Foreword

Welcome to the growing group of value–conscious people who drive Toyotas. We are proud of the advanced engineering and quality construction of each vehicle we build.

This Owner's Manual explains the operation of your new Toyota. Please read it thoroughly and have all the occupants follow the instructions carefully. Doing so will help you enjoy many years of safe and trouble–free motoring. For important information about this manual and your Toyota, read the following pages carefully.

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

If there is not a Toyota dealer near you, or you need emergency assistance for any reason, please call the following number:

● **U.S. OWNERS:**	Toyota Customer Assistance Center	**Toll–free:1–800–331–4331**

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 Toyota's 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

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2004 L/C100 from July '03 Prod. (OM60A04U)

Important information about this manual

Safety and vehicle damage warnings

Throughout this manual, you will see safety and vehicle damage warnings. You must follow these warnings carefully to avoid possible injury or damage.

The types of warnings, what they look like, and how they are used in this manual are explained as follows:

⚠ CAUTION

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

NOTICE

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

Safety symbol

When you see the safety symbol shown above, it means: “Do not”; “Do not do this”; or “Do not let this happen”.

Important information about your Toyota

Occupant restraint systems

Toyota encourages you and your family to take the time to read Section 1–3 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 1–3 of this Owner's Manual is the most important section for you and your family to read.

Section 1–3 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.

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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 1–3 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.

Toyota recommends you to read the provisions in Section 1–3 carefully and refer to them as needed during your time of ownership of this vehicle.

New vehicle warranty

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

- New vehicle warranty
- Emission control systems warranty
- Others

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

Your responsibility for maintenance

It is the owner's responsibility to make sure the specified maintenance is performed. Section 6 gives details of these maintenance requirements. Also included in Section 6 is general maintenance. For scheduled maintenance information, place refer to the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".

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Important health and safety information about your Toyota

⚠ 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 Toyota

A wide variety of non–genuine spare parts and accessories for Toyota 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 Toyota vehicle.

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

Installation of a mobile two–way radio system

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

Tires and loading on your Toyota

Underinflated or overinflated tire inflation 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 293 and 224.

Scrapping of your Toyota

The SRS airbag and seat belt pretensioner devices in your Toyota contain explosive chemicals. If the vehicle is scrapped with the airbags and pretensioners left as they are, this may cause an accident such as fire. Be sure to have the systems of the SRS airbag and seat belt pretensioner removed and disposed of by a qualified service shop or by your Toyota dealer before you dispose of your vehicle.

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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 202 and “Off–road driving precautions” on page 232.

SECTION 1 – 1

OPERATION OF INSTRUMENTS AND CONTROLS

Overview of instruments and controls

Instrument panel overview 2
Instrument cluster overview 5
Indicator symbols on the instrument panel 6

Instrument panel overview

▶View A

1. Side vents
2. Side defroster outlets
3. Instrument cluster
4. Center vents
5. Electric moon roof switches and/or personal lights
6. Glove box
7. Power door lock switches
8. Power window switches
9. Automatic transmission selector lever
10. Seat heater switches
11. Rear seat audio system
12. Cup holder
13. Parking brake lever
14. Second start mode selector button and driving pattern selector button
15. Four–wheel drive control lever
16. Lower vent
17. Hood lock release lever
18. Fuel filler door opener
19. Window lock switch

▶**View B**

1. Headlight, turn signal and front fog light switches
2. Cruise control switch
3. Ignition switch
4. Wiper and washer switches
5. Emergency flasher switch
6. Clock, outside temperature and trip information display
7. Car audio
8. Front passenger's seat belt reminder light
9. Air conditioning controls
10. Outside rear view mirror heater switch
11. Rear air conditioning switch
12. Rear window defogger switch
13. Center differential lock switch
14. Power antenna switch
15. Power tilt and telescopic steering switch
16. Instrument panel light control dial
17. Power rear view mirror control switches
18. Power quarter window switch (left–hand side)
19. Power quarter window switch (right–hand side)
20. Roll sensing of curtain shield airbags off switch

▶Lower part of center cluster panel

1. Ashtray
2. Cigarette lighter
3. Power outlet

Instrument cluster overview

1. Voltmeter
2. Speedometer
3. Service reminder indicators and indicator lights
4. Tachometer
5. Engine oil pressure gauge
6. Engine coolant temperature gauge
7. Odometer and two trip meters
8. Trip meter reset knob
9. Fuel gauge

Indicator symbols on the instrument panel

BRAKE	Brake system warning light*1	A/T P	Unengaged “Park” warning light*1
	Driver’s seat belt reminder light*1	A/T OIL TEMP	Automatic transmission fluid temperature warning light*1
	Discharge warning light*1		Turn signal indicator lights
MAINT REQD	Engine oil replacement reminder light		Headlight high beam indicator light
CHECK	Malfunction indicator lamp*1	ECT PWR	Driving pattern (“POWER” mode) indicator light
	Low fuel level warning light*1	2nd STRT	Automatic transmission second start indicator light
	SRS warning light*1		Center differential lock indicator light
ABS	Anti-lock brake system warning light*1	CRUISE	Cruise control indicator light*2
	Open door warning light*1	PRND 432L	Automatic transmission indicator lights

VSC OFF	vehicle stability control system off indicator light*1
VSC TRAC	vehicle stability control system and active traction control system warning light*1
TRAC	Active traction control system indicator light
	Slip indicator light
RSCA OFF	Roll sensing of curtain shield airbags off indicator light*3

*1: For details, see “Service reminder indicators and warning buzzers” on page 122.

*2: If this light flashes, see “Cruise control” on page 142.

*3: For details, see “Roll sensing of curtain shield airbags off switch” on page 66.

SECTION 1 – 2

OPERATION OF INSTRUMENTS AND CONTROLS

Keys and Doors

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Engine immobilizer system 12
Side doors 13
Power windows 21
Power quarter windows 23
Back door 24
Hood 26
Theft deterrent system 27
Fuel tank cap 29
Electric moon roof 30

Keys

Your vehicle is supplied with two kinds of keys.

1. Master keys (black)—These keys work in every lock. Your Toyota dealer will need one of them to make a new key with a built–in transponder chip.
2. Sub key (gray)—This key does not work in the glove box.

A transponder chip for engine immobilizer system has been placed in the head of the master and sub keys. These chips are needed to enable the system to function correctly, so be careful not to lose these keys. If you make your own duplicate key, you will not be able to cancel the system or start the engine.

To protect items locked in the glove box when using valet parking, leave the sub key with the attendant.

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

For information on use of the wireless remote control key, see “Wireless remote control” on page 17.

NOTICE

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. Otherwise the engine may not start, or may stop soon after it starts.***

- ***When starting the engine, do not use the key with other transponder keys around (including keys of other vehicles) and do not press other key plates against the key grip. Otherwise the engine may not start, or may stop soon after it starts. If this happens, remove the key once and then insert it again after removing other transponder keys (including 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.***
- ***Do not cover the key grip with any material that cuts off electromagnetic waves.***
- ***Do not knock the key hard against other objects.***
- ***Do not leave the key exposed to high temperatures for a long period, such as on the dashboard and hood under the direct sunlight.***
- ***Do not put the key in water or wash it in an ultrasonic washer.***

- ***Do not use the key with electromagnetic materials.***
- ***Do not use the key with electromagnetic materials.***

Engine immobilizer system

KEY NUMBER PLATE

Your key number is shown on the plate. Keep the plate in a safe place such as your wallet, not in the vehicle.

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

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

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. The indicator light will start flashing to show the system is set.

If either of the following indicator conditions occurs, contact your Toyota dealer.

- The indicator light stays on except when the theft deterrent system is setting or activating. (See "Theft deterrent system" on page 27.)
- The indicator light does not start flashing when the key is removed from the ignition switch.
- The indicator light flashes unsteady.

Inserting the registered key in the ignition switch automatically cancels the system, which enables the engine to start. The indicator light will go off.

For your Toyota dealer to make a new key with a 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 Toyota 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.

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.

Side doors—

LOCKING AND UNLOCKING WITH KEY

Insert the key into the keyhole and turn it.

To lock: Turn the key forward.
To unlock: Turn the key backward.

All the side doors and back door lock and unlock simultaneously with either front side 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 Toyota dealer for details.*

LOCKING AND UNLOCKING WITH INSIDE LOCK KNOB

Move the lock knob.

To lock: Push the knob forward.
To unlock: Pull the knob backward.

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

Closing the side door with the lock knob in the lock position will also lock the side door. Be careful not to lock your keys in the vehicle.

Front side doors cannot be locked when either front side door is open and the key is in the ignition.

Driver's side

Passenger's side

LOCKING AND UNLOCKING WITH POWER DOOR LOCK SWITCH

Push the switch.

To lock: Push the switch down on the front side.
To unlock: Push the switch down on the rear side.

All the side doors and back door lock or unlock simultaneously.

When the front doors are locked from the outside or locked with the wireless remote control key, the power door lock switch will not work until the either front door is unlocked with the key, lock knob, or wireless remote control key.

REAR DOOR CHILD–PROTECTORS

Move the lock lever to the "LOCK" position as shown on the label.

This feature allows you to lock a rear door so it can be opened from the outside only, not from inside. We recommend using this feature whenever small children are in the vehicle.

⚠ CAUTION

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

—Automatic door locking and unlocking functions

You can select the following modes of the automatic locking and unlocking functions. The initial mode is mode 1.

- **Mode 1—Automatic locking operation linked to shift lever position**

  All doors are automatically locked when the shift lever is moved out of "P" position after the ignition switch is turned to the "ON" position and all the doors are closed.

- **Mode 2—Automatic locking operation linked to vehicle speed**

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

- **Mode 3—Automatic unlocking operation linked to 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.

- **Mode 4—Automatic unlocking operation linked to shift lever position**

  All doors are automatically unlocked when the selector lever is moved to "P" position after the ignition switch is turned to "ON" position.

SETTING FUNCTIONS

You can set the following functions by yourself.

To set the mode 1 (the automatic locking operation linked to shift lever position):

1. Set the parking brake, close all doors and turn the ignition switch to the “ON” position.
2. Shift the selector lever into the “P” position.
3. Within 10 seconds of turning the ignition switch to the “ON” position, press and hold the front of the driver’s side power door lock switch for 5 seconds and then release it.
4. The doors will be locked and unlocked to indicate that the function is set.

To cancel the function, do the above operation again.

To set the mode 2 (the automatic locking operation linked to vehicle speed):

1. Set the parking brake, close all doors and turn the ignition switch to the “ON” position.
2. Shift the selector lever from the “P” into the “N” position.
3. Within 10 seconds of turning the ignition switch to the “ON” position, press and hold the front of the driver’s side power door lock switch for 5 seconds and then release it.
4. The doors will be locked and unlocked to indicate that the function is set.

To cancel the function, do the above operation again.

To set the mode 3 (the automatic unlocking operation linked to the ignition switch):

1. Set the parking brake, close all doors and turn the ignition switch to the “ON” position.
2. Shift the selector lever into the “P” into the “N” position.
3. Within 10 seconds of turning the ignition switch to the “ON” position, press and hold the rear of the driver’s side power door lock switch for 5 seconds and then release it.
4. The doors will be locked and unlocked to indicate that the function is set.

To cancel the function, do the above operation again.

To set the mode 4 (the automatic unlocking operation linked to shift lever position):

1. Set the parking brake, close all doors and turn the ignition switch to the “ON” position.
2. Shift the selector lever into the “P” position.
3. Within 10 seconds of turning the ignition switch to the “ON” position, press and hold the rear of the driver’s side power door lock switch for 5 seconds and then release it.
4. The doors will be locked and unlocked to indicate that the function is set.

To cancel the function, do the above operation again.

⚠ CAUTION

To prevent an accident, set and cancel the function with the parking brake set securely.

—Wireless remote control*

Locking operation

Unlocking operation

The wireless remote control system is designed to lock or unlock all the side doors and back door from a distance within approximately 1 m (3 ft.) of the vehicle.

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

LOCKING AND UNLOCKING THE SIDE DOORS AND BACK DOOR

To lock and unlock all the side doors and back door, push the switches slowly and securely. At this time, the indicator light on the key grip flashes once.

To lock: Push the "LOCK" switch. All the side doors and back door are locked simultaneously. At this time, turn signal lights flash once.*

*NOTE: *The turn signal lights can be set not to flash. Ask your Toyota dealer for details.*

Check to see that all the side doors and back door are securely locked.

If any of the side doors or back door is not securely closed, or if the key is in the ignition switch, locking cannot be performed by the "LOCK" switch.

To unlock: Push the "UNLOCK" switch once to unlock the driver's door alone. Pushing the switch twice within 3 seconds unlocks all the side doors and back door simultaneously.* At this time, turn signal lights flash twice.**

*NOTE: *The 2–step unlocking function can be changed. **The turn signal lights can be set not to flash. Ask your Toyota dealer for details.*

Together with the activation of unlocking, the interior light comes on for 15 seconds if the interior light switch is in "DOOR" position.* However, this function does not work when the ignition key is in the "ACC" or "ON" position. (For detailed information, see "Interior light" on page 112.)

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 side doors and back door will be automatically locked again.

*NOTE: *The interior light can be set not to come on or the duration of lighting can be changed. **The time before automatic re–locking can be changed. Ask your Toyota dealer for details.*

If the "LOCK" or "UNLOCK" switch is kept pressed in, the locking or unlocking operation is not repeated. Release the switch and then push again.

“PANIC” SWITCH

Pushing the “PANIC” switch for 1 second blows the horn intermittently and flashes the headlights, tail lights and interior lights.*

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

The “PANIC” switch is used to deter vehicle theft when you witness anyone attempting to break into or damage your vehicle.

The alarm will last for 1 minute. To stop the alarm midway, push the “PANIC”, “LOCK” or “UNLOCK” switch, or unlock any side door or back door with key. You can also stop the alarm by turning the ignition key from “LOCK” to the “ON” position.

The “PANIC” mode does not work when the ignition key is in the “ON” position.

