542.

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, other fluids and spark plugs may also be hot.
- If the engine is hot, do not remove the radiator cap or loosen the drain plugs to prevent burning yourself.
- 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.
- 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 and power steering fluid, or the transmission and power steering could be damaged.*
- *Be careful not to scratch the glass surface with the wiper frame.*

## INTRODUCTION

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### 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 559 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  $-35^{\circ}\text{C}$  ( $-31^{\circ}\text{F}$ ).

##### 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:**

- Rag or paper towel
- 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



## **SECTION 6-2**

---

### **SERVICE PROCEDURES AND SPECIFICATIONS**

#### **Engine**

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Facts about engine oil consumption .....	553
Used engine oil .....	554
Checking the engine oil level .....	555
Checking the engine coolant level .....	560
Checking the radiator and condenser .....	563
Spark plugs .....	564

## ENGINE

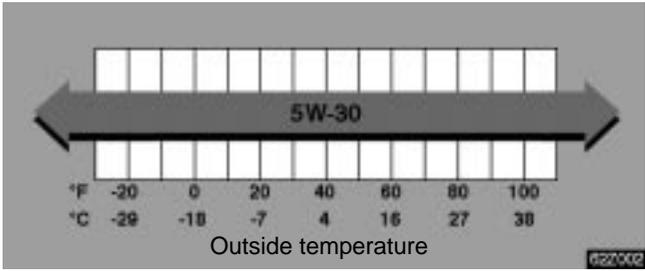
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### SPECIFICATIONS

#### — GENERAL

Model	2UZ-FE
Type	8 cylinder V Type, 4 cycle, gasoline
Bore and stroke	94.0 × 84.0 mm (3.70 × 3.31 in.)
Displacement	4664 cm <sup>3</sup> (284.5 cu. in.)
Valve clearance (engine cold)	
Intake	0.15 — 0.25 mm (0.006 — 0.010 in.)
Exhaust	0.25 — 0.35 mm (0.010 — 0.014 in.)
Drive belt tension	Automatic adjustment

**— LUBRICATION SYSTEM**

<p>Oil capacity Drain and refill with filter without filter</p>	<p>6.2 L (6.5 qt., 5.5 Imp. qt.) 5.7 L (6.0 qt., 5.0 Imp. qt.)</p>
<p>Oil grade</p>	<p>API grade SL “Energy-Conserving” or ILSAC multigrade engine oil</p>
<p>Recommended oil viscosity (SAE):</p>	

**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.

## ENGINE

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### — COOLING SYSTEM

Capacity	12.9 L (13.6 qt., 11.4 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.

### — FUEL

Fuel type	Unleaded gasoline only
Octane rating	87 (Research octane number 91) or higher

**ENGINE****— 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.	

## ENGINE

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### FUEL

#### Fuel type

**Your vehicle must use only unleaded gasoline.**

To help prevent gas station mixups, your Lexus has a smaller fuel tank opening. The special nozzle on pumps with unleaded fuel will fit it, but the larger standard nozzle on pumps with leaded gas will not.

At a minimum, the gasoline you use should meet the specifications of ASTM D4814 in the U.S.A. and CGSB 3.5–M93 in Canada.

#### **NOTICE**

***Do not use leaded gasoline. Use of leaded gasoline will cause the three-way catalytic converter to lose its effectiveness and the emission control system to function improperly. Also, this can increase maintenance costs.***

### **Octane rating**

**Select Octane Rating 87 (Research Octane Number 91) or higher. For improved vehicle performance, the use of premium unleaded gasoline with an Octane Rating of 91 (Research Octane Number 96) or higher is recommended.**

Use of unleaded fuel with an octane number or rating lower than stated above will cause persistent heavy knocking. If severe, this will lead to engine damage.

#### **If your engine knocks...**

If you detect heavy knocking even when using the recommended fuel, or if you hear steady knocking while holding a steady speed on level roads, consult your Lexus dealer.

However, occasionally, you may notice light knocking for a short time while accelerating or driving up hills. This is normal and there is no need for concern.

### **Gasoline containing detergent additives**

**Lexus recommends the use of gasoline that contains detergent additives to avoid build-up of engine deposits.**

**However, all gasoline sold in the U.S. contains detergent additives to keep clean and/or clean intake systems.**

### **Quality gasoline**

Automotive manufacturers in the U.S., Europe and Japan have developed a specification for quality fuel named World-Wide Fuel Charter (WWFC) that is expected to be applied world wide. The WWFC consists of four categories that depend on required emission levels. In the U.S., category 3 has been adopted. The WWFC improves air quality by providing for better emissions in vehicle fleets, and customer satisfaction through better vehicle performance.

### **Cleaner burning gasoline**

**Cleaner burning gasoline, including reformulated gasoline that contains oxygenates such as ethanol or MTBE is available in many areas.**

Lexus recommends the use of cleaner burning gasoline and appropriately blended reformulated gasoline. These types of gasoline provide excellent vehicle performance, reduce vehicle emissions, and improve air quality.

## ENGINE

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### Oxygenates in gasoline

Lexus allows the use of oxygenate blended gasoline where the oxygenate content is up to 10% ethanol or 15% MTBE. If you use gasohol in your Lexus, be sure that it has an octane rating no lower than 87.

Lexus does not recommend the use of gasoline containing methanol.

### Gasoline containing MMT

Some gasoline contain an octane enhancing additive called MMT (Methylcyclopentadienyl Manganese Tricarbonyl).

Lexus does not recommend the use of gasoline that contains MMT. If fuel containing MMT is used, your emission control system may be adversely affected. The Malfunction Indicator Lamp on the instrument cluster may come on. If this happens, contact your Lexus dealer for service.

#### **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

### 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.

87 L (23 gal., 19.1 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 that has been damaged and it is in need of repair. In this case, do not restart the engine.**

## FACTS ABOUT ENGINE OIL CONSUMPTION

### Functions of engine oil

Engine oil has the primary function of lubricating and cooling the inside of the engine, and plays a major role in maintaining the engine in proper working order.

### Engine oil consumption

**It is normal that an engine should consume some engine oil during normal engine operation. The causes of oil consumption in a normal engine are as follows.**

- Oil is used to lubricate pistons, piston rings and cylinders. A thin film of oil is left on the cylinder wall when a piston moves downwards in the cylinder. High negative pressure generated when the vehicle is decelerating sucks some of this oil into the combustion chamber. This oil as well as some part of the oil film left on the cylinder wall is burned by the high temperature combustion gases during the combustion process.
- Oil is also used to lubricate the stems of the intake valves. Some of this oil is sucked into the combustion chamber together with the intake air and is burned along with the fuel. High temperature exhaust gases also burn the oil used to lubricate the exhaust valve stems.

## ENGINE

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**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 by high-speed driving 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.