WIRELESS REMOTE CONTROL KEY

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

- Do not leave the key on 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.

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

If the wireless remote control key does not actuate the doors or operate from a normal distance, or the indicator light on the key is dimmed or does not come on:

- Check for closeness to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the key.
- The battery may have been consumed. Check the battery in the key. To replace the battery, see following “REPLACING THE BATTERY”.

If you lose your wireless remote control key, contact your Toyota dealer as soon as possible to avoid the possibility of theft, or an accident. (For detailed information, see “If you lose your keys” on page 266.)

For vehicles sold in U.S.A.

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

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

⚠ CAUTION

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

REPLACING THE BATTERY

For replacement, use a CR1616 lithium battery 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 terminal battery, be careful not to lose the components.***
- ***Replace only with the same or equivalent type recommended by a Toyota dealer.***
- ***Dispose of used battery according to the local laws.***

Replace the battery by following these procedures:

1. Remove the screw, and then the cover.

2. Remove the module from the key frame.

3. Remove the 2 screws to take out the lid of the module. Take out the discharged battery and put a new battery with the positive side up.

NOTICE
Do not bend the terminals.

4. Install the lid with the 2 screws.
5. Install the module into the key frame and secure the cover with the screw.
6. When pushing any switch on the wireless key, make sure the indicator light comes on.

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 of the transmitter, or it may interfere with proper operation.***
- ***Be careful not to bend the electrode of the battery insertion and that dust or oils do not adhere to the case.***
- ***Take care not to lose the screws.***
- ***Close the cover securely.***

Power windows

The windows can be operated with the switch on each side door.

The power windows work when the ignition switch is in the “ON” position.

Key off operation: If both front doors are closed, they work for 45 seconds even after the ignition switch is turned off. They stop working when either front door is opened.

OPERATING THE DRIVER’S WINDOW

Use the switch on the driver’s door.

Normal operation: The window moves as long as you hold the switch.

To open: Lightly push down the switch.
To close: Lightly pull up the switch.

Automatic operation: Push the switch completely down or pull it completely up, and then release it. The window will fully open or close. To stop the window partway, lightly move the switch in the opposite direction and then release it.

Jam protection function: If something gets caught between the window and window frame during automatic closing operation or key off closing operation, the window stops and opens halfway.

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

OPERATING THE PASSENGERS' WINDOWS

Use the switch on each passenger's door or the switches on the driver's door that control each passenger's window.

Normal operation: The window moves as long as you hold the switch.

To open: Lightly push down the switch.
To close: Lightly pull up the switch.

If you push in the window lock switch on the driver's door, the passengers' windows cannot be operated.

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

Automatic operation: Push the switch completely down or pull it completely up, and then release it. The window will fully open or close. To stop the window partway, lightly move the switch in the opposite direction and then release it.

Jam protection function: If something gets caught between the window and window frame during automatic closing operation or key off closing operation, the window stops and opens halfway.

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

⚠ CAUTION

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

- **Before you close the power windows, always make sure there is nobody around the power windows. You must also make sure the heads, hands and other parts of the bodies of all occupants are kept completely inside the vehicle. If someone's neck, head or hands get caught in a closing window, it could result in a 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 or 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 in a window to activate the jam protection function intentionally.**
- **The jam protection function may not work if something gets caught just before the window is fully closed.**

Power quarter windows

The rear quarter windows can be operated with the "REAR VENT" switches on the instrument panel.

The power rear quarter windows work when the ignition switch is in the "ON" position.

Both left and right rear quarter windows move as long as you hold the switch.

To open: Push the right one of the switches.
To close: Push the left one of the switches.

⚠ CAUTION

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

- **Before you close the power quarter windows, always make sure there is nobody around the power quarter windows. You must also make sure the hands and other parts of the bodies of all occupants are kept completely inside the vehicle. If someone's hands get caught in a closing window, it could result in a serious injury. When anyone closes the power quarter windows, make sure he or she operates the windows safely.**
- **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 or she could use the power quarter window switches and get trapped in a window. Unattended person (particularly a small child) can be involved in a serious accident.**

Back door

LOCKING AND UNLOCKING WITH KEY

Insert the key into the key hole and turn it.

To lock: Turn the key clockwise.
To unlock: Turn the key counterclockwise.

All the doors lock and unlock simultaneously with back door.

Operating the power door lock switch simultaneously locks or unlocks all the side doors and the back door. (See "Side doors" on page 13.)

To open the back door, pull the lock release lever.

Pull the handle toward you and pull down the lower side of the back door.

When closing the back door, make sure it is fully closed.

See "Cargo and luggage" on page 224 for precautions when loading luggage.

LOCKING AND UNLOCKING FROM INSIDE

To lock: Push the knob.
To unlock: Pull the knob.

Operating the power door lock switch simultaneously locks or unlocks all the side doors and the back door. (See “Side doors” on page 13.)

Push the handle and push down the lower side of the back door.

When closing the back door, make sure it is fully closed.

See “Cargo and luggage” on page 224 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 stop and tail lights, rear turn signal lights or rear retro reflectors 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 CHILD–PROTECTOR

Move the lock lever to the "LOCK" position as shown on the label.

This feature allows you to lock a back door so it can be opened from the outside only, not from inside. We recommend using this feature whenever small children are in the vehicle.

CAUTION

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

Hood

To open the hood:

1. **Pull the hood lock release lever. The hood will spring up slightly.**

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.

Theft deterrent system

2. In front of the vehicle, pull 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 into place. If necessary, press down gently on the front edge to lock it.

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

The alarm blows the horn intermittently and flashes the headlights, tail lights and other exterior lights.

SETTING THE SYSTEM

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

The indicator light will start flashing when the key is removed from the ignition switch. (See “Engine immobilizer system” on page 12 for details.)

2. Have all passengers get out of the vehicle.
3. Close and lock all the side doors, back door and hood.

The indicator light will come on when all the side doors, back door and hood are closed and locked.

The system will automatically be set after 30 seconds. When the system is set, the indicator light will start flashing again.

4. After making sure the indicator light starts flashing, you may leave the vehicle.

Never leave anyone in the vehicle when you set the system, because unlocking from the inside will activate the system.

WHEN THE SYSTEM IS SET

Activating the system

The system will sound the alarm under the following conditions:

- If any of the side doors is unlocked or opened without the key or wireless remote control key, or if the back door or hood is forcibly opened
- If the battery terminal is disconnected and then reconnected

The indicator light will come on when the system is activating.

If any of the side door or back door is unlocked without the key or wireless remote control key and the key is not in the ignition switch, all the side doors and back door will be automatically locked again.

After one minute, the alarm will automatically stop and the indicator light will starts flashing again.

Reactivating the alarm

Once set, the system automatically resets the alarm after the alarm stops.

The alarm will activate again under the same circumstances described in "Activating the system".

Stopping the alarm

The alarm will be stopped by the following two ways:

- Turn the ignition key from the "LOCK" to "ON" position.
- Unlock any of the side doors or back door with the key or wireless remote control key.

These ways cancel the system at the same time.

TESTING THE SYSTEM

1. Open all the windows.
2. Set the system as described above. The side doors and back door should be locked with the key or wireless remote control key. Be sure to wait until the indicator light goes off or starts flashing.
3. Unlock any side door or back door from the inside. The system should activate the alarm.
4. Stopping the alarm as described above.
5. Repeat this operation for the other doors, back door 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 Toyota dealer.

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.

When refueling, turn off the engine.

⚠ CAUTION

- **Do not smoke, cause sparks or allow open flames when refueling. The fumes are flammable.**
- **When opening the cap, do not remove the cap quickly. In hot weather, fuel under pressure could cause injury by spraying out of the filler neck if the cap is suddenly removed.**

2. To remove the fuel tank cap, turn the cap slowly counterclockwise, then pause slightly before removing it. After removing the cap, hang it on the cap hanger.

It is not unusual to hear a slight swoosh when the cap is opened. When installing, turn the cap clockwise till you hear a click.

If the cap is not tightened securely, the malfunction indicator lamp comes on. Make sure the cap is tightened securely.

⚠ CAUTION

- **Make sure the cap is installed securely to prevent fuel spillage in the event of an accident.**
- **Use only a genuine Toyota fuel tank cap for replacement. It is designed to regulate fuel tank pressure.**

Electric moon roof

Sliding operation

Tilting operation

To operate the moon roof, use the switches beside the personal light.

The moon roof works when the ignition switch is in the “ON” position. However, if both front doors are closed, it works for 45 seconds even after the ignition switch is turned off. It stops working when either of the front doors is opened.

Sun shade operation—

The sun shade can be opened or closed by hand.

Sliding operation—

To open: Push the switch on the rear side.

The roof will open and stop partway 30 mm (1.2 in.) from the fully opened position. When you push the switch again, the moon roof will open fully. To stop the roof partway, push the same switch or tilt switch while the roof is moving.

As driving with the moon roof opened fully will cause wind throbs, we recommend you to drive with the moon roof partway 30 mm (1.2 in.) from the fully opened position.

The sun shade will be opened together with the roof.

To close: Push the switch on the front side.

The roof will fully close. To stop the roof partway, push the same switch or tilt switch.

Tilting operation—

To tilt up: Push the switch on the “UP” side.

The roof will tilt up fully. To stop the roof partway, push the same switch or slide switch.

To lower: Push the switch on the opposite side of the “UP” side.

The roof will fully close. To stop the roof partway, push the same switch or slide switch.

Jam protection function (closing operation only): If something gets caught between the moon roof and frame during closing operation, the moon roof stops and opens halfway.

If an impact is given to the moon roof, this function may work without anything caught.

If the battery terminals is disconnected or the battery is run down, the moon roof may not operate automatically and the jam protection function will not operate correctly after you reconnect, replace or recharge the battery with the moon roof slide–opened or tilted up. In any of these cases, you should return the moon roof to normal.

To normalize the moon roof, push and hold the switch until the moon roof is closed or tilted down completely.

Make sure the moon roof opens and closes automatically. If the moon roof cannot be operated properly, have it checked by your Toyota 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 a 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 or she could use the moon roof switches 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 when something gets caught just before the moon roof is fully closed.**

SECTION 1 – 3

OPERATION OF INSTRUMENTS AND CONTROLS

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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 on top of a folded–down seatback, or in the luggage compartment or cargo area. Persons not properly seated and/or not properly restrained by seat belts can be severely injured in the event of emergency braking or a collision.**
- **During driving, do not allow any passengers to stand up or move around between seats. Otherwise, severe injuries can occur in the event of emergency braking or a collision.**

Front seats—
—Front seat precautions

Driver seat

⚠ CAUTION

The SRS driver airbag deploys with considerable force, and can cause death or serious injury especially if the driver is very close to the airbag. The National Highway Traffic Safety Administration ("NHTSA") advises:

Since the risk zone for driver airbag is the first 50–75 mm (2–3 in.) of inflation, placing yourself 250 mm (10 in.) from your driver airbag provides you with a clear margin of safety. This distance is measured from the center of the steering wheel to your breastbone. If you sit less than 250 mm (10 in.) away now, you can change your driving position in several ways:

- **Move your seat to the rear as far as you can while still reaching the pedals comfortably.**
- **Slightly recline the back of the seat. Although vehicle designs vary, many drivers can achieve the 250 mm (10 in.) distance, even with the driver seat all the way forward, simply by reclining the back of the seat somewhat. If reclining the back of your seat makes it hard to see the road, raise yourself by using a firm, non–slippery cushion, or raise the seat if your vehicle has that feature.**
- **If your steering wheel is adjustable, tilt it downward. This points the airbag toward your chest instead of your head and neck.**

The seat should be adjusted as recommended by NHTSA above, while still maintaining control of the foot pedals, steering wheel, and your view of the instrument panel controls.

Front passenger seat

CAUTION

The SRS front passenger airbag also deploys with considerable force, and can cause death or serious injury especially if the front passenger is very close to the airbag. The front passenger seat should be as far from the airbag as possible with the seatback adjusted, so the front passenger sits upright.

Front seats (with SRS side airbags)

CAUTION

The SRS side airbags are installed in the driver and front passenger seats. Observe the following precautions.

- Do not lean against the front door when the vehicle is in use, since the side airbag inflates with considerable speed and force. Otherwise, you may be killed or seriously injured.
- Do not use seat accessories which cover the area where the side airbags inflate. Such accessories may prevent the side airbags from activating correctly, causing death or serious injury.
- Do not modify or replace the seats or upholstery of the seats equipped with side airbags. Such change may prevent the side airbag system from activating correctly, disable the system or cause the side airbags to inflate accidentally, resulting in death or serious injury.

—Seat adjustment precautions

CAUTION

- Do not adjust the seat while the vehicle is moving as the seat may unexpectedly move and cause the driver to lose control of the vehicle.
- Be careful that the seat does not hit a passenger or luggage.
- After adjusting the seat position, try sliding the seat forward and backward to make sure it is locked in position.
- After adjusting the seatback, push your body back against the seat to make sure the seat is locked in position.
- Do not put objects under the seats. Otherwise, the objects may interfere with the seat–lock mechanism and the seat may suddenly move, causing the driver to lose control of the vehicle.
- While adjusting the seat, do not put your hands under the seat or near the moving parts. Otherwise, your hands or fingers may be caught and injured.

—Adjusting front seats

1. **SEAT POSITION AND SEAT CUSHION ANGLE ADJUSTING SWITCH**

Move the control switch in the desired direction.

Releasing the switch will stop the seat at that position.

Do not place anything under the front seats, as this might interfere with the seat movement.

2. **SEATBACK ANGLE ADJUSTING SWITCH**

Move the control switch in the desired direction.

Releasing the switch will stop the seat-back at that position.

⚠ CAUTION

To reduce the risk of sliding under the lap belt during a collision, 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. In the event of a frontal collision, the more the seat is reclined, the greater the risk of personal injury.

3. **SEAT LUMBAR SUPPORT ADJUSTING SWITCH**

Push the control switch on either side.

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

Armrest

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

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

Rear seats—
—Rear seat precautions

⚠ CAUTION

- **Do not adjust the seat while the vehicle is moving.**
- **Be careful that the seat does not hit a passenger or luggage.**
- **After adjusting the seatback, push your body back against the seat to make sure the seat is locked in position.**
- **When returning seats to their original position, observe the following in order to prevent personal injury in a collision or sudden stop:**

  Make sure 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.

  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.

Tumbling the seats will enlarge the luggage compartment. See “Cargo and luggage” on page 224 for precautions when loading luggage.

—Adjusting second seats

SEATBACK ANGLE ADJUSTING LEVER

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

⚠ CAUTION

- **To reduce the risk of sliding under the lap belt during a collision, avoid reclining the seatback any more than needed. The seat belts provide maximum protection in a frontal or rear collision when the second seat 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. Therefore, in the event of a frontal collision, the more the seat is reclined, the greater the risk of personal injury.**
- **Do not adjust the seat while the vehicle is moving.**
- **After adjusting the seatback, push your body back against the seat to make sure the seat is locked in position.**

—Moving second seat for third seat entry

For easy access to the third seat, do this;

1. **Lower the head restraint to the lowest position.**
2. **Push the seatback angle adjusting lever and pull the seat cushion lock release lever or pull the strap.**

After passengers are in, return the seat until it locks.

CAUTION

After returning the seat, make sure 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.

—Tumbling second seat

BEFORE TUMBLING SECOND SEAT

1. **Stow the second seat belt buckles as shown in the illustration.**

This prevents the seat belt buckles from falling out when you tumble the second seat.

NOTICE

The seat belt buckles must be stowed before you tumble the second seat.

2. **Make sure the shoulder belt passes through the hanger when folding the second seat.**

This prevents the shoulder belt from being damaged.

CAUTION

The seat belt must be removed from the hanger when the seat belt is in use.

TUMBLING SECOND SEAT

1. **Lower the outer head restraint to the lowest position and pull up the center head restraint. Unlock the seatback and fold it down.**

Tumbling the rear seats will enlarge the luggage compartment. See “Cargo and luggage” on page 224 for precautions when loading luggage.

2. **Unlock the seat cushion. Swing the whole seat up and forward.**

3. **Hook the strap.**

When returning the second seat to its original position, put the holding strap into the hole.

4. Remove the seat hook covers from the back of the seat cushion, and install them over the seat hooks.

⚠ CAUTION

Be sure to apply the covers on the seat hooks, or you may get burned when they become hot.

When returning the second seat to its original position, remove the seat hook covers from the floor and install them in the back of the seat cushion.

WHEN RETURNING THE SECOND SEAT

If you cannot raise the seatback because of the locked seat belt, do not try it hard. Release the lock of the seat belt in the following way. Push in the lower front edge of the seatback cushion to slacken the seat belt (1) and let the seat belt retract a little (2).

⚠ CAUTION

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

- **Make sure 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.**
- **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.**

—Adjusting third seats

SEATBACK ANGLE ADJUSTING LEVER

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

⚠ CAUTION

- **To reduce the risk of sliding under the lap belt during a collision, avoid reclining the seatback any more than needed. The seat belts provide maximum protection in a frontal or rear collision when the third seat 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. Therefore, in the event of a frontal collision, the more the seat is reclined, the greater the risk of personal injury.**
- **Do not adjust the seat while the vehicle is moving.**
- **After adjusting the seatback, push your body back against the seat to make sure the seat is locked in position.**

—Tumbling third seats

BEFORE TUMBLING THIRD SEAT

1. **Stow the third seat belt and buckles as shown in the illustration.**

This prevents the seat belt and buckles from falling out when you tumble the third seat.

NOTICE

The seat belt and buckles must be stowed before you tumble the third seat.

2. Make sure the shoulder belt passes through the hanger when folding the third seat.

This prevents the shoulder belt from being damaged.

⚠ CAUTION

The seat belt must be removed from the hanger when the seat belt is in use.

TUMBLING THIRD SEAT

1. Lower the head restraint to the lowest position. Unlock the seatback and fold it down.

Tumbling the third seats will enlarge the luggage compartment. See “Cargo and luggage” on page 224 for precautions when loading luggage.

2. Unlock the seat cushion and slide the whole seat to the rear–most position while pulling up the handle.

3. Swing the whole seat up.

4. Hook the strap.

When returning the third seat to its original position, put the holding strap into the hole.

5. Remove the seat hook covers from the back of the seat cushion, and install them over the seat hooks.

⚠ CAUTION

Be sure to apply the covers on the seat hooks, or you may get burned when they become hot.

When returning the third seat to its original position, remove the seat hook covers from the floor and install them in the back of the seat cushion.

CAUTION

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

- **Make sure 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. Be certain to replace head restraint. Failure to do so will prevent 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

After tumbling the third seat, open the cover, hold the whole seat and pull it up while pulling the handle toward you.

Removing the third seat will enlarge the luggage compartment. See “Cargo and luggage” on page 224 for precautions when loading luggage.

Remove the seat hook covers from the back of the seat cushion, and install them over the seat hooks.

CAUTION

Be sure to apply the covers on the seat hooks, or you may get burned when they become hot.

When returning the third seat to its original position, remove the seat hook covers from the floor and install them in the back of the seat cushion.

⚠ CAUTION

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

- **Do not fold or remove the seat while the vehicle is moving.**
- **Be careful not to get your hands or feet pinched in the seat.**
- **Be careful not to hit the removed seat against a person or drop it on yourself.**
- **After tumbling or installing the seat, push it forward and backward to make sure it is locked in position.**

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.**
- **Do not try to sit on or place anything on the removed seat.**

- **When reinstalling the seat, be careful not to hit the seat against you or inside of the vehicle.**
- **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.**

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.

Head restraints

Front

Rear

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

To raise: Pull it up.
To lower: Push it down while pressing the lock release button.

Front head restraint only—You can also move the head restraint forward or backward. If such adjustment is desired, pull or push the head restraint.

Rear center head restraint—When an occupant sits on the rear center seat, always pull up the rear center head restraint to the lock position.

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

⚠ CAUTION

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

Seat heaters

To turn on the seat heater, push the switch to "HI" (high heating temperature) or "LO" (low heating temperature). To turn off the seat heater, push the switch lightly on the opposite side.

The key must be in the "ON" position.

⚠ CAUTION

Occupants must use caution when operating the seat heater because it may make them feel too hot or cause burns at low temperatures (erythema, varicella). Use extra caution for;

- **Babies, small children, elderly persons, sick persons or handicapped persons**
- **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.

NOTICE

- ***Do not put unevenly weighed 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 switch off when the engine is not running.***

Seat belts—
—Seat belt precautions

Toyota 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. (For details, see "Child restraint" on page 76.)

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. Toyota 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. Toyota 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.**
- **To reduce the risk of sliding under the lap belt during a collision, 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 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. In the event of a frontal collision, the more the seat is reclined, the greater the risk of personal injury.**
- **Be careful not to damage the belt webbing or hardware. Take care that they do not get caught or pinched in the seat or doors.**
- **Inspect the belt system periodically. Check for cuts, fraying, and loose parts. Damaged parts should be replaced. Do not disassemble or modify the system.**
- **Keep the belts clean and dry. If they need cleaning, use a mild soap solution or lukewarm water. Never use bleach, dye, or abrasive cleaners, or allow them to come into contact with the belt—they may severely weaken the belts. (See "Cleaning the interior" on page 271.)**
- **Replace the belt assembly (including bolts) if it has been used in a severe impact. The entire assembly should be replaced even if damage is not obvious.**

—Fastening 3-point 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 the 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 76.) 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 lap and shoulder portions of the belt 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 Toyota dealer. Do not use the seat until the seat belt is fixed, because it cannot protect an adult occupant or your child from injury.**

Adjust the position of the lap and shoulder belts.

Position the lap belt as low as possible on your hips–not on your waist, then adjust it to a snug fit by pulling the shoulder portion upward through the latch plate.

CAUTION

- **Both high–positioned lap belts and loose–fitting belts could cause serious injuries due to sliding under the lap belt during a collision or other unintended event. Keep the lap belt positioned as low on hips as possible.**
- **Do not place the shoulder belt under your arm.**

Seat belts with an adjustable shoulder anchor—

Adjust the shoulder anchor position to your size.

To raise: Slide the anchor up.
To lower: Push in the lock release button and slide the anchor down.

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

⚠ CAUTION

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

To release the belt, press the buckle release button and allow the belt to retract.

If the belt does not retract smoothly, pull it out and check for kinks or twists. Then make sure it remains untwisted as it retracts.

—Fastening 2-point seat belt

Sit up straight and well back in the seat. To fasten your belt, insert the tab into the buckle.

You will hear a click when the tab locks into the buckle.

If the belt is not long enough for you, hold the tab at a right angle to the belt and pull on the tab.

⚠ CAUTION

- **After inserting the tab, make sure the tab and buckle are locked and that the lap portion of 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 Toyota dealer. Do not use the seat until the seat belt is fixed, because it cannot protect an adult occupant or your child from injury.**

Remove excess length of the belt and adjust the belt position.

To shorten the belt, pull the free end of the belt.

Position the lap belt as low as possible on your hips—not on your waist, then adjust it to a snug fit.

⚠ CAUTION

Both high-positioned and loose-fitting lap belts could cause serious injuries due to sliding under the lap belt during a collision or other unintended event. Keep the lap belt positioned as low on hips as possible.

To release the belt, press the buckle release button.

—Seat belt extender

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

Please contact your local Toyota 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 Toyota dealer.

⚠ CAUTION

When using the seat belt extender, observe the following precautions. Failure to follow these instructions could reduce the effectiveness of the seat belt restraint system in case of an accident, increasing the chance of personal injury.

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

- **If the seat belt extender has been connected to the driver's seat belt buckle 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.**

- **Be sure to wear the seat belt without the seat belt extender if you can fasten the seat belt without the extender.**
- **Do not use the seat belt extender when installing a child restraint system on the front or rear passenger seat. If installing a child restraint system with the seat belt extender connected to the seat belt, the seat belt will not securely hold the child restraint system, which could cause death or serious injury to the child or other passengers in the event of collision.**

To connect the extender to the seat belt, insert the tab into the seat belt buckle so that the "PRESS" signs on the buckle release buttons of the extender and the seat belt are both facing outward as shown.

You will hear a click when the tab locks into the buckle.

When releasing the seat belt, press on the buckle release button on the extender, not on the seat belt. This helps prevent damage to the vehicle interior and extender itself.

When not in use, remove the extender and store in the vehicle for future use.

⚠ CAUTION

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

—Seat belt pretensioners

The 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 retractor so that the belts snugly restrain the occupants.

The seat belt pretensioners are activated even with no passenger in the front seat.

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

Roll sensing of curtain shield airbags off indicator light

The seat belt pretensioners will not operate in a vehicle rollover if the roll sensing of curtain shield airbags off indicator light is on. For details, see “Roll sensing of curtain shield airbags off switch” on page 66.

⚠ CAUTION

- **Make sure the roll sensing of curtain shield airbags off indicator light is not on.**
- **When the roll sensing of curtain shield airbags off switch is turned on (and the roll sensing of curtain shield airbags off indicator light is on), the seat belt pretensioners will not operate in a vehicle rollover and turning off the seat belt pretensioners can reduce the occupant protection which your vehicle safety systems can provide to you in certain accidents and increase the likelihood of death or serious injuries.**

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

1. Front airbag sensors
2. SRS warning light
3. Seat belt pretensioner assemblies
4. Airbag sensor assembly

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

When the seat belt pretensioners are activated, an operating noise may be heard and a small amount of non–toxic gas may be released. This does not indicate that a fire is occurring. This gas is normally harmless.

Once the seat belt pretensioners have been activated, the seat belt retractors remain locked.

⚠ CAUTION

- **Do not modify, remove, strike or open the seat belt pretensioner assemblies, airbag sensor or surrounding area or wiring. Doing any of these may prevent the seat belt pretensioners from activating correctly, cause sudden operation of the system or disable the system, resulting in death or serious injury.**
- **Do not use tires or wheels other than the manufacturer's recommended size. Such a use may cause the curtain shield airbags and seat belt pretensioners to inflate accidentally, resulting in death or serious injury. For details, see "Checking and replacing tires" on page 296.**
- **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, resulting in death or serious injury. For details, see "Roof luggage carrier" on page 196.**
- **Do not modify or change the suspension system. Such changes may cause the curtain shield airbags to inflate accidentally, resulting in death or serious injury.**

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

NOTICE

Do not perform any of the following changes without consulting your Toyota dealer. Such changes can interfere with proper operation of the front seat belt pretensioners in some cases.

- ***Installation of electronic devices such as a mobile two-way radio, cassette tape player or compact disc player***
- ***Repairs on or near the front seat belt retractor assemblies***
- ***Modification of the front end structure***
- ***Attachment of a grille guard (bull bar, kangaroo bar, etc.), snowplow, winches or any other equipment to the front end***
- ***Repairs made on or near the front fenders, front end structure or console***

This indicator comes on when the 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 sensors, curtain shield airbag sensors, driver's seat position sensor, driver's seat belt buckle switch, seat belt pretensioner assemblies, inflators, warning light, roll sensing of curtain shield airbags off indicator light, interconnecting wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" on page 122.)

If any of the following conditions occurs, this indicates a malfunction of the airbags or seat belt pretensioners. Contact your Toyota dealer as soon as possible.

- When the ignition key is turned to the "ON" position, the light does not come on, remains on or flashes.
- The light comes on or starts flashing while driving.
- If any seat belt does not retract or can not be pulled out due to a malfunction or activation of the relevant seat belt pretensioner.
- The seat belt pretensioner assembly or surrounding area has been damaged.

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

- The front of the vehicle (shaded in the illustration) was involved in an accident that was not severe enough to cause the seat belt pretensioners to operate.
- Either seat belt pretensioner assembly or surrounding area is scratched, cracked, or otherwise damaged.

SRS driver airbag and front passenger airbag

The SRS (Supplemental Restraint System) front airbags are designed to provide further protection for the driver and front passenger in addition to the primary safety protection provided by the seat belts.