### **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" described below.

## **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.

## **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.
- 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.
- Do not leave used oil within the reach of children.

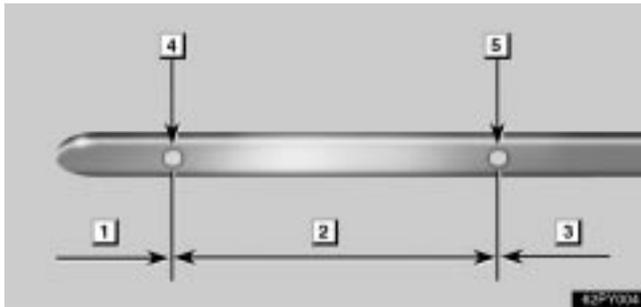
**CHECKING THE ENGINE OIL LEVEL**

**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.

## ENGINE

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### **NOTICE**

*Be careful not to drop engine oil on the vehicle components.*

► **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.

## ENGINE



**If the oil level is below or only slightly above the low line, 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 line and full line on the dipstick is indicated below for reference.

When the level reaches within the correct range, return the filler cap and turn the cap clockwise until you hear a click.

Oil quantity. L (qt., Imp. qt.)                      1.5 (1.6, 1.3)

## ENGINE

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### **NOTICE**

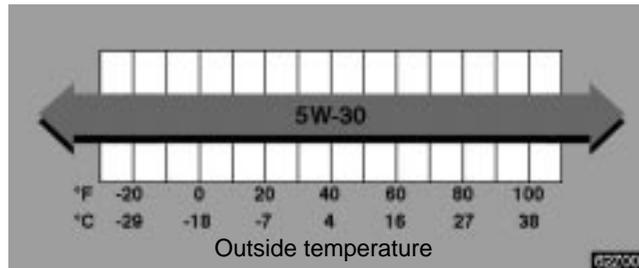
- *Be careful not to spill engine oil on the vehicle components.*
- *Avoid overfilling, or the engine could be damaged.*
- *Check the oil level on the dipstick once again after adding the oil.*

### Engine oil selection

“Toyota Genuine Motor Oil” is used in your Lexus vehicle. Use Lexus approved “Toyota Genuine Motor Oil” or equivalent to satisfy the following grade and viscosity.

Oil grade: API grade SL “Energy–Conserving” or ILSAC multigrade engine oil.

Recommended viscosity: SAE 5W–30



**SAE 5W–30 is the best choice, for good fuel economy and good starting in cold weather.**

**If SAE 5W–30 oil 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 marks



► **API Service Symbol**    ► **ILSAC Certification Mark**

Either or both API registered marks are added to some oil containers to help you select the oil you should use.

- The API Service Symbol is located anywhere on the outside of the container.

The top portion of the label shows the oil quality by API (American Petroleum Institute) designation such as SL. The center portion of the label shows the SAE viscosity grade such as SAE 5W–30. “Energy–Conserving”, shown in the lower portion, indicates that the oil has fuel–saving capabilities.

- The ILSAC (International Lubricant Standardization and Approval Committee) Certification Mark is displayed on the front of the container.

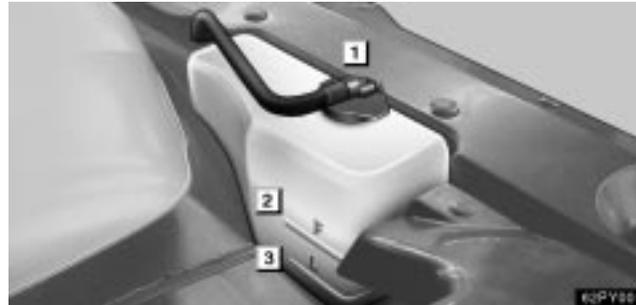
## ENGINE

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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** "F" (upper) line  
**3** "L" (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.

## ENGINE

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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 radiator 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.**

## ENGINE

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### 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  $-35^{\circ}\text{C}$  ( $-31^{\circ}\text{F}$ ).

For Canada — "Toyota Super Long Life Coolant" is a mixture of 55% coolant and 45% deionized water. This coolant provides protection down to about  $-42^{\circ}\text{C}$  ( $-44^{\circ}\text{F}$ ).

#### **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.

 **CAUTION**

**To prevent burning yourself, be careful not to touch the radiator or condenser when the engine is hot.**

**NOTICE**

***To prevent damage to the radiator and condenser, do not perform the work by yourself.***

## 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.

## ENGINE

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### SPARK PLUGS

Your engine is fitted with iridium-tipped spark plugs.



#### **NOTICE**

*Use only iridium-tipped spark plugs and do not adjust gaps for your engine performance and smooth drivability.*

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## **SECTION 6-3**

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### **SERVICE PROCEDURES AND SPECIFICATIONS**

#### **Chassis**

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**SPECIFICATIONS****— DIFFERENTIAL**

Oil capacity Front Rear	1.4 L (1.5 qt., 1.2 Imp. qt.) 3.1 L (3.3 qt., 2.7 Imp. qt.)
Oil type	Hypoid gear oil API GL-5
Oil viscosity	Above $-18^{\circ}\text{C}$ ( $0^{\circ}\text{F}$ ): SAE 90 or SAE 85W-90 Below $-18^{\circ}\text{C}$ ( $0^{\circ}\text{F}$ ): SAE 80W or SAE 80W-90

**— TRANSFER**

Oil capacity	1.4 L (1.5 qt., 1.2 Imp. qt.)
Oil type	Hypoid gear oil API GL-5
Recommended oil viscosity	SAE 75W-90

## CHASSIS

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### — AUTOMATIC TRANSMISSION

Fluid capacity Drain and refill	Up to 3.0 L (3.2 qt., 2.6 Imp. qt.)
Fluid type	<b>Toyota Genuine ATF WS*</b>

\*: Change automatic transmission fluid only as necessary. Generally, it is necessary to change automatic transmission fluid only if your vehicle is driven under one of the Special Operating Conditions listed in your "Owner's Manual Supplement/Scheduled Maintenance". When changing the automatic transmission fluid, use only "Toyota Genuine ATF WS" (ATF JWS3324 or NWS9638) to aid in assuring optimum transmission performance.

**NOTICE**

*Using automatic transmission fluid other than “Toyota Genuine ATF WS” may cause deterioration in shift quality, locking up of your transmission accompanied by vibration, and ultimately damage the automatic transmission of your vehicle.*

Please contact your Lexus dealer for further details.