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

The front passenger airbag is activated even with no passenger in the front seat.

Always wear your seat belt properly.

Your vehicle is equipped with a crash sensing and diagnostic module, which will record the use of the seat belt restraint system by the driver when the SRS front airbags are inflated.

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 48.**

- **Improperly seated and/or restrained infants and children can be killed or seriously injured by the deploying front airbags. An infant or child who is too small to use a seat belt should be properly secured using a child restraint system. Toyota strongly recommends that all infants and children be placed in the rear seat of the vehicle and properly restrained. The rear seat is the safest for infants and children. For instructions concerning the installation of a child restraint system, see "Child restraint" on page 76.**

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.

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

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

The SRS front airbag system consists mainly of the following components, and their locations are shown in the illustration.

1. Front airbag sensors
2. SRS warning light
3. Airbag module for front passenger (airbag and inflator)
4. Airbag sensor assembly
5. Airbag module for driver (airbag and inflator)
6. Driver's seat position sensor
7. Driver's seat belt buckle switch

The airbag sensor assembly consists of a safing sensor and airbag sensor.

The front airbag sensors constantly monitor the forward deceleration of the vehicle. If an impact results in a forward deceleration beyond the designed threshold level, the system triggers the airbag inflators. At this time a chemical reaction in the inflators very quickly fills the airbags with non–toxic gas to help restrain the forward motion of the occupants. The front airbags then quickly deflate, so that there is no obstruction of the driver's vision should it be necessary to continue driving.

When the airbags inflate, they produce a 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, primarily to the head and chest, it may also cause other, less severe injuries to the face, chest, arms and hands. These are usually in the nature of minor burns or abrasions and swelling, but the force of a deploying airbag can cause more serious injuries, especially if an occupant's hands, arms, chest or head is in close proximity to the airbag module at the time of deployment. This is why it is important for the occupant to: avoid placing any object or part of the body between the occupant and the airbag module; sit straight and well back into the seat; wear the available seat belt properly; and sit as far as possible from the airbag module, while still maintaining control of the vehicle.

Parts of the airbag module (steering wheel hub, 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

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

- **The driver sit as far back as possible from the steering wheel while still maintaining control of the vehicle.**
- **The front passenger sit as far back as possible from the dashboard.**
- **All vehicle occupants be properly restrained using the available seat belts.**

- **If the seat belt extender has been connected to the driver's seat belt buckle 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.**

For instructions and precautions concerning the seating position, see "—Front seat precautions" on page 34.

- **Do not sit on the edge of the seat or lean against the dashboard when the vehicle is in use, since the front passenger airbag could inflate with considerable speed and force. Anyone who is up against, or very close to, an airbag when it inflates, can be killed or seriously injured. Sit up straight and well back in the seat, and always use your seat belt properly.**

- **Toyota strongly recommends that all infants and children be placed in the rear seat of the vehicle and be properly restrained.**
- **Do not allow a child to stand up or kneel on the front passenger seat, since the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.**

- **Do not hold a child on your lap or in your arms. Use a child restraint system in the rear seat. For instructions concerning the installation of a child restraint system, see "Child restraint" on page 76.**

- **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 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, dashboard near the front passenger airbag, 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, resulting in death or serious injury.**

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

NOTICE

Do not perform any of the following changes without consulting your Toyota 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 compact disc player***
- ***Modification of the suspension system***
- ***Modification of the front end structure***
- ***Attachment of a grille guard (bull bar, kangaroo bar, etc.), snowplow, winches or any other equipment to the front end***
- ***Repairs made on or near the front fenders, front end structure, console, steering column, steering wheel or dashboard near the front passenger airbag***

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

This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensors, curtain shield airbag sensors, driver's seat position sensor, driver's seat belt buckle switch, seat belt pretensioner assemblies, inflators, warning light, roll sensing of curtain shield airbags off indicator light, interconnecting wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" on page 122.)

If either of the following conditions occurs, this indicates a malfunction of the airbags or seat belt pretensioners. Contact your Toyota dealer as soon as possible.

- When the ignition key is turned to the "ON" position, the light does not come on, remains on or flashes.
- The light comes on or starts flashing while driving.

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

- The SRS 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 airbags to inflate.
- The pad section of the steering wheel or dashboard (shaded in the illustration) is scratched, cracked, or otherwise damaged.

NOTICE
Do not disconnect the battery cables before contacting your Toyota dealer.

SRS side airbags and curtain shield airbags with roll sensing function

The SRS (Supplemental Restraint System) side airbags and curtain shield airbags are designed to provide further protection for the driver, front passenger and second seat 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 on impacted side 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 chest and the SRS curtain shield airbags help reduce injuries mainly to the driver's, front passenger's or second seat passenger's head and can help the driver, front passenger and second seat passengers to retain inside the vehicle.

Roll sensing function:
In response to a vehicle rollover, the SRS curtain shield airbags on both sides work with the seat belts to help reduce injury by inflating. The SRS curtain shield airbags help reduce injuries mainly to the driver's, front passenger's or second seat passenger's head and can help the driver, front passenger and second seat passengers to retain inside the vehicle.

The SRS side and curtain shield airbags on the passenger side are activated even with no passenger in the front seat.

Always wear your seat belt properly.

CAUTION

- The SRS side airbag and curtain shield airbag system is designed only as a supplement to the primary protection of the driver, front passenger and second seat 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 48.

- Do not allow anyone to lean his/her head or any part of his/her body against the door or the area of the seat, front pillar, rear pillar or roof side rail from which the SRS side airbag and curtain shield airbag deploy even if he/she is a child seated in the child restraint system. It is dangerous if the SRS side airbag and curtain shield airbag inflate, and the impact of the deploying airbag could cause death or serious injury to the occupant.
- Improperly seated and/or restrained infants and children can be killed or seriously injured by the deploying airbags. An infant or child who is too small to use a seat belt should be properly secured using a child restraint system. Toyota strongly recommends that all infants and children be placed in the rear seats of the vehicle and properly restrained. The rear seats are the safest for infants and children. For instructions concerning the installation of a child restraint system, see "Child restraint" on page 76.

Roll sensing of curtain shield airbags off switch

The roll sensing of curtain shield airbags off switch can turn off the curtain shield airbags in a vehicle rollover. This switch should only be used in a situation where the inflation is not desired (such as extreme–off road driving).

When you push the roll sensing of curtain shield airbags off switch for a few seconds with the ignition switch on, the roll sensing of curtain shield airbags 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.

In a severe side impact, the curtain shield airbag on impacted side will inflate even if the roll sensing function is turned off.

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 be back on automatically.

⚠ CAUTION

- **Make sure the roll sensing of curtain shield airbags off indicator light is not on.**
- **When the roll sensing of curtain shield airbags off switch is turned on (and the roll sensing of curtain shield airbags off indicator light is on), the curtain shield airbags will not inflate in a vehicle rollover and turning off the curtain shield airbags can reduce the occupant protection which your vehicle safety systems can provide to you in certain accidents and increase the likelihood of death or serious injuries.**

The SRS side airbags may not inflate 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.

Always wear your seat belts properly.

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.

The curtain shield airbags may not inflate 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 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.

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.

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.

The SRS side airbags and curtain shield airbags may deploy if a severe impact occurs to the underside of your vehicle. Some examples are shown in the illustration.

The SRS side airbag and curtain shield airbag system consists mainly of the following components, and their locations are shown in the illustration.

1. SRS warning light
2. Curtain shield airbag modules (airbag and inflator)
3. Side airbag modules (airbag and inflator)
4. Curtain shield airbag sensors
5. Side and curtain shield airbag sensors
6. Airbag sensor assembly

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. Then a chemical reaction in the inflators quickly fills the airbags with non–toxic gas to help restrain the lateral motion of front and second seat 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 front and second seat 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 pillar, front, center and rear garnish and roof interior may be hot for several minutes, but the airbags themselves will not be hot. The airbags are designed to inflate only once.

⚠ CAUTION

The 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 second seat passengers must:

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

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

- Do not allow anyone to lean against the door when the vehicle is in use, since the side airbags and 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.

- 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 side airbags and to the front and rear pillar, front, center and rear garnish and roof interior with the curtain shield airbags.

- Make sure the roll sensing of curtain shield airbags off indicator is not on. 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.

- **Do not allow anyone to kneel on the passenger seat, facing the passenger's side door, since the side airbags and curtain shield airbags could inflate with considerable speed and force. Otherwise, he/she may be killed or seriously injured. Special care should be taken especially when you have a small child in the vehicle.**

- **Do not allow anyone to get his/her head closer to the area where the side airbags and curtain shield airbags inflate, since these airbags could inflate with considerable speed and force. Otherwise, he/she may be killed or serious injured. Special care should be taken especially when you have a small child in the vehicle.**

- **Do not allow anyone to get his/her head or hands out of windows, since the curtain shield airbags could inflate with considerable speed and force. Otherwise, he/she may be killed or seriously injured. Special care should be taken especially when you have a small child in the vehicle.**

- **Do not attach a cup holder or any other device or object on or around the door. When the side airbags inflate, the cup holder or any other device or object will be thrown with great force, or the side airbags may not activate correctly, resulting in death or serious injury. Likewise, the driver and front passenger should not hold objects in their arms or on their knees.**

- **Do not attach a microphone or any other device or object near the area where the curtain shield airbags activate such as on the windshield glass, side door glass, front, center and roof side garnish, roof interior or assist grips. When the curtain shield airbags inflate, the microphone or other device or object will be thrown away with great force, or the curtain shield airbags 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 airbags inflate, those items will be thrown away with great force or the curtain shield airbags may not activate correctly, resulting in death or serious injury. When you hang clothes, hang them on the coat hook directly.**
- **Do not use seat accessories which cover the parts where the side airbags inflate. Such accessories may prevent the side airbags from activating correctly, causing death or serious injury.**
- **Do not modify or replace the seats or upholstery of the seats 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.**

- **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, resulting in death or serious injury.**
- **Do not use tires or wheels other than the manufacturer's recommended size. Such a use may cause the curtain shield airbags to inflate accidentally, resulting in death or serious injury. For details, see "Checking and replacing tires" on page 296.**

- **Do not place luggage heavier than specified on the roof luggage carrier. Such luggage may cause the curtain shield airbags to inflate accidentally, resulting in death or serious injury. For details, see "Roof luggage carrier" on page 196.**

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

NOTICE

Do not perform any of the following changes without consulting your Toyota 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 compact disc player.***
- ***Modification of the side structure of the passenger compartment.***
- ***Repairs made on or near the console or front seats.***

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

This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensors, curtain shield airbag sensors, driver's seat position sensor, driver's seat belt buckle switch, seat belt pretensioner assemblies, inflators, warning light, roll sensing of curtain shield airbags off indicator light, interconnecting wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" on page 122.)

If either of the following conditions occurs, this indicates a malfunction of the airbags or seat belt pretensioners. Contact your Toyota dealer as soon as possible.

- When the ignition key is turned to the "ON" position, the light does not come on, remains on or flashes.
- The light comes on or starts flashing while driving.

In the following cases, contact your Toyota 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, center and rear garnish, and roof interior 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 Toyota dealer.

Child restraint—
—Child restraint precautions

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

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

Your vehicle conforms to SAEJ1819.

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 48 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 the age and size of the child. Holding a child in your arms is not a substitute for a child restraint system. In an accident, the child can be crushed against the windshield, or between you and the vehicle's interior.**

- **Toyota strongly urges use of a proper child restraint system which conforms to the size of the child, installed on the rear seat. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.**
- **Never install a rear–facing child restraint system on the front passenger seat. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear–facing child restraint system is installed on the front passenger seat.**
- **A forward–facing child restraint system should be allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible, the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or serious injured.**

- **On vehicle 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, front, center or rear garnish or roof interior 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.**
- **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. 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 either the lap belt or 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.

—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 92.

Child restraint lower anchorages approved for your vehicle may also be used. See "Installation with child restraint lower anchorages" on page 94.

(A) Infant seat

(C) Booster seat

(B) Convertible seat

—Installation with 2–point type seat belt

(A) INFANT SEAT INSTALLATION

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

⚠ CAUTION

Do not install a child restraint system on the third seat if it interferes with the lock mechanism of the second seats. Otherwise, the child or second seat occupant(s) may be killed or seriously injured in case of sudden braking or a collision.

1. Run the center lap 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 lap belt.

⚠ CAUTION

- **After inserting the tab, make sure the tab and buckle are locked and that the lap portion of the belt is 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 Toyota dealer immediately. Do not install the child restraint seat on the seat until the seat belt is fixed.**

2. While pressing the infant seat firmly against the seat cushion and seatback, tighten the lap belt by pulling its free end 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 instruction provided by its manufacturer.

3. To remove the infant seat, press the buckle release button.

(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 instruction about the applicable age and size of the child as well as directions for installing the child restraint system.

⚠ CAUTION

Do not install a child restraint system on the third seat if it interferes with the lock mechanism of the second seats. Otherwise, the child or second seat occupant(s) may be killed or seriously injured in case of sudden braking or a collision.

1. Run the center lap 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 lap belt.

⚠ CAUTION

- **After inserting the tab, make sure the tab and buckle are locked and that the lap portion of the belt is 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 Toyota dealer immediately. Do not install the child restraint seat on the seat until the seat belt is fixed.**

2. While pressing the convertible seat firmly against the seat cushion and seatback, tighten the lap belt by pulling its free end 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.

3. To remove the convertible seat, press the buckle release button.

—Installation with 3–point type seat belt

(A) INFANT SEAT INSTALLATION

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

⚠ CAUTION

- **Never install a rear–facing child restraint system on the front passenger seat. In the event of an accidents, 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.**

- **Do not install a child restraint system on the third seat if it interferes with the lock mechanism of the second seats. Otherwise, the child or second seat occupant(s) may be killed or seriously injured in case of sudden braking or a collision.**
- **If the driver's seat position does not allow sufficient space for safe installation, install the child restraint system on the second right seat.**

1. Run the lap and shoulder belt through or around the infant seat following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt. Keep the lap portion of the belt tight.

⚠ CAUTION

- **After inserting the tab, make sure the tab and buckle are locked and that the lap and shoulder portions of the belt are not twisted.**
- **Do not insert coins, clips, etc. in the buckle as this may prevent your child from properly latching the tab and buckle.**
- **If the seat belt does not function normally, it cannot protect your child from death or serious injury. Contact your Toyota dealer immediately. Do not install the child restraint seat on the seat until the seat belt is fixed.**

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

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

3. While pressing the infant seat firmly against the seat cushion and seatback, let the shoulder belt retract as far as it will go to hold the infant seat securely.

⚠ CAUTION

Push and pull the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer.

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

(B) CONVERTIBLE SEAT INSTALLATION

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

⚠ CAUTION

- **Never install a rear–facing child restraint system on the front passenger seat. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear–facing child restraint system is installed on the front passenger seat.**

- **A forward–facing child restraint system should be allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.**

- **On vehicle 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, front, center or rear garnish or roof interior 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.**

- **Do not install a child restraint system on the third seat if it interferes with the lock mechanism of the second seats. Otherwise, the child or second seat occupant(s) may be killed or serious injured in case of sudden braking or a collision.**
- **If the driver's seat position does not allow sufficient space for safe installation, install the child restraint system on the second right seat.**

1. Run the lap and shoulder belt through or around the convertible seat following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt. Keep the lap portion of the belt tight.

⚠ CAUTION

- **After inserting the tab, make sure the tab and buckle are locked and that the lap and shoulder portions of the belt are not twisted.**
- **Do not insert coins, clips, etc. in the buckle as this may prevent your child from properly latching the tab and buckle.**
- **If the seat belt does not function normally, it cannot protect your child from death or serious injury. Contact your Toyota dealer immediately. Do not install the child restraint seat on the seat until the seat belt is fixed.**

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

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

3. While pressing the convertible seat firmly against the seat cushion and seatback, let the shoulder belt retract as far as it will go to hold the convertible seat securely.

⚠ CAUTION

Push and pull the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer.

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

(C) BOOSTER SEAT INSTALLATION

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

⚠ CAUTION

- **A forward–facing child restraint system should be allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.**

- **On vehicle 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, front, center or rear garnish or roof interior 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.**

1. Sit the child on a booster seat. Run the lap and shoulder belt through or around the booster seat and across the child following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt.

Make sure the shoulder belt is correctly across the child's shoulder and that the lap belt is positioned as low as possible on child's hips. See "Seat belts" on page 48 for details.

⚠ CAUTION

- **Always make sure the shoulder belt is positioned across the center of child's shoulder. The belt should be kept away from child's neck, but not falling off child's shoulder. Otherwise, the child may be killed or seriously injured in case of sudden braking or a collision.**
- **Both high–positioned lap belts and loose–fitting belts could cause death or serious injuries due to sliding under the lap belt during a collision or other unintended event. Keep the lap belt positioned as low on 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 Toyota dealer immediately. Do not install the child restraint seat on the seat until the seat belt is fixed.**

2. To remove the child restraint system, 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.

Use the anchor bracket located behind the second seat on the floor to attach the top strap.

Anchor brackets are installed for each second seating position.

This symbol indicates the location of user ready anchor brackets.

TO USE THE ANCHOR BRACKET:

1. **Remove the head restraint.**

2. **Fix the child restraint system with the seat belt.**
3. **Take off the cover, latch the hook onto the anchor bracket and tighten the top strap.**

For instructions to install the child restraint system, see “Child restraint—” on page 76.

⚠ 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 installation instructions provided by its manufacturer.**

4. **Replace the head restraint.**

—Installation with child restraint lower anchorages

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

The anchorages are installed in the clearance between the seat cushion and seatback of left and center second seats.

Child restraint system interfaced with the FMVSS225 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.

CHILD RESTRAINT SYSTEM INSTALLATION

1. **Take off the cover between the seat cushion and seatback a little and confirm the position of the lower anchorages below the tag on the seat cushion.**

Type A

Type B

Type A—

2. **Latch the hooks of lower straps onto the anchorages and tighten the lower straps.**

Type B—

2. **Latch the buckles onto the anchorages**

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 92.)

For the installation details, refer to the instruction manual equipped with each product.

⚠ CAUTION

- **When using the lower anchorages for the child restraint system, be sure that there are no irregular objects around the anchorages or that the seat belt is not caught.**
- **Push and pull the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer.**
- **Do not install a child restraint system on the rear seat if it interferes with the lock mechanism of the front seats. Otherwise, the child or front seat occupant(s) may be killed or seriously injured in case of sudden braking or a collision.**

SECTION 1 – 4

OPERATION OF INSTRUMENTS AND CONTROLS

Steering wheel and Mirrors

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Power 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.

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 into the ignition switch, the steering column returns to the previously set position.

This feature can be set inoperative. Ask your Toyota dealer.

> **⚠ 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.**

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 when seen in a flat mirror.

When you push the outside rear view mirror heater switch, the heater panels in the outside rear view mirrors will quickly clear the mirror surface. (See "Outside rear view mirror heaters" on page 116.)

⚠ 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 mirror heater switch is on.**

—Power rear view mirror control

To adjust a mirror, use the switches.

1. Master switch—To select the mirror to be adjusted
   Place the switch at "L" (left) or "R" (right).
2. Control switch—To move the mirror
   Push the switch in the desired direction.

Mirrors can be adjusted when the key is in the "ACC" or "ON" position.

NOTICE

If ice should jam the mirror, do not operate the control or scrape the mirror face. Use a spray de-icer to free the mirror.

—Folding rear view mirrors

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

To fold the rear view mirror, push backward.

⚠ 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.

Anti-glare inside rear view mirror—

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

Pushing the switch changes the mode between "AUTO" and "DAY".

The indicator comes on when the "AUTO" mode is selected.

"DAY" mode: The mirror surface is normal.

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

When the ignition key is inserted and turned on, the inside rear view mirror always turns on in the “AUTO” mode.

When the outside air temperature is low, it may take a little longer for the mirror to darken in response to the detection of headlights.

⚠ CAUTION

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

—Compass

The compass indicates the direction in which the vehicle is heading. The illustration shown above indicates the vehicle is heading north.

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

Pushing the “AUTO” button for longer 3 seconds turns on or off the compass display.

The compass may not show the correct direction in the following conditions:

- The vehicle is stopped immediately after turning. The compass does not adjust while the vehicle is stopped.
- The 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.
- Any door is open.

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

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

NOTICE

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

CALIBRATING THE COMPASS (deviation calibration)

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

To adjust for this deviation, stop the vehicle and push the button for longer than about 6 seconds until the number (1–15) appears on the display. Then push the button again, referring to the following map to select the number of the zone where the vehicle is.

Zone number ★ **Hawaii is included in zone 6.**

If the direction is displayed several seconds after adjustment, the calibration is finished.

⚠ CAUTION

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

CALIBRATING THE COMPASS (circling calibration)

"C" appears on the display in case the circling calibration is required due to a drastic change in the magnetic field. To rectify this, follow the calibration procedure below.

Drive the vehicle slowly (at 8km/h (5mph) 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.

If calibration cannot be performed because of the magnetized vehicle, etc., take your vehicle to Toyota dealer.

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

⚠ CAUTION

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

Sun visors—

To block out glare, move the sun visor.

To block out glare from the front—Swing down the main sun visor.

To block out glare from the side—Swing down the main sun visor, remove it from the hook and swing it to the lateral side.

You can adjust its position as shown.

To block the glare from the front when the main sun visor is swung down, swing down the second sun visor.

⚠ CAUTION

Slide the main sun visor only when it is swung down to the lateral side. It can cover the anti-glare inside rear view mirror and obstruct the rear view.

—Vanity mirror

To use the vanity mirror, swing down the main sun visor and open the cover.

The vanity light comes on when you open the cover.

SECTION 1 – 5

OPERATION OF INSTRUMENTS AND CONTROLS

Lights, Wipers and Defogger

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Headlight and turn signals

HEADLIGHTS

To turn on the following lights: Twist the headlight/turn signal lever knob.

Position 1—Parking, tail, license plate, side marker and instrument panel lights

However, if the surroundings are bright and if the instrument panel light control dial is not turned fully on, the instrument panel lights do not come on.

Position 2—Headlights and all of the above

Position 3 (“AUTO”)—Headlights and/or all of the lights in position 1

They automatically turn on or off depending on the darkness of the surroundings.*

Manually twist the knob to the position 2 to turn on the headlights if they are needed immediately when entering a dark tunnel, parking structure, etc.

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

The automatic light control sensor is on the top of the passenger’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 come on, the lights automatically turn off about 30 seconds after any of the doors is opened and closed with the ignition key turned to the “ACC” or “LOCK” position.* To turn them on again, turn the ignition key to the ”ON” position, or turn the headlight switch off and then twist the knob until the first or second clickstop. If you are going to park for over one week, make sure the headlight switch is off.

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.

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

NOTICE
To prevent the battery from being discharged, do not leave the lights on for a long period when the engine is not running.

Daytime running light system

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

To turn on the other exterior lights and instrument panel lights, twist the knob to the position 1.

Twist the knob to the position 2 to turn the headlights to full intensity for driving at night.

High–Low beams—For high beams, turn the headlights on and push the lever away from you (position 1). Pull the lever toward you (position 2) for low beams.

The headlight high beam indicator light (blue light) on the instrument panel will tell you that the high beams are on.

Flashing the high beam headlights (position 3)—Pull the lever all the way back. The high beam headlights turn off when you release the lever.

You can flash the high beam headlights with the knob turned to “OFF”.

TURN SIGNALS

To signal a turn, push the headlight/turn signal lever up or down to position 1.

The key must be in the “ON” position.

The lever automatically returns after you make a turn, but you may have to return it by hand after you change lanes.

To signal a lane change, move the lever up or down to the pressure point (position 2) and hold it.

If the turn signal indicator lights (green lights) on the instrument panel flash faster than normal, a front or rear turn signal bulb is burned out. See “Replacing light bulbs” on page 307.

Emergency flashers

To turn on the emergency flashers, push the switch.

All the turn signal lights will flash. To turn them off, push the switch once again.

Turn on the emergency flashers to warn other drivers if your vehicle must be stopped 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 operating.

NOTICE

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

Instrument panel light control

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

Front fog lights

To turn on the front fog lights, twist the band of the headlight/turn signal lever. They will come on only when the headlights are on low beam.

Interior lights

Center

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"—

—Center: Turn the light on when any of side doors and back door are opened.

—Rear: Turn the light on when any of the rear side doors and back door are opened.

ILLUMINATED ENTRY SYSTEM

Center—
With the switch in the "DOOR" position, the light comes on when either side or back door is opened. After all the doors are closed, the light remains on for a certain time and then goes out.*

However, in the following cases, the light goes out immediately:

- All the doors are closed when the ignition key is in "ACC" or "ON" position.
- The ignition key is turned to "ACC", "ON" or "START" when the light is still on.
- All the doors are locked when the light is still on.
- One front door will be closed with the lock knob pushed forward while the other doors are locked.

*NOTE: *The interior lights can be set not to come on or the duration of lighting can be changed. Ask your Toyota dealer for details.*

INTERIOR LIGHTS CUT OFF OPERATION

When the ignition switch is “OFF” and any interior lights in the vehicle stay lighting on, the lights will cut off automatically after 30 minutes.

You can cancel the cut off operation by:

- Turning the key to the “ACC” position.
- Opening or closing any of side doors and back door.

All the lights are cut off when any of the doors are locked or unlocked by key or wireless remote control key.

Personal lights

Front

Center

To turn on the personal light, push the switch on 1 side. To turn the lights off, push the switch on 2 side.

PERSONAL LIGHTS CUT OFF OPERATION

When the ignition switch is “OFF” and any personal lights in the vehicle stay lighting on, the lights will cut off automatically after 30 minutes.

You can cancel the cut off operation by:

- Turning the key to the “ACC” position.
- Opening or closing any of side doors and back door.

All the lights are cut off when any of the doors are locked or unlocked by key or wireless remote control key.

Ignition switch light

For easy access to the ignition switch, the ignition switch light comes on when any door is opened.

The light remains on for a certain time after all the doors are closed.

It goes off immediately when the ignition switch is turned to the “ACC” position or when all the doors are locked.

Windshield wipers and washer

To turn on the windshield wipers, move the lever to the desired setting.

The key must be in the “ON” position.

There are 3 settings:

1. **“INT” position:** Intermittent operation
2. **“LO” position:** Low speed operation
3. **“HI” position:** High speed operation

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

To squirt washer fluid, pull the lever toward you.

If the windshield wipers are off, they will operate a couple of times after the washer squirts.

For instructions on adding washer fluid, see “Adding washer fluid” on page 307.

In freezing weather, warm the windshield with the defroster before using the washer. This will help prevent the washer fluid from freezing on your windshield, which can block your vision.

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

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

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

Rear window wiper and washer

To turn on the rear window wiper, twist the lever knob upward.

The key must be in the “ON” position.

There are 2 settings:

1. **“INT” position:** Intermittent operation
2. **“ON” position:** Low speed operation

To squirt washer fluid on the rear window, twist the knob upward or downward as far as it will go (position 3 or 4). The knob automatically returns from these positions after you release it.

For instructions on adding washer fluid, see “Adding washer fluid” on page 307.

NOTICE

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

Rear window defogger

To defog or defrost the rear window, push the switch.

The 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.

Push the switch once again to turn the defogger off.

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

Make sure you turn the defogger off when the surfaces are clear. Leaving the defogger on for a long time could cause the battery to discharge, especially during stop–and–go driving. The defogger is not designed for drying rain water or for melting snow.

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 heaters

To defog or defrost the outside rear view mirrors, push the switch.

The key must be in the “ON” position.

The heater panels in the outside rear view mirrors will quickly clear the surfaces. An indicator light will illuminate to indicate the mirror heaters are operating.

Push the switch once again to turn the defoggers off.