**— BRAKES**

Pedal clearance	52 mm (2.0 in.) Min. *1
Pedal free play	1 — 6 mm (0.04 — 0.24 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	5 — 7 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 pulled with the force of 196 N (20 kgf, 44 lbf)

## CHASSIS

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### — CHASSIS LUBRICATION

Propeller shafts Spiders Slide yoke	Lithium base chassis grease, NLGI No.2 Molybdenum–disulfide lithium base chassis grease, NLGI No.2 or lithium base chassis grease, NLGI No.2
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### — STEERING

Free play	Less than 30 mm (1.2 in.)
Power steering fluid	Automatic transmission fluid DEXRON® II or III

### — TIRES AND WHEELS

Tire size	P265/65R17 110S
Tire inflation pressure Recommended cold tire inflation pressure	220 kPa (2.2 kgf/cm <sup>2</sup> or bar, 32 psi)
Wheel size	17 × 7 1/2 JJ
Wheel nut torque	112 N·m (11.5 kgf·m, 83 ft·lbf)

#### NOTE:

For complete information on tires (e.g. replacing tires or replacing wheels), see “Checking tire inflation pressure” through “Aluminum wheel precautions” on pages 574 through 597.

## 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 or when the fluid level in the accumulator is high.

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.

### NOTICE

*If you spill some of the fluid, be sure to wipe it off to prevent it from damaging the parts or paintwork.*

### Refilling brake fluid:

1. Turn the ignition switch off.
2. Depress the brake pedal more than 20 times (until the brake pedal resistance decreases and pedal travel increases).
3. Remove the reservoir cap by hand. Add brake fluid up to the “MAX” line.

If you do not follow the procedure above, the reservoir may overflow.

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.**

## CHASSIS

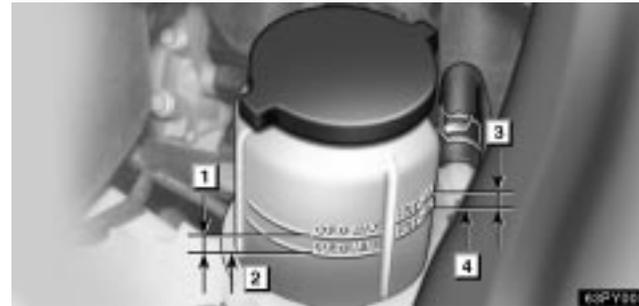
### CHECKING POWER STEERING FLUID

The power steering fluid reservoir is located under the right side engine compartment cover. Before checking the power steering fluid, remove the cover. (For details, see “Removing the engine compart covers” on page 538.)



**Check the fluid level, simply look at the see-through 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**

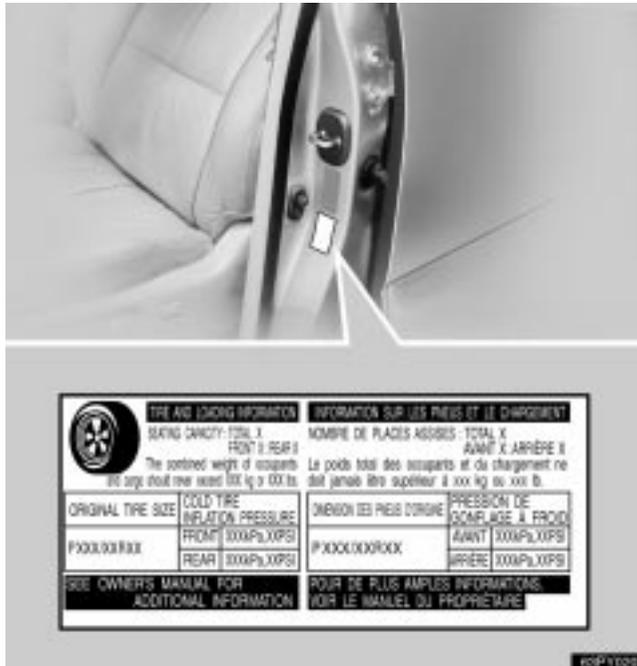
The reservoir may be hot so be careful not to burn yourself.

**NOTICE**

- *Avoid overfilling, or the power steering could be damaged.*
- *When adding the power steering fluid, avoid spilling it. The generator under the power steering reservoir could be damaged if fluid is spilled on it.*

## CHASSIS

### 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 570 and 627. 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.
- **If you cannot adjust the tire pressure when the tires are cold,** add 20 kPa (0.2 kgf/cm<sup>2</sup> or bar, 2.9 psi) to 30 kPa (0.3 kgf/cm<sup>2</sup> or bar, 4.3 psi) more to the front tires and rear tires than the cold tire pressure, but never exceed the maximum cold tire pressure molded on the tire sidewall.

- **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.

## CHASSIS

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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.**

### NOTICE

***Use only the original valve cap. If any other valve cap is used, it may corrode or melt and become difficult or impossible to remove.***

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

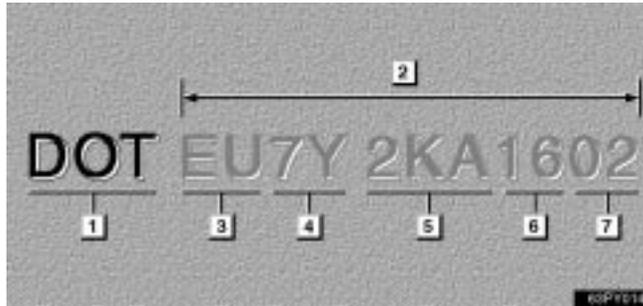


► The illustration indicates typical tire symbols.

- 1 **Tire size:** For details, see “Tire size” on page 580.
- 2 **DOT and Tire Identification Number (TIN):** For details, see “DOT and Tire Identification Number (TIN)” on page 580.
- 3 **Location of the tread wear indicators:** For details, see “Checking and replacing tires” on page 589.
- 4 **Tire ply composition and materials:** Plies mean a layer of rubber-coated parallel cords. Cords mean the strands forming the plies in the tire.
- 5 **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.
- 6 **“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.
- 7 **Load limit at maximum cold tire inflation pressure:** For details, see “Checking and replacing tires” on page 589.
- 8 **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 567.
- 9 **Uniform tire quality grading:** For details, see “Uniform tire quality grading” that follows.
- 10 **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 587.

## CHASSIS

### 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
- 6 Manufacturing week
- 7 Manufacturing year

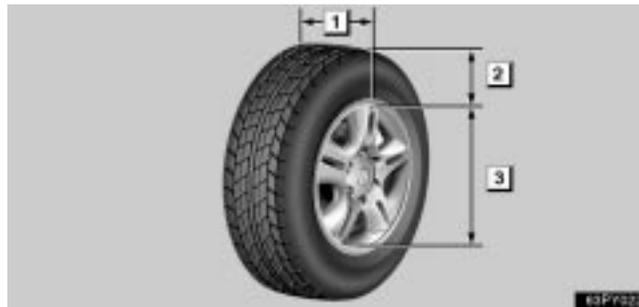
The "DOT" symbol certifies that the tire conforms to applicable Federal Motor Vehicle Safety Standards.

### Tire size



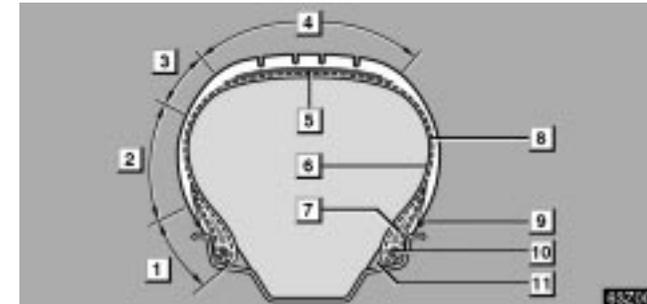
► The illustration indicates typical tire size.

- 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

## CHASSIS

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### 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.

## CHASSIS

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### 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
Normal occupant weight	68 kg (150 lb.) times the number of occupants specified in the second column of Table 1 that follows

**CHASSIS**

Tire related term	Meaning
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
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

## CHASSIS

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Tire related term	Meaning
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 578.



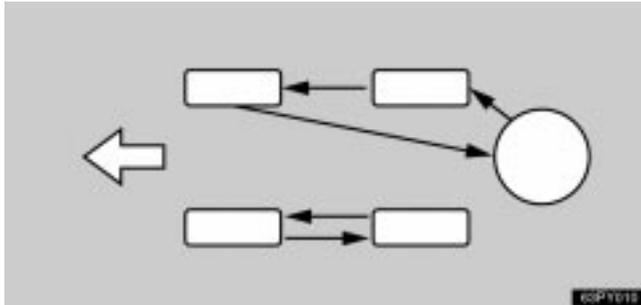
#### CAUTION

- **Do not mix summer and all season tires on your vehicle as this can cause dangerous handling characteristics, resulting in loss of control.**
- **Do not use tires other than the manufacturer's designated tires, and never mix tires or wheels of the sizes different from the originals.**

## CHASSIS

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### 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.

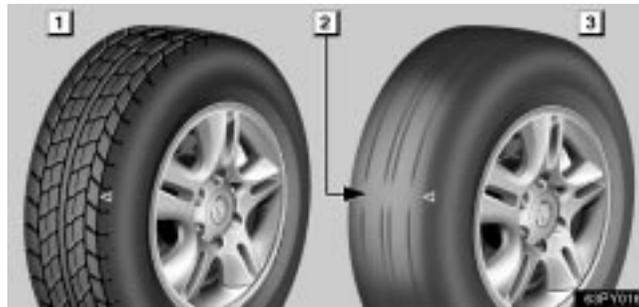
The wheel assemblies must be rotated as illustrated above.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire 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 the tread wear indicators is shown by the marks such as “TWI” or “△” 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.

## CHASSIS

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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 load capacity as the originally installed tires. Also, all the tires must be the same brand and have the same tread patterns.**

Using any other size or type of tire may seriously affect handling, ride, speedometer/odometer calibration, ground clearance, and clearance between the body and tires or snow chains.

Check that the maximum load of the replaced tire is greater than 1/2 of the Gross Axle Weight Ratings (GAWR) of either the front axle or the rear axle, whichever is greater. As for the maximum load of the tire, see the load limit at maximum cold tire inflation pressure mentioned on the sidewall of the tire, and as for the Gross Axle Weight Ratings (GAWR), see the Certification Label. For details about Certification Label and sidewall of the tire, see pages 535 and 578.

### 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.**
- **Do not use tires of different brands, sizes, construction or tread patterns, as this may cause dangerous handling characteristics resulting in loss of control.**

## INSTALLING SNOW TIRES AND CHAINS

### When to use snow tires or chains

**Snow tires or chains are recommended when driving on snow or ice.**

On wet or dry roads, conventional or radial tires provide better traction than snow or studded tires.

### Snow tire selection

**If you need snow tires, select tires of the same size, construction and load capacity as the originally installed tires. Also, all the tires must be the same brand and have the same tread patterns.**

Do not use tires other than stated above. Since your vehicle has radial tires as original equipment, make sure your snow tires also have radial construction. Do not install studded tires without first checking local regulations for possible restrictions.



### CAUTION

Observe the following instructions. Otherwise, an accident may occur resulting in death or serious injuries.

- Do not use snow tires other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control.
- Do not use snow tires of different brands, sizes, construction or tread patterns, as this may cause dangerous handling characteristics resulting in loss of control.

### Snow tire installation

**Snow tires should be installed on all wheels.**

Installing snow tires on the rear wheels only can lead to an excessive difference in road grip capability between the front and rear tires which could cause loss of vehicle control.

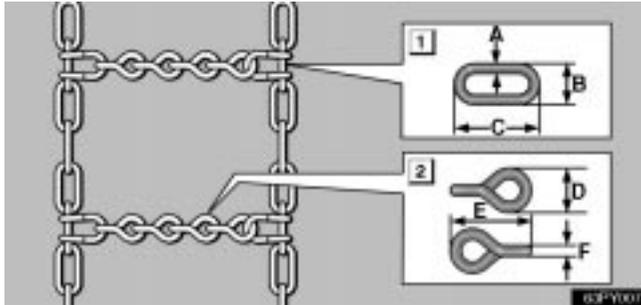


### CAUTION

- Do not drive with the snow tires incorrectly inflated.
- Never drive over 105 km/h (65 mph) with any type of snow tires.

## CHASSIS

### Tire chain selection



► **1 Side chain**    **2 Cross chain**

**Use the tire chains of correct size.**

For P265/65R17 tires, use the following type chains.

	mm	(in.)
A: Diameter of side chain	5.0	(0.20)
B: Width of side chain	18.0	(0.71)
C: Length of side chain	46.0	(1.81)
D: Width of cross chain	22.6	(0.89)
E: Length of cross chain	38.1	(1.5)
F: Diameter of cross chain	6.3	(0.25)

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.*

## CHASSIS

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### Chain installation

**Install the chains on the rear tires as tightly as possible. Do not use tire chains on the front tires. Retighten chains after driving 0.5 — 1.0 km (1/4 — 1/2 mile).**

When installing chains on your tires, carefully follow the instructions of the chain manufacturer.

### CAUTION

- Do not exceed 50 km/h (30 mph) or the chain manufacturer's recommended speed limit, whichever is lower.
- Drive carefully avoiding bumps, holes, and sharp turns, which may cause the vehicle to bounce.
- Avoid sharp turns or locked-wheel braking, as use of chains may adversely affect vehicle handling.
- When driving with chains installed, be sure to drive carefully. Slow down before entering curves to avoid losing control of the vehicle. Otherwise an accident may occur.

**NOTICE**

*When jacking up or installing tire chains, be sure to turn off the rear height control air suspension with the "HEIGHT CONTROL OFF" switch and stop the engine. Otherwise, the vehicle height may change because of the automatic leveling function resulting in accident.*

## CHASSIS

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### 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

Observe the following instructions. Otherwise, an accident may occur resulting in death or serious injuries.