The system will automatically shut off after the mirror heaters have operated about 15 minutes.

CAUTION

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

Make sure you turn the mirror heaters off when the surfaces are clear. Leaving the mirror heaters on for a long time could cause the battery to discharge, especially during stop–and–go driving. The mirror heaters are not designed for drying rain water or for melting snow.

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

NOTICE

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

SECTION 1 – 6

OPERATION OF INSTRUMENTS AND CONTROLS

Gauges, Meters and Service reminder indicators

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Service reminder indicators and warning buzzers 122
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Fuel gauge

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

Nearly full—Needle at “F”
Nearly empty—Needle at “E”

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 Toyota dealer as soon as possible.

It is not a malfunction even if the needle of the fuel gauge returns to “E” when the ignition switch is turned to the “START” position.

Engine coolant temperature gauge

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.

It is not a malfunction even if the needle of the engine coolant temperature gauge returns to “C” when the ignition switch is turned to the “START” position.

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 250.***

Engine oil pressure gauge

The engine oil pressure gauge indicates engine oil pressure when the ignition switch is on. Check it while driving to make sure the needle is in the proper range.

If the engine oil pressure should stay below the normal range, pull off the road to a safe place and stop the engine immediately. Call a Toyota dealer or qualified repair shop for assistance.

Engine oil pressure may not build up when the engine oil level is too low. The engine oil pressure gauge is not designed to indicate oil level, and the engine oil level must be checked using the level dipstick.

It is not a malfunction even if the needle of the engine oil pressure gauge returns to “L” when the ignition switch is turned to the “START” position.

NOTICE

Do not drive the vehicle with the engine oil pressure below the normal range until the cause is fixed—it may ruin the engine.

Voltmeter

The voltmeter tells whether the battery is charged or discharged. Check it while the engine is running—the needle should always indicate as shown above.

If the needle reads below or above the normal range while the engine is running, it indicates the charging system needs immediate repair.

However, it is normal for the needle to drop below the normal range during engine starting.

It is not a malfunction even if the needle of the voltmeter returns to “9” when the ignition switch is turned to the “START” position.

Tachometer

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

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

It is not a malfunction even if the needle of the tachometer returns to “0” when the ignition switch is turned to the “START” position.

NOTICE

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

Odometer and two trip meters

This meter displays the odometer and two trip meters.

1. Odometer—Shows the total distance the vehicle has been driven.
2. Two trip meters—Show two different distances independently driven since the last time each trip meter was set to zero.

   You can use one trip meter to calculate the fuel economy and the other to measure the distance on each trip. All trip meter data is cancelled if the electrical power source is disconnected.

3. Trip meter reset knob—Resets the two trip meters to zero, and also change the meter display.

   To change the meter display, quickly push and release the knob. The meter display changes in the order from the odometer to trip meter A to trip meter B, then back to the odometer each time you push.

   To reset the trip meter A to zero, display the meter A reading, then push and hold the knob until the meter is set to zero. The same process can be applied for resetting the trip meter B.

Service reminder indicators and warning buzzers

If the indicator or buzzer comes on...		Do this.
(a)	**BRAKE** (Indicator and buzzer)	If parking brake is off, stop immediately and contact Toyota dealer.
(b)	(Indicator and buzzer)	Fasten driver's seat belt.
(c)	PASSENGER	Fasten front passenger's seat belt.
(d)		Stop and check.
(e)	MAINT REQD	Replace engine oil.
(f)	CHECK	Take vehicle to Toyota dealer.
(g)		Fill up tank.
(h)		Take vehicle to Toyota dealer immediately.

If the indicator or buzzer comes on...		Do this.
(i)	ABS	Take vehicle to Toyota dealer. If brake system warning light is also on, stop immediately and contact Toyota dealer.
(j)		Close all side doors and back door.
(k)	A/T P	Shift four–wheel drive control out of “N”.
(l)	A/T OIL TEMP	Stop and check.
(m)	VSC TRAC VSC OFF	Take vehicle to Toyota dealer.
(n)	Key reminder buzzer	Remove key.

(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...**

⚠ CAUTION

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

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

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

Have your vehicle checked at your Toyota dealer in the following cases:

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

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

⚠ CAUTION

If any of the following conditions occur, immediately stop your vehicle at a safe place and contact your Toyota dealer.

- **The light does not turn off even after the parking brake is released while the engine is running.**
- **The warning buzzer comes on together with the warning light.**

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.

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

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

Any 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 “ON” position. It is normal if it goes out after a while.
- Depressing the brake pedal repeatedly may turn on the 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.

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

This light and buzzer remind you to buckle up the driver's seat belt.

Once the ignition key is turned to "ON" or "START", the reminder light flashes and the buzzer sounds if the driver's seat belt is not fastened. Unless the driver fastens the belt, the light keeps on flashing and the buzzer sounds 4 to 8 seconds.

(c) Front Passenger's Seat Belt Reminder Light

This light reminds you to buckle up the front passenger's 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. Unless the front passenger fastens the belt, the light stays flashing.

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

(d) Discharge Warning Light

This light warns that the battery is being discharged.

If it comes on while you are driving, 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 Toyota dealer or repair shop.

NOTICE

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

(e) Engine Oil Replacement Reminder Light

This light reminds you when to replace the engine oil.

This light will come on when the ignition switch is turned to "ON", and will go off after about a few seconds.

When you drive for about 7200 km (4500 miles) after engine oil replacement, this light illuminates for about 3 seconds and then flashes for about 12 seconds with the ignition key is turned to "ON" position. If you continue driving without 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 "OFF" position with the odometer reading shown. (For details, see "Odometer and trip meter" on page 121).
2. Turn the ignition key to the "ON" position while holding down the "ODO/TRIP" knob.

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

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

(f) 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 will not go off even after several trips, contact your Toyota dealer as soon as possible.

If the lamp will not go off even after the several trips...

or

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 Toyota dealer as soon as possible to service the vehicle.

If the engine speed does not increase with the accelerator pedal depressed, there may be a problem somewhere in your 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 Toyota 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.

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 Toyota 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 280.

(g) Low Fuel Level Warning Light

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

(h) SRS Warning Light

This light will come on when the ignition key is turned to the "ON" position. After about 6 seconds, the light will go off. This means the system of the airbag and front seat belt pretensioners are operating properly.

The warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensors, curtain shield airbag sensors, driver's seat position sensor, driver's seat belt buckle switch, front seat belt pretensioner assemblies, inflators, warning light, roll sensing of curtain shield airbags off indicator light, interconnecting wiring and power sources.

If either of the following conditions occurs, this indicates a malfunction somewhere in the components monitored by the warning light system. Contact your Toyota 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 or flashes while driving.

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

(i) "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 anti–lock brake system, the brake assist system, the vehicle stability control system and/or active traction 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 Toyota 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 Toyota 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 “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.

(j) Open Door Warning Light

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

(k) 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”, or the vehicle can move.

(l) 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 Toyota dealer or qualified repair shop for assistance.

NOTICE

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

(m) Vehicle Stability Control System and Active Traction Control System Warning Light

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

If the “VSC/TRAC” warning light and “VSC OFF” indicator light come on, have your vehicle checked by Toyota dealer as soon as possible. However, it is no problem that the “VSC/TRAC” warning light comes on when the brake actuator temperature becomes high. (For details, see “Active traction control system” on page 145.)

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

The lights may come on for 60 seconds after the ignition key is turned to “ON” position. It is normal if they go out after a while.

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

When the “VSC/TRAC” warning light and “VSC OFF” indicator light come on, the vehicle stability control system and/or active traction control system are not operating, but there is no problem if you continue to drive.

(n) Key Reminder Buzzer

This buzzer reminds you to remove the key when you open the driver’s door with the ignition key in the “ACC” or “LOCK” position.

CHECKING SERVICE REMINDER INDICATORS (except the low fuel level warning light)

1. Apply the parking brake.
2. Open one of the side doors or back door.
   The open door warning light should come on.
3. Close the door.
   The open door warning light should go off.
4. Place the four–wheel drive control lever in “N” position and the selector lever in “P” position.
5. Turn the ignition key to “ON”, but do not start the engine.
   All the service reminder indicators except the open door warning light should come on. The “ABS”, “VSC/TRAC”, “VSC OFF”, “TRAC”, and slip indicator light go off after a few seconds. The SRS warning light goes off after about 6 seconds.

   There may be the case that the “ABS”, “VSC/TRAC” and “VSC OFF” stay on for about 60 seconds after the ignition key is turned to “ON” position. It is normal if they go out after a while.

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

Trip information display

The following information is shown with the ignition key turned on. Each time you push the “MODE” button, the displayed information is changed.

- Average vehicle speed
- Driving distance after engine starting
- Available driving range
- Average fuel consumption after refueling
- Current fuel consumption

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

- **Average vehicle speed**

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

The displayed value is updated every 10 seconds.

To begin recalculating, push the “RESET” button for about 1 second.

- **Driving distance after engine starting**

The driving distance after engine starting is displayed.

To begin recalculating, push the “RESET” button for about 1 second.

- **Available driving range**

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

- **Average fuel consumption after refueling**

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

The value is updated every 10 seconds.

When refueling, be sure to stop your vehicle and turn the ignition key off.

- **Current fuel consumption**

The current fuel consumption is calculated and displayed based on the driving distance and the fuel consumption per 2 second interval with the engine running.

The value is updated every 2 seconds.

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

SECTION 1 – 7

OPERATION OF INSTRUMENTS AND CONTROLS

Ignition switch, Transmission and Parking brake

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Ignition switch with steering lock

“START”—Starter motor on. The key will return to the “ON” position when released.

For starting tips, see page 230.

It is not a malfunction even if the needle of the tachometer, fuel gauge, engine coolant temperature gauge, engine oil pressure gauge or voltmeter returns to bottom position when the ignition switch is turned to the “START” position.

“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 key can be removed only at this position.

To turn the key from “ACC” to the “LOCK” position, you must put the selector lever in the “P” position.

Once you remove the key, the engine immobilizer system is automatically set. (See “Engine immobilizer system” on page 12.)

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.

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.

Automatic transmission

★ Shift while pressing the brake pedal. (Ignition switch must be in the "ON" position)

Selector lever position

P: Parking, engine starting and key removal position
R: Reverse position
N: Neutral position
D: Normal driving position (Shifting into overdrive position)
4: Position for engine braking (Shifting into overdrive not possible)◆
3,2: Position for more powerful engine braking
L: Position for maximum engine braking

▶ The shift position is displayed on the instrument cluster

Driving pattern selector button for selecting a driving pattern suited to existing driving conditions

"PWR" (power) mode for powerful acceleration
This indicator lights on the instrument panel

Normal mode for general driving condition

Second start mode selector button for selecting either second start mode or normal driving mode

Second start mode
This indicator lights on the instrument panel in the second start mode

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◆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 ways to decrease the vehicle speed, see "Cruise control" on page 142.

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.

(a) Normal driving

1. Start the engine as instructed in “How to start the engine” on page 230. The transmission must be in “P” or “N”.
2. With your foot holding down the brake pedal, shift the selector lever to “D”.

When the lever is in the “D” position, the automatic transmission system will select the most suitable gear for running conditions such as normal cruising, hill climbing, hard towing, etc.

Always use the “D” position for better fuel economy and quieter driving. If the engine coolant temperature is low, the transmission will not shift into the overdrive gear even in the “D” position.

⚠ 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.

(b) Using engine braking

To use engine braking, you can downshift the transmission as follows:

- Shift into the “4” position. The transmission will downshift to fourth gear and engine braking will be enabled.
- Shift into the “3” position. The transmission will downshift to third gear when the vehicle speed drops down to or lower than following speed for third gear, and more powerful engine braking will be enabled.

  Four–wheel drive control lever in “H” . . . . . 124 km/h (77 mph)

  Four–wheel drive control lever in “L” . . . . . 49 km/h (31 mph)
- Shift into the “2” position. The transmission will downshift to second gear when the vehicle speed drops down to or lower than following speed for second gear, and more powerful engine braking will be enabled.

  Four–wheel drive control lever in “H” . . . . . 83 km/h (52 mph)

  Four–wheel drive control lever in “L” . . . . . 33 km/h (21 mph)
- Shift into the “L” position. The transmission will downshift to first gear when the vehicle speed drops down to or lower than following speed for “L” position and maximum engine braking will be enabled.

  Four–wheel drive control lever in “H” . . . . . 43 km/h (27 mph)

  Four–wheel drive control lever in “L” . . . . . 17 km/h (11 mph)

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 ways to decrease the vehicle speed, see “Cruise control” on page 142.

⚠ CAUTION

Be careful when downshifting on a slippery surface. Abrupt shifting could cause the vehicle to spin or skid.

(c) Using “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” and “2”, the vehicle will start in first gear and automatically shift to third or second gear.

With the selector lever in “L”, the transmission is engaged in first gear.

NOTICE

◆***Be careful not to over-rev the engine. Watch the tachometer to keep engine rpm from going into the red zone. The approximate maximum allowable speed for each position is given below for your reference:***

Transmission	*km/h (mph)* *Transfer* *L*	*H*
4	*67 (42)*	*165 (102)*
3	*48 (30)*	*118 (73)*
2	*33 (20)*	*81 (50)*
L	*19 (12)*	*47 (29)*

◆***Do not continue hill climbing or hard towing for a long time in the “3”, “2” or “L” position. This may cause severe automatic transmission damage from overheating. To prevent such damage, “4” position should be used in hill climbing or hard towing.***

(d) Backing up

1. Bring the vehicle to a complete stop.
2. With the brake pedal held down with your foot, shift the selector lever to the “R” position.

NOTICE

Never shift into reverse while the vehicle is moving.

(e) Parking

1. Bring the vehicle to a complete stop.
2. Pull the parking brake lever up fully to securely apply the parking brake.
3. With the brake pedal pressed down, shift the selector lever to the “P” position.

If the four–wheel drive control is in the “N” position while the selector lever is in the “P” position, the transmission will damage and the wheels will not lock.