- Do not use wheels other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control.
- Do not use wheels of different brands, sizes and types, as this may cause dangerous handling characteristics resulting in loss of control.

## ALUMINUM WHEEL PRECAUTIONS

- When installing aluminum wheels, check that the wheel nuts are tight after driving your vehicle the first 1600 km (1000 miles).
- If you have rotated, repaired, or changed your tires, check that the wheel nuts are still tight after driving 1600 km (1000 miles).
- When using tire chains, be careful not to damage the aluminum wheels.
- Use only Lexus wheel nuts and wrench designed for your aluminum wheels.
- When balancing your wheels, use only Lexus balance weights or equivalent and a plastic or rubber hammer.
- As with any wheel, periodically check your aluminum wheels for damage. If damaged, replace immediately.

## SUSPENSION AND CHASSIS



### CAUTION

**Do not modify the suspension/chassis with lift kits, spacers, springs, etc. It can cause dangerous handling characteristics, resulting in loss of control.**

## **SECTION 6-4**

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### **SERVICE PROCEDURES AND SPECIFICATIONS**

#### **Electrical components**

Specifications .....	599
Checking battery condition .....	608
Battery recharging precautions .....	613
Checking and replacing the blade type fuses .....	614
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Adding washer fluid .....	618
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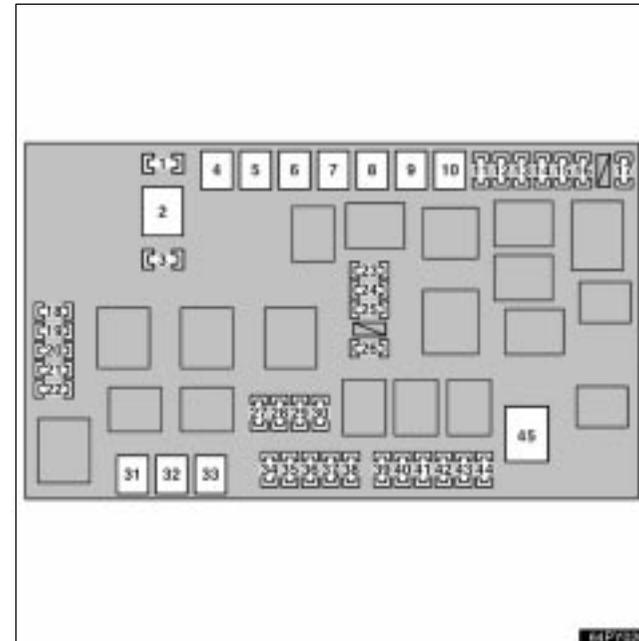
## SPECIFICATIONS

### — FUSE LOCATIONS



- ▶ **1** Engine compartment
- ▶ **2** Driver's side instrument panel

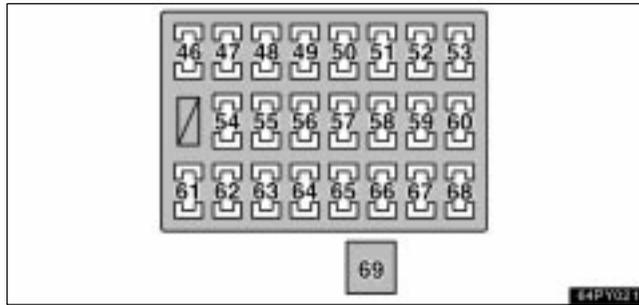
### — FUSES



- ▶ Engine compartment

## ELECTRICAL COMPONENTS

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► *Driver's side instrument panel*

## ELECTRICAL COMPONENTS

No.	FUSE	AMPERE	CIRCUIT
1	SPARE	10	Spare fuse
2	ALT	140	Charging system and all components in "AM1", "HEATER", "CDS FAN", "FR FOG", "DEFOG", "AIR SUS", "AC INV", "SEAT HEATER", "OBD", "STOP", "J/B", "RR AC", "MIR HEATER", "BATT CHG", "TOWING BRK" and "TOWING" fuses
3	SPARE	15	Spare fuse
4	HEATER	50	Air conditioning system
5	AIR SUS	50	Rear height control air suspension
6	AM1	50	All components in "ACC", "CIG", "IG1", "FR WIP-WSH", "RR WIP", "RR WSH", "DIFF", "ECU-IG", "TEMS" and "STA" fuses
7	TOWING BRK	30	Trailer brake controller
8	J/B	50	All components in "P FR P/W", "P RR P/W", "D RR P/W", "D P/SEAT", "P P/SEAT", "TAIL", "PANEL" and "POWER OR TI&TE" fuses
9	BATT CHG	30	Trailer sub battery
10	TOWING	40	Trailer lights
No.	FUSE	AMPERE	CIRCUIT

## ELECTRICAL COMPONENTS

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11	CDS FAN	20	Electric cooling fan
12	RR A/C	30	Rear air conditioning system
13	MIR HEATER	10	Outside rear view mirror defogger
14	STOP	10	Stop lights, high mounted stoplight, shift lock control system, vehicle stability control system, electronic modulated suspension, rear height control air suspension, multiport fuel injection system/sequential multiport fuel injection system
15	AC INV	15	Power outlet (115 VAC)
16	FR FOG	15	Front fog lights
17	OBD	7.5	On-board diagnosis system
18	HEAD (LO RH)	10	Right-hand headlight (low beam)
19	HEAD (LO LH)	10	Left-hand headlight (low beam)
No.	FUSE	AMPERE	CIRCUIT
20	HEAD (HI RH)	10	Right-hand headlight (high beam)
21	HEAD (HI LH)	10	Left-hand headlight (high beam)
22	EFI NO.2	10	Multiport fuel injection system/sequential multiport fuel injection system
23	HEATER NO.2	7.5	Air conditioning system

## ELECTRICAL COMPONENTS

24	DEFOG	30	Rear window defogger
25	AIRSUS NO.2	10	Rear height control air suspension
26	SEAT HEATER	20	Seat heaters
27	DOME	10	Ignition switch light, interior lights, personal lights, foot lights, running board lights, door courtesy lights, inside door handle lights, multi-information display
28	RADIO NO.1	20	Audio system, navigation system
<b>No.</b>	<b>FUSE</b>	<b>AMPERE</b>	<b>CIRCUIT</b>
29	ECU-B	10	Multiplex communication system, vehicle stability control system, wireless remote control system, inside rear view mirror, air conditioning system, electronic modulated suspension, driving position memory system, power windows, moon roof, rear view monitor system
30	ECU-B NO.2	10	Theft deterrent system
31	ABS MTR	40	Anti-lock brake system, vehicle stability control system, active traction control system, brake assist system
32	AM2	30	Starting system, all components in "IGN", "SRS", "GAUGE" and "ST2" fuses

## ELECTRICAL COMPONENTS

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33	ABS SOL	30	Anti-lock brake system, vehicle stability control system, active traction control system, brake assist system
<b>No.</b>	<b>FUSE</b>	<b>AMPERE</b>	<b>CIRCUIT</b>
34	ALT-S	7.5	Charging system
35	MAYDAY	7.5	No circuit
36	HORN	10	Horns
37	A/F HEATER	15	A/F sensor
38	TRN-HAZ	15	Turn signal lights
39	ETCS	10	Electronic throttle control system
40	EFI	20	Multiport fuel injection system/sequential multiport fuel injection system
41	D FR P/W	20	Power window
42	DR/LCK	25	Power door lock
43	TOWING	30	Towing converter
44	RADIO NO.2	30	Audio system, navigation system
45	A/PUMP	50	Multiport fuel injection system/sequential multiport fuel injection system
46	IGN	10	Multiport fuel injection system/sequential multiport fuel injection system, vehicle stability control system

## ELECTRICAL COMPONENTS

47	SRS	10	SRS airbag system, front passenger occupant classification system
48	GAUGE	7.5	Gauges and meters
<b>No.</b>	<b>FUSE</b>	<b>AMPERE</b>	<b>CIRCUIT</b>
49	ST2	7.5	Multiport fuel injection system/sequential multiport fuel injection system
50	FR WIP-WSH	30	Windshield wipers, windshield washer
51	TEMS	20	Electronic modulated suspension
52	DIFF	20	Four-wheel drive system
53	RR WIP	15	Rear window wiper
54	D P/SEAT	30	Driver's power seat
55	P P/SEAT	30	Front passenger's power seat
56	PWR OUTLET	15	Power outlet (12 VDC)
57	IG1 NO.2	10	Rear air conditioning system, inside rear view mirror, kinetic dynamic suspension system
58	RR WSH	15	Rear window washer
<b>No.</b>	<b>FUSE</b>	<b>AMPERE</b>	<b>CIRCUIT</b>

## ELECTRICAL COMPONENTS

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59	ECU-IG	10	Shift lock control system, power windows, outside rear view mirror defogger, anti-lock brake system, active traction control system, vehicle stability control system, air conditioning system, navigation system, power windows, moon roof, tilt and telescopic steering, multi-information display, driving position memory system, rear view monitor system, tire pressure warning system
60	IG1	10	Air conditioning system, back-up lights, rear window defogger, seat heaters, vehicle stability control system
61	STA	7.5	Multiport fuel injection system/sequential multiport fuel injection system
62	P FR P/W	20	Front passenger's power window
63	P RR P/W	20	Rear right side power window

No.	FUSE	AMPERE	CIRCUIT
64	D RR P/W	20	Rear left side power window
65	PANEL	10	Instrument panel lights
66	TAIL	10	Parking lights, tail lights, license plate lights, front fog lights

## ELECTRICAL COMPONENTS

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<b>67</b>	<b>ACC</b>	<b>7.5</b>	Shift lock control system, power outlets, outside rear view mirrors, audio system, navigation system, power rear view mirrors, multi-information display, rear view monitor system
<b>68</b>	<b>CIG</b>	<b>10</b>	Cigarette lighter
<b>69</b>	<b>POWER OR TI&amp;TE</b>	<b>30</b>	Power windows, moon roof, tilt and telescopic steering

## CHECKING BATTERY CONDITION

### Precautions

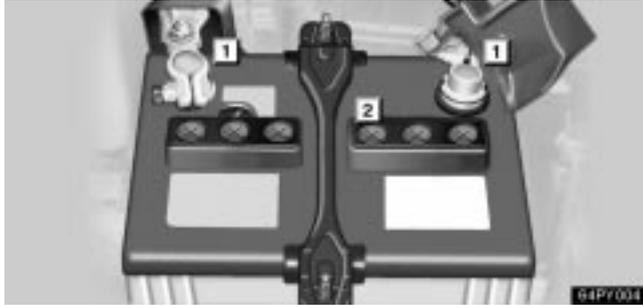
 CAUTION
<b>BATTERY PRECAUTIONS</b> The battery produces flammable and explosive hydrogen gas. <ul style="list-style-type: none"><li>• Do not cause a spark by contacting the battery terminals with tools.</li><li>• Do not smoke or light a match near the battery.</li></ul> The electrolyte contains poisonous and corrosive sulfuric acid. <ul style="list-style-type: none"><li>• Avoid contact with eyes, skin or clothes.</li><li>• Never inhale or swallow electrolyte.</li><li>• Wear protective safety glasses when working near the battery.</li><li>• Keep children away from the battery.</li></ul> <b>EMERGENCY MEASURES</b> <ul style="list-style-type: none"><li>• If electrolyte gets in your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while traveling to the medical office.</li></ul>

- 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 to 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.

## ELECTRICAL COMPONENTS

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### Checking battery exterior



► **1** *Terminals*    **2** *Hold-down clamp*

**Check the battery for corroded or loose connections, cracks, or loose hold-down clamps.**

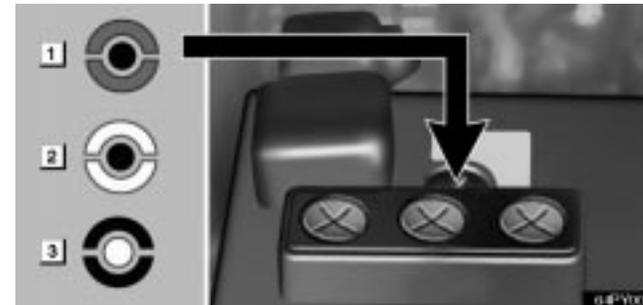
1. If the battery is corroded, wash it off with a solution of warm water and baking soda. Coat the terminals with grease to prevent further corrosion.
2. If the connections are loose, tighten the clamp bolts — but do not overtighten.
3. Tighten the hold-down clamp only enough to keep the battery firmly 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 power windows and moon roof may not operate automatically and the jam protection function will not function correctly after you reconnect, replace or recharge the battery. In any of these cases, you should normalize the power windows and moon roof. To normalize the power windows and moon roof, see pages 50 and 118.

**Checking battery condition****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.

## ELECTRICAL COMPONENTS

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### ***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.

### **NOTICE**

***Never recharge the battery while the engine is running. Also, make sure all accessories are turned off.***



### **CAUTION**

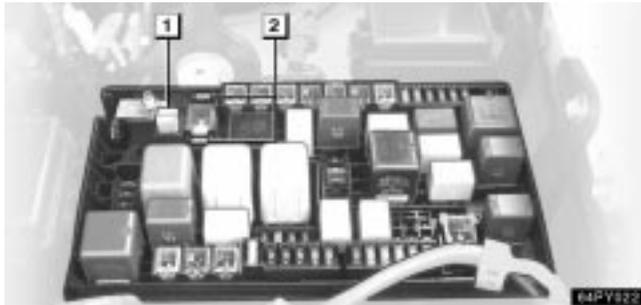
- Always charge the battery in an unconfined area. Do not charge the battery in a garage or closed room where there is not sufficient ventilation.
- Only do a slow charge (5 A or less). Charging at a quicker rate is dangerous. The battery may explode causing personal injuries.