⚠ CAUTION

While the vehicle is moving, never attempt to move the selector lever into “P” position 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 fourth gear 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 immediately afterward.
- When towing a trailer, in order to maintain engine braking efficiency, do not use overdrive.

⚠ CAUTION

Always keep your foot on the brake pedal while stopped with the engine running. This prevents the vehicle from creeping.

NOTICE

Always use the brake pedal or the parking brake to hold the vehicle on an upgrade. Do not attempt to hold the vehicle using the accelerator pedal, as this can cause the transmission to overheat.

(g) Driving in “PWR” (Power) mode

In the “PWR” mode, the transmission is shifted up and down at a higher vehicle speed than in the Normal mode and a more powerful acceleration is achieved. To set the “PWR” mode, push in the driving pattern selector button. The “PWR” mode indicator light comes on.

For ordinary driving, Toyota recommends using the Normal mode to improve fuel economy.

(h) If you cannot shift the selector lever out of “P” position

If you cannot shift the selector lever from the “P” position 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 266.

(i) Driving in “2nd STRT” (second start) mode

In the “2nd STRT” (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 “2nd STRT” mode, push the “2nd” button. In the “2nd STRT” mode, the “2nd STRT” indicator light comes on.

The “PWR” mode is automatically cancelled when you push the “2nd” button.

Four–wheel drive system— (a) Four–wheel drive control

Use the four–wheel drive control lever and center differential lock button to select the 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 button 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.

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 button 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 button 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 button 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 button 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 un–locked) mode. Also, using this mode when driving down steep off–road inclines will help contribute to increased vehicle stability.

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.

If the indicator light does not go off when you push out the center differential lock button, drive straight ahead while accelerating or decelerating, or drive in reverse.

See “(b) Shifting procedure” for further instructions.

Advice for driving on slippery roads in “L” (low speed position) mode

If you shift the four–wheel drive control lever to “L” and the automatic transmission lever to “2” when you drive in steep off–road areas, the output of the brake can be controlled effectively by the active traction control system, which assists the driver to control the driving power of 4 wheels.

Use the “L” position of the automatic transmission lever for maximum power and traction when your wheels get stuck or when you drive down a steep incline. In the following cases, the output of the brake can be controlled by the active traction control system if the engine speed is under 3,000 rpm (normally engine speed is under 3,000 rpm when the wheels get unstuck).

- The four–wheel drive control lever in the “L” position and the automatic transmission lever in the “L” position or the automatic transmission lever in the “D”, “4”, “3” or “2” with the transmission downshifting to the first gear

- The four–wheel drive control lever in the “L” position and the automatic transmission lever in the “R” position

(As for the automatic transmission lever positions, see “Automatic transmission” on page 135.)

(b) Shifting procedure

SHIFTING BETWEEN “H” (UNLOCKED) AND “H” (LOCKED)

To shift between unlock and lock modes in “H”, push the center differential lock button.

SHIFTING BETWEEN “L” (UNLOCKED) AND “L” (LOCKED)

To shift between unlock and lock modes in “L”, push the center differential lock button.

SHIFTING 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. Wait until the wheels have stopped slipping or spinning before shifting.

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 button 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.

Parking brake

When parking, firmly apply the parking brake to avoid inadvertent creeping.

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 (3).

To remind you that the parking brake is set, the parking brake reminder light in the instrument panel remains on until you release the parking brake.

⚠ CAUTION

Before driving, be sure the parking brake is fully released and the parking brake reminder light is off.

Cruise control

The cruise control allows you to cruise the vehicle at a desired speed over about 40 km/h (25 mph) even with your foot off the accelerator pedal.

Your cruising speed can be maintained within the limits of engine performance, although a slight speed change may occur when driving up or down the grades. On steeper hills, a greater speed change will occur so it is better to drive without the cruise control.

When the cruise control is on, the driving pattern of the automatic transmission is fixed in the normal position, regardless of the position of the driving pattern selector switch.

⚠ CAUTION

- **To help maintain maximum control of your vehicle, do not use the cruise control when driving in heavy or varying traffic, or on slippery (rainy, icy or snow—covered) or winding roads.**
- **Avoid vehicle speed increases when driving downhill. If the vehicle speed is too fast in relation to the cruise control set speed, cancel the cruise control then downshift the transmission to use engine braking to slow down.**

TURNING THE SYSTEM ON

To operate the cruise control, push the "ON·OFF" switch. This turns the system on. The indicator light in the instrument panel shows that you can now set the vehicle at a desired cruising speed. Another push on the switch will turn the system completely off.

⚠ CAUTION

To avoid accidental cruise control engagement, keep the "ON·OFF" button off when not using the cruise control.

SETTING AT A DESIRED SPEED

The transmission must be in "D" or "4" before you set the cruise control speed.

Bring your vehicle to the desired speed, push the lever down in the "– SET" direction and release it. This sets the vehicle at that speed.

If the speed is not satisfactory, tap the lever up for a faster speed, or tap it down for a slower speed. Each tap changes the set speed by 1.6 km/h (1.0 mph). You can now 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 it, the vehicle will return to the speed set prior to the acceleration.

CANCELLING THE PRESET SPEED

You can cancel the preset speed by:

a. Pulling the control lever in the "CANCEL" direction and releasing it.

b. Depressing the brake pedal.

c. Pushing the "CRUISE ON–OFF" switch.

If the vehicle speed falls below about 40 km/h (25 mph), the preset speed will automatically cancel out.

If the vehicle speed drops 16 km/h (10 mph) below the preset speed, the preset speed will also automatically cancel out.

If the preset speed automatically cancels out for other than the above cases, have your vehicle checked by your Toyota dealer at the earliest opportunity.

RESETTING TO A FASTER SPEED

Push the lever up in the "+ RES" direction and hold it. Release the lever when the desired speed is attained. While the lever is held up, the vehicle will gradually gain speed.

However, a faster way to reset is to accelerate the vehicle and then push the control lever down in the "– SET" direction.

RESETTING TO A SLOWER SPEED

Push the lever down in the "– SET" direction and hold it. Release the lever when the desired speed is attained. While the lever is held down, the vehicle speed will gradually decrease.

However, a faster way to reset is to depress the brake pedal and then push the control lever down in the "– SET" direction.

Even if you downshift the transmission from the "D" position to "4" with the cruise control on, engine braking will not be 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.

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.

However, once the vehicle speed falls below about 40 km/h (25 mph), the preset speed will not be resumed.

CRUISE CONTROL FAILURE WARNING

If the "CRUISE" indicator light in the instrument cluster flashes when using the cruise control, press the "ON·OFF" button to turn the system off and then press it again to turn it on.

If any of the following conditions then occurs, there is some trouble in the cruise control system.

- 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 Toyota dealer and have your vehicle inspected.

Active traction control system

Active traction control system indicator light

The active traction control system automatically helps control the spinning of 4 wheels which may occur when accelerating on slippery road surfaces, by controlling the output of the brake and engine. Thus, the system assists driver to control the driving power of 4 wheels. When you turn the ignition switch on, the active traction control system always turns on automatically, and the active traction control indicator light will come on. The indicator light will go off after a few seconds.

When active traction control is applied, the active traction control system indicator light blinks.

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, and does not indicate malfunction. When the active traction control system is operating, you may feel vibration or hear noise of your vehicle, caused by operation of the brakes. This indicates the system is functioning properly.

When getting the vehicle out of mud or new snow, etc. the active traction control system will help operate to prevent the wheels from spinning.

Active traction control system failure warning

This light warns when there is a problem somewhere in the active traction control system.

If the “VSC/TRAC” warning light comes on, have your vehicle checked by your Toyota dealer as soon as possible.

The brake actuator temperature increases during the active traction control system or vehicle stability control system operating. If the brake actuator temperature becomes too high while the active traction control system or vehicle stability control system 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 "VSC/TRAC" warning 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 "VSC/TRAC" warning light goes off if the accelerator pedal is released.

When the "ABS" warning light come on, the active traction control system is not operating.

The "VSC/TRAC" warning light will come on when the ignition key is turned "ON", and will go off after a few seconds.

The "VSC/TRAC" warning light may stay on for 60 seconds after the ignition key is turned to "ON" position. It is normal if it goes off after a few seconds.

Depressing the brake pedal repeatedly may turn on the "VSC/TRAC" warning light. It is normal if it goes off after a few seconds.

When the "VSC/TRAC" warning light comes on the active traction control system is not operating, but there is no problem if you continue to drive.

In the following cases, contact your Toyota dealer:

- The "VSC/TRAC" warning light does not come on after the ignition key is turned "ON".
- The "VSC/TRAC" remains on after the ignition key is turned "ON".

⚠ CAUTION

Under certain slippery road conditions, full traction of the vehicles and power to 4 wheels may not be maintained, even though the active traction control system is in operation. Do not drive the vehicle under any speed or maneuvering conditions which will cause the vehicle to lose traction. 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 road conditions present.

Vehicle stability control system

The vehicle stability control system helps provide integrated control of the systems such as anti–lock brake, traction control, engine control, etc. This system automatically controls the output of the brakes or engine to help prevent the vehicle from skidding under adverse conditions.

The system activates when the vehicle speed is about more than 15 km/h (9 mph).

You may hear a sound in the engine compartment for a few seconds when the engine is started or just after the vehicle begins to move. This means that the vehicle stability control system is in the self–check mode and does not indicate a malfunction.

⚠ CAUTION

- **Active traction control system, vehicle stability control system and anti–lock brake system are electronic systems designed to help the driver maintain control under adverse conditions. They are not a substitute for safe driving practices. Factors including speed, road conditions and driver steering input can all affect whether active traction control system, vehicle stability control system and anti–lock brake system will be effective in preventing a loss of control. Always keep safety driving in mind. If the slip indicator light flashes, sounding an alarm, special care should be taken while driving.**

- **Only use tires of specified size. The size, manufacturer, brand and tread pattern for all 4 tires should be the same. If you use the tires other than specified, or different type or size, the vehicle stability control system may not function correctly. When replacing the tires or wheels, contact your Toyota dealer. (See "Checking and replacing tires" on page 296.)**

If the vehicle is going to skid during driving, the slip indicator light flashes and an alarm sounds intermittently.

When you turn the ignition switch on, the slip indicator light will come on. The slip indicator light will go off after a few seconds.

Pushing the center differential lock button automatically turns the vehicle stability control system off. At this time, the “VSC OFF” indicator comes on with the center differential lock indicator light. (For details, see “Four–wheel drive system—(a)Four–wheel drive control” on page 139.)

Vehicle stability control system failure warning

These lights warn when there is a problem somewhere in the vehicle stability control system or active traction control system.

If the “VSC/TRAC” warning light and “VSC OFF” indicator light come on, have your vehicle checked by your Toyota dealer as soon as possible. However, there is no problem if the “VSC/TRAC” warning light comes on when the brake actuator temperature becomes high. (For details, see “Active traction control system” on page 145.)

When the “ABS” warning light comes on, the vehicle stability control system is not operating.

The “VSC/TRAC” warning light and “VSC OFF” indicator light will come on when the ignition key is turned “ON”, and will go off after a few seconds.

The “VSC/TRAC” warning light and “VSC OFF” indicator light may stay on for 60 seconds after the ignition key is turned to “ON” position. It is normal if they go off after a few seconds.

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

When the “VSC/TRAC” warning light and “VSC OFF” indicator light come on, the vehicle stability control system is not operating, but there is no problem if you continue to drive.

In the following cases, contact your Toyota dealer:

- The “VSC/TRAC” warning light, “VSC OFF” indicator light and slip indicator light do not come on after the ignition key is turned “ON”.
- The “VSC/TRAC” warning light and “VSC OFF” indicator light remain on after the ignition key is turned “ON”.
- The “VSC OFF” indicator light comes on while driving without pushing the center differential lock switch.

SECTION 1 – 8

OPERATION OF INSTRUMENTS AND CONTROLS

Car audio system

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For vehicle equipped with Navigation system, please refer to the separate ”Navigation System Owner’s Manual”.

AM·FM radio/cassette player/compact disc changer controller/compact disc player with changer

Using your audio system——some basics

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

Your audio system works when the ignition key is in the “ACC” or “ON” position.

TURNING THE SYSTEM ON AND OFF

Push “PWR·VOL” to turn the audio system on and off.

Push “AM”, “FM”, “TAPE” or “DISC” to turn on that function without pushing “PWR·VOL”.

You can turn on each player by inserting a cassette tape or compact disc.

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

SWITCHING BETWEEN FUNCTIONS

Push “AM”, “FM”, “TAPE” or “DISC” if the system is already on but you want to switch from one function to another.

TONE AND BALANCE

For details about your system’s tone and balance controls, see the description of your own system.

Tone

How good an audio program sounds to you is largely determined by the mix of the treble, midrange, and bass levels. In fact, different kinds of music and vocal programs usually sound better with different mixes of treble, midrange, and bass.

Balance

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.

YOUR RADIO ANTENNA

Lowering the antenna

The antenna automatically extends when the radio is on, and retracts when the radio mode is off. However, even if you turn off the radio when the radio on the rear seat audio system is on, the antenna does not retract. To lower a power antenna, push the "∨" (down) switch. Also, the antenna automatically goes down when the radio mode is switched off to turn on the cassette tape player or compact disc player, turning off the audio system by pushing "PWR·VOL" or turning the ignition key to "LOCK" position.

Some models also have an antenna printed on the inside of the right side quarter window.

NOTICE

- ***To prevent damage to the antenna, make sure it is retracted before driving your Toyota through an automatic car wash.***
- ***The antenna mast has to be extended higher than 100 mm (3.94 in.) length when the audio is on. Extend the antenna mast when the radio signal is weak.***
- ***Putting a window tint (especially, conductive or metallic type) on the right–hand rear quarter window may affect the reception of radio or mobile telephone. For the installation of the window tint, consult with your Toyota dealer.***

Adjusting the power antenna

To adjust the antenna height, push the switch.

Confirm that no one is close enough to get pushed before extending the antenna.

Clean the antenna mast periodically with a clean dry cloth.