## ELECTRICAL COMPONENTS

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### CHECKING AND REPLACING THE BLADE TYPE FUSES

The engine compartment fuse box is located under the left side engine compartment cover. Before checking the engine compartment fuses, remove the cover. (For details, see "Removing the engine compartment covers" on page 538.)



► *Engine compartment* **1** Pull-out tool **2** Spare fuses

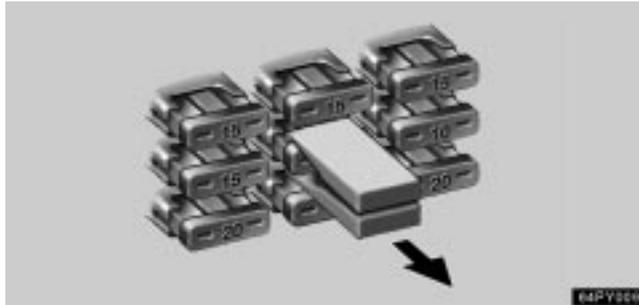


► *Driver's side instrument panel*

**1. Turn the ignition switch off and open the fuse box lid.**

Determine which fuse may be causing the problem. The lid of the fuse box shows the name of the circuit for each fuse.

## ELECTRICAL COMPONENTS



**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 "CIG", "RADIO NO.1" or "SEAT HEATER" 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.

## ELECTRICAL COMPONENTS

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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.

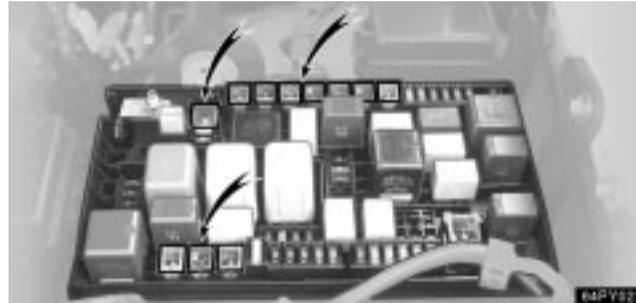


### CAUTION

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

The engine compartment fuse box is located under the left side engine compartment cover. Before checking the engine compartment fuses, remove the cover. (For details, see “Removing the engine compartment covers” on page 538.)

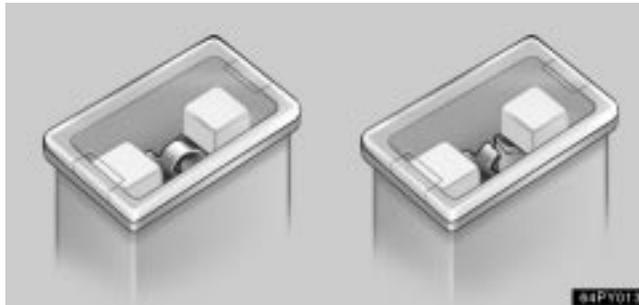


► *Engine compartment*

## ELECTRICAL COMPONENTS



▶ *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.*

## ELECTRICAL COMPONENTS

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### ADDING WASHER FLUID



#### **NOTICE**

*Do not use engine antifreeze or any other substitute because it may damage your vehicle's paint.*

**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.

## REPLACING LIGHT BULBS

The illustrations on the following pages show the locations of light bulbs. If it is necessary to replace a bulb, take your vehicle to your Lexus dealer as soon as possible. Use bulbs with the bulb numbers and wattage ratings given in the table.

### NOTICE

*Only use a bulb of the listed type.*



### 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.

## **ELECTRICAL COMPONENTS**

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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**

## ELECTRICAL COMPONENTS



	Light Bulbs	Bulb No.	W	Type
1	Headlights (High beam)	9005	60	A
2	Headlights (Low beam)	—	55	B
3	Front side marker lights	168	5	C
4	Front turn signal lights	4157NAK	27/8	D
5	Parking lights	168	5	C
6	Fog lights	—	55	E

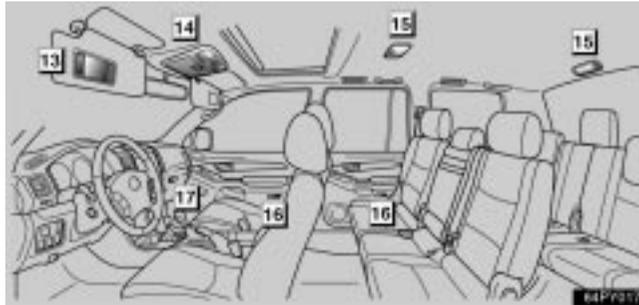
## ELECTRICAL COMPONENTS

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	Light Bulbs	Bulb No.	W	Type
7	Running board lights	194	3.8	C
8	Rear turn signal lights	7440	21	C
9	Stop/tail lights	7443	21/5	C
10	Stop/tail and rear side marker lights	7443	21/5	C
11	Back-up lights	7440	21	C
12	License plate lights	168	5	C

## ELECTRICAL COMPONENTS



	Light Bulbs	Bulb No.	W	Type
13	Vanity lights	—	2	F
14	Personal lights	—	8	G
15	Interior lights	—	8	F
16	Door courtesy lights	—	3.8	G
17	Glove box light	—	1.2	C

## **ELECTRICAL COMPONENTS**

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- A: HB3 halogen bulbs
- B: H11 halogen bulbs
- C: Wedge base bulbs (clear)
- D: Wedge base bulbs (amber)
- E: H3 halogen bulbs
- F: Double end bulbs
- G: Single end bulbs

1

## **SECTION 6-5**

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### **SERVICE PROCEDURES AND SPECIFICATIONS**

#### **Body**

Specifications .....	627
Protecting your vehicle from corrosion .....	629
Washing and waxing .....	630
Cleaning the interior .....	633
Rain clearing mirrors .....	638

**SPECIFICATIONS**

**— DIMENSIONS AND WEIGHTS**

Overall length	4780 mm (188.2 in.)
Overall width	1880 mm (74.0 in.)
Overall height* <sup>1</sup>	1855 mm (73.0 in.)* <sup>2</sup> 1895 mm (74.6 in.)* <sup>3</sup>
Wheelbase	2790 mm (109.8 in.)
Tread — Front — Rear	1585 mm (62.4 in.) 1585 mm (62.4 in.)
Vehicle capacity weight (occupants + luggage) With third seats Without third seats	544 kg (1200 lb.) 454 kg (1000 lb.)
Towing capacity	2948 kg (6500 lb.)

\*1: Unladen vehicle

\*2: Without roof luggage carrier

\*3: With roof luggage carrier

**BODY**

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— **FUEL TANK**

Capacity	87 L (23 gal., 19.1 Imp. gal.)
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## 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 ambient temperature.

**To help prevent corrosion on your Lexus, follow these guidelines:**

**Keep your vehicle clean by regular washing.** In addition, observe the following points.

- If you drive on salted roads in the winter or if you live near the ocean, you should hose off the undercarriage at least once a month to minimize corrosion.
- High pressure water or steam is effective for cleaning the vehicle's underside and wheel housings. Pay particular attention to these areas as it is difficult to see all the mud and dirt. It will do more harm than good to simply wet the mud and debris without removing. 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 630 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.

## BODY

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**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.

**Use mud shields on your wheels.** If you drive on salted or gravel roads, mud shields help protect your vehicle. Full-size shields, which come as near to the ground as possible, are the best. We recommend that the fittings and the area where the shields are installed be treated to resist corrosion. Your Lexus dealer will be happy to assist in supplying and installing the shields if they are recommended for your area.

**Keep your vehicle in a well ventilated garage or a roofed place. Do not park your vehicle in a damp, poorly ventilated garage.** If you wash your vehicle in the garage, or if you drive it covered with water or snow, your garage may be so damp as to cause corrosion. Even if your garage is heated, a wet vehicle can corrode if the ventilation is poor.

## WASHING AND WAXING

### Washing your Lexus

**Keep your vehicle clean by regular washing.**

The following cases may cause weakness to the paint or corrosion to the body and parts. Wash your vehicle as soon as possible.

- When driving in a coastal area
- When driving on a road sprinkled with antifreeze
- When exposed to coal tar, tree sap, bird droppings and carcass of an insect
- When driving in areas where there is a lot of smoke, soot, dust, iron dust or chemical substances
- When the vehicle becomes remarkably dirty with dust and mud

### Hand-washing your Lexus

**Work in the shade and wait until the vehicle body is not hot to the touch.**

1. Rinse off loose dirt with a hose. Remove any mud or road salt from the underside of the vehicle or in 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.

## BODY

**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 substance splashes an ornament, be sure to wash it off with water and check if the ornament is damaged.

### CAUTION

**Do not attach the heavily damaged plastic wheel ornament. It may fly off the wheel and cause accidents while the vehicle is moving.**

### NOTICE

***Do not use organic substances (gasoline, kerosene, benzine or strong solvents), which may be toxic or cause damage.***

**Aluminum wheels:** Use only a mild soap or neutral detergent.

**Urethane bumpers and side moldings:** Wash carefully. Do not scrub with abrasive cleaners. The bumper and side molding faces are soft.

**Road tar:** Remove with turpentine or cleaners that are marked safe for painted surfaces.

## BODY

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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.

### 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.

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## CLEANING THE INTERIOR

**CAUTION**

Do not wash the vehicle floor with water, or allow water to get onto the floor when cleaning the vehicle interior or exterior. Water may get into audio components or other electrical components above or under the floor carpet (or mat) and cause a malfunction; and it may cause body corrosion.

**Leather-trimmed Interior**

Remove dirt using a soft cloth dampened with 5% solution of neutral detergent for wool. Then thoroughly wipe off all traces of detergent with a clean damp cloth.

After cleaning or whenever any part of the leather gets wet, dry with a soft clean cloth. Allow the leather to dry in a ventilated shaded area.

## BODY

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### **NOTICE**

- *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  
(Part of door panels)**

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.*

## BODY

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### **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 quarter and rear windows, be careful not to scratch or damage the wire antennas, heater wires or connectors.*

## BODY

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### Air Conditioning Control Panel, Audio Panel, Instrument Panel, Console Panel and Switches

#### **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.

Use a soft damp cloth for cleaning.

Soak a clean soft cloth in water or lukewarm water then lightly wipe off any dirt.

## RAIN CLEARING MIRRORS

The rear view mirrors have been coated to produce a “rain clearing” effect. This coating causes the raindrops to spread, clearing the driver’s rear view when it rains.

It is sufficient to wash the mirrors with water for day to day care.

The rain clearing effect is reduced in drizzle and light rain.

In the following cases, the rain clearing effect will be reduced temporarily, but will gradually recover.

- After wiping dirt off the mirrors
- When the mirrors fog up

## **BODY**

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- After waxing your vehicle in an automatic car wash

- After your vehicle has been parked for a long period in underground parking lots, etc. where there is no direct sunlight.

If you would like to restore the rain clearing effect to its normal level immediately in the above cases, wash the mirrors with neutral detergent, then rinse thoroughly.

## BODY

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### **NOTICE**

*To maintain the rain clearing ability, and prevent the mirrors from being scratched, observe the following precautions.*

- *Do not use any glass cleaners that contain compounds.*
- *If ice should jam the mirror, do not scrape the mirror. Use a spray de-icer to free the mirror.*
- *Wash off any wax stuck to the mirrors with neutral detergent and rinse thoroughly as any wax on the surface of the mirrors can cause the rain clearing effect to be lost.*
- *Do not use any water repellents as they can destroy the rain clearing effect. If any repellent gets stuck on the surface of the mirrors, wash it off with neutral detergent, then rinse thoroughly.*

7  
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# **SECTION 7**

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## **REPORTING SAFETY DEFECTS FOR U.S. OWNERS**

**Reporting safety defects for U.S. owners**

Reporting safety defects for U.S. owners ..... 643

## **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.

## GAS STATION INFORMATION

- **Fuel selection:**

Select Octane Rating 87 (Research Octane Number 91) or higher. For improved vehicle performance, the use of premium unleaded gasoline with an Octane Rating of 91 (Research Octane Number 96) or higher is recommended.

- **Fuel tank capacity:**

87 L (23 gal., 19.1 Imp. gal.)

- **Engine oil:**

“Toyota Genuine Motor Oil” or equivalent

Oil grade: API grade SL “Energy–Conserving” or ILSAC multigrade engine oil.

Recommended oil viscosity: SAE 5W–30

Oil capacity:

Drain and refill

With filter 6.2 L (6.5 qt., 5.5 Imp. qt.)

Without filter 5.7 L (6.0 qt., 5.0 Imp. qt.)

See page 555 for detailed information.

- **Engine coolant:**

Capacity: 12.9 L (13.6 qt., 11.4 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 560.

- **Automatic transmission:**

Fluid type — “Toyota Genuine ATF WS”

See page 568 for detailed information.

- **Tire information:**

See pages 574 through 597 for detailed information.

- **Tire inflation pressure:**

Tire size: P265/65R17 110S

Tire inflation pressure: 220 kPa (2.2 kgf/cm<sup>2</sup> or bar, 32 psi)

**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 GX470 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.

## **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.