YOUR CASSETTE PLAYER

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

NOTICE

Do not oil any part of the player and do not insert anything other than cassette tapes into the slot, or the tape player may be damaged.

YOUR COMPACT DISC PLAYER

When you insert a disc, gently push it in with the label side up. (The player will automatically eject a disc if the label side is down.)

The discs set in the player are played continuously, starting with disc number 1. The disc number of the disc currently being played, the track number and the time from the beginning of the program appear on the display.

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

The player will skip any empty disc number.

NOTICE

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

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

—Controls and features

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Details of specific buttons, controls, and features are described in the alphabetical list that follows.

1 2 3 4 5 6 (Preset buttons)

These buttons are used to preset and tune in radio stations.

To preset a station to a button: Tune in the desired station (see "AUDIO–TUNE" knob or "SEEK" button). Push and hold down the button until you hear a beep—this will set the station to the button. The button number will appear on the display.

To tune in to a preset station: Push the button for the station you want. The button number and station frequency will appear on the display.

These systems can store one AM and two FM stations for each button (The display will show "AM", "FM1" or "FM2" when you push "AM" "FM").

⏏ (Eject button)

Cassette tape

Push the cassette tape eject button to eject a cassette.

Compact disc

To eject one compact disc only: Push and release the compact disc eject button. If you hold the button too long (if the audio system is on at this time, you hear a beep.), the mechanism will change to the mode for ejecting all the discs loaded in the changer. You can also eject any specific one of the discs loaded in the player as follows:

1. Push either side of the "∨DISC∧" button until the number of the disc you want to eject is displayed.
2. Push and release the compact disc eject button.

To eject all the discs loaded in the player: Push and hold the compact disc eject button (until you hear a beep when the audio system is on). The last compact disc played before pushing the button will be ejected first. If a disc is left in the slot for a long time, the function to eject all the discs will be automatically cancelled.

◀❙▶ (Program)

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

Auto–reverse feature: After the cassette player reaches the end of a tape side, it automatically reverses and begins to play the other side. This is true whether the cassette was playing or fast forwarding.

◀◀/▶▶ (Reverse/Fast forward buttons)

Cassette Player

Push the fast forward button to fast forward a cassette tape. "FF" will appear on the display. Push the reverse button to rewind a tape. "REW" will appear on the display.

To stop the tape while it is fast forwarding, push the fast forward button or "TAPE"; to stop the tape while it is rewinding, push the reverse button or "TAPE".

If a tape side rewinds completely, the cassette player will stop and then play that same side. If a tape fast forwards completely, the cassette player will play the other side of the tape, using the auto–reverse feature.

Compact Disc Player

If you want to fast forward or reverse through a compact disc track, push and hold in the fast forward or reverse button. When you release the button, the compact disc player will resume playing.

AM button

Push “AM” to turn on the radio and select the AM band. “AM” will appear on the display.

If the audio system is off, you can turn on the radio by pushing “AM”. Also, push “AM” to switch from cassette or compact disc operation to radio operation.

AUDIO–TUNE Knob

This knob is used to adjust the tone and balance or to tune the station manually on the radio mode.

Tone and sound balance adjustment function—

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.

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

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

Manual tuning function—

Turn the knob. The radio will step up or down to another frequency.

DISC (Compact Disc) button

Push “DISC” to switch from radio or cassette operation to compact disc operation. If the audio system is off, you can turn on the compact disc player by pushing “DISC”. In both cases, a disc must already be loaded in the player.

When the audio is set into compact disc operation, the display shows the track or, track and disc number currently being played.

If the player or another unit equipped with the player malfunctions, your audio system will display one of the three 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 disc from the player and allow the player to cool down.

If “ERROR 1” appears on the display, it indicates the disc is dirty, damaged or label face down. Clean the disc 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 disc. Set the disc again.

If the malfunction is not rectified, take your vehicle to your Toyota dealer.

DISC ∨∧

By using this button, you can select a disc you wish to listen to.

Push either side of the button until the number of the disc you want to listen to appears on the display.

Dolby® DD B NR*

If you are listening to a tape that was recorded with Dolby® B Noise Reduction, push the "DD" button. The "DD" will appear on the display. Push the button again to turn off Dolby® B NR.

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

*: Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

FM button

Push "FM" to turn on the radio and select the FM band. "FM1" or "FM2" will appear on the display. This system allows you to set six stations in FM1 and six stations in FM2.

If the audio system is off, you can turn on the radio by pushing "FM". Also, push "FM" to switch from cassette or compact disc operation to radio operation.

LOAD button

This button is used to load the compact discs in the compact disc auto changer which is integrated with the radio and cassette player. This compact disc auto changer can store up to 6 discs.

The key must be in the "ACC" or "ON" position.

Loading one compact disc only—

To load one compact disc only, quickly push and release the button. If you hold the button too long (if the audio system is on at this time, you hear a beep.), the mechanism will change to the mode for loading multiple compact discs. After pushing the button, insert a compact disc. At this time, the indicators on both sides of the slot are flashing. After the disc is loaded, the shutter of the slot will close and the indicators will stop flashing.

If no compact disc is inserted, the shutter will close after 15 seconds.

Loading multiple compact discs—

To load multiple compact discs, push and hold (until you hear a beep when the audio system is on). After pushing the button, insert the first compact disc. At this time, the indicators on both sides of the slot are flashing. After the disc is loaded, the shutter of the slot will close and the indicators will stop flashing. After a few seconds, the shutter will automatically open again so the next disc can be inserted. The same process can be applied for loading the rest of the discs.

If no compact disc is inserted, the shutter will close after 15 seconds.

PWR·VOL (Power and Volume) knob

Push “PWR·VOL” to turn the audio system on and off. Turn “PWR·VOL” to adjust the volume.

RAND (Random)

There are two random features—you can either listen to the tracks on all the compact discs in the player in random order, or only listen to the tracks on a specific compact disc in random order.

To randomly play for the tracks on a disc:
Quickly push and release “RAND”. “RAND” will appear on the display. The disc you are listening to will play in random order. If you hear a beep, you held the button too long, and the player will play all the tracks in the player in random order. To turn off the random feature, push this button again.

To randomly play for all the tracks in the player:
Push and hold “RAND” until you hear a beep. “·RAND” will appear on the display and the player will perform all the tracks on all the discs in the player in random order. To turn off the random feature, push this button again.

RDS (Radio Data System) display

The radio will automatically switch to the RDS mode to receive an RDS station while turned to FM broadcasts. “RDS” will appear on the display.

RPT (Repeat)

Cassette Player

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

There must be at least 3 seconds of blank space between tracks in order for the repeat feature to work correctly.

Compact Disc Player

There are two repeat features—You can either replay a disc track or a whole compact disc.

Repeating a track:
Quickly push and release “RPT” while the track is playing. “RPT” will appear on the display. If you hear a beep, you held the button too long, and the player will repeat the whole disc. When the track ends, it will automatically be replayed. This process will be continued until you push the button again to turn off the repeat feature.

Repeating a disc:
Push and hold “RPT” until you hear a beep. “·RPT” will appear on the display. The player will repeat all the tracks on the disc you are listening to. When the disc ends, the player will automatically go back to the first track of the disc and replay. This process will be continued until you push the button again to turn off the repeat feature.

SCAN button

Radio

You can either scan all the frequencies on a band or scan only the preset stations for that band.

To scan the preset stations:
Push and hold “SCAN” until you hear a beep. The radio will tune in the next preset station up the band, stay there for 5 seconds, and then move to the next preset station. To select a station, push “SCAN” again.

To scan all the frequencies:
Quickly push and release “SCAN”. If you hear a beep, you held the button too long, and the radio will scan the preset stations. The radio will find the next station up the station band, stay there for 5 seconds, and then scan again. To select a station, push “SCAN” again.

Compact Disc Player

There are two scan features—you can either scan the tracks on a specific disc or scan the first tracks of all the discs in the player.

Scanning the tracks on a disc:
Quickly push and release “SCAN”. “SCAN” will appear on the display and the player will scan all the tracks on the disc you are listening to. If you hear a beep, you held the button too long, and the player will scan the first track of all the discs in the player. To select a track, push “SCAN” again. If the player scanned all the tracks on the disc, it will stop scanning.

Scanning the first track of all the discs in the player:
Push “SCAN” until you hear a beep. “ ·SCAN” will appear on the display and the player will perform the first track of the next disc. To select a disc, push the “SCAN” again. If the player has scanned all the discs, it will stop scanning.

SEEK TRACK button

Radio

In the seek mode, the radio finds and plays the next station up or down the station band.

To seek a station, quickly push and release the “∧” or “∨”. Do this again to find another station.

Cassette Player

By using this button, you can skip up or down to a different track.

You can skip up to nine tracks at a time.

Push the right or left side of the button. “FF 1” or “REW 1” will appear on the display.

Next, push either side of the “SEEK TRACK” button until the number on the display reaches the number of tracks you want to skip. If you push the button ten times, the skip feature will be turned off.

When counting the number of tracks you want to rewind, remember to count the current track as well. For example, if you want to rewind to a song that is two before the song you are listening to, push on the left side of the button until “REW 3” appears on the display.

If you have pushed the track button more than you wanted to, push the other side of the button. The track number will be reduced.

The track number you select is not valid if it is higher than the number of tracks remaining on the current cassette side.

- After the beginning of the tape is reached, the player will automatically start playing the same side.

- After the end of the tape is reached, the player will automatically reverse sides and start playing the other side.

There must be at least 3 seconds of blank space between tracks for the track button to work correctly. In addition, the feature may not work well with some spoken word, live, or classical recordings.

Compact Disc Player

By using this button, you can skip up or down to a different track.

Push either side of the "SEEK TRACK" button until the number of the track you want to listen to appears on the display. If you want to return to the beginning of the current track, push the left side of the button one time, quickly.

ST (Stereo reception) display

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.

TAPE button

Push "TAPE" to switch from radio or compact disc operation to cassette operation. If the audio system is off, you can turn on the cassette player by pushing "TAPE". In both cases, a cassette must already be loaded in the player.

TEXT button

Radio

This button is operational only in RDS mode.

To display the station name and text message, push this button while "RDS" appears on the display. Each time you push the button, indication on the display will change from the band to the station name to radio text in this order. After 6 seconds passes, indication returns to the band.

If the radio receives a radio text from RDS station, "MSG" appears on the display. Push the 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 button until you hear a beep.

After the entire message has been displayed, the message will disappear.

Compact disc player

This button is used to change the display for the compact disc that contains text data.

To change the display, quickly push and release the "TEXT" button while the compact disc is playing. The display changes in the order from the elapsed time to disc title to track title, then back to the elapsed time.

If this button is pushed while a compact disc that does not contain text data is playing, "NO TITLE" will appear on the display.

If the entire disc or track title does not appear on the display, push and hold the button until you hear a beep. The rest of the title will appear.

TRAF (Traffic announcement function) button

This button turns the traffic announcement (TA) feature on and off. This button is operational only in FM mode.

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

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

TYPE (Program type) button

When you push this 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 “∧”, the program type changes as in the following:

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

With the program type displayed, push the “SEEK/TRACK” or “SCAN” button. You can seek or scan for the station broad casting the same type of program.

Car 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 Compact Disc into the slot.***
- ***The use of a cellular phone inside or near the vehicle may cause a noise from the speakers of the audio system which you are listening to. However, this does not indicate a malfunction.***

RADIO RECEPTION

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

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

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

FM

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

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

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

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

AM

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

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

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

CARING FOR YOUR CASSETTE PLAYER AND TAPES

For the best performance for your cassette player and tapes:

Clean the tape head and other parts regularly.

- A dirty tape head or tape path can decrease sound quality and tangle your cassette tapes. The easiest way to clean them is by using a cleaning tape. (A wet type is recommended.)

Use high–quality cassettes.

- Low–quality cassette tapes can cause many problems, including poor sound, inconsistent playing speed, and constant auto–reversing. They can also get stuck or tangled in the cassette player.
- Do not use a cassette if it has been damaged or tangled or if its label is peeling off.
- Do not leave a cassette in the player if you are not listening to it, especially if it is hot outside.
- Store cassettes in their cases and out of direct sunlight.
- Avoid using cassettes with a total playing time longer than 100 minutes (50 minutes per side). The tape used in these cassettes is thin and could get stuck or tangled in the cassette player.

CARING FOR YOUR COMPACT DISC PLAYER AND DISCS

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

⚠ CAUTION

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

- Use only compact discs marked as shown above. The following products may not be playable on your compact disc player.

  Copy–protected CD
  CD–R (CD–Recordable)
  CD–RW (CD–Re–writable)
  CD–ROM

Special shaped discs

Low quality discs

Labeled discs

NOTICE
To prevent damage to the player or changer, do not use special shaped, low quality or labeled discs such as those shown in the illustrations.

- Handle compact discs 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, scrapes, warping, pin holes, or other disc damage could cause the player to skip or to repeat a section of a track. (To see a pin hole, hold the disc up to the light.)
- Remove discs from the compact disc player when you are not listening to them. Store them in their plastic cases away from moisture, heat, and direct sunlight.

To clean a compact disc: Wipe it with a soft, lint–free cloth that has been dampened with water. Wipe in a straight line from the center to the edge of the disc (not in circles). Dry it with another soft, lint–free cloth. Do not use a conventional record cleaner or anti–static device.

Rear seat audio system

In the rear seat, you can enjoy a different mode from the one used on the front audio system, using headphones.

(a) Turning the system on and off

"ON/SOURCE" button: Use this button to turn system on when the system is off. When the system is turned on, the mode changes by pushing this button.

"OFF" button: Use this button to turn off the system.

"Volume adjusting" knob: Use this knob to adjust the volume.

(b) When the radio mode is selected

" ∨ CH ∧ " button: Push this button to select a station preset on the preset button of the front audio system. Each push of the button changes to the station with higher numbered preset button.

" ∨ TUNE ∧ " button: Push this button for manual tuning or seek tuning.

- Push this button briefly. Each time you push the button, the radio will step up or down to another frequency.
- Push this button and hold it until you hear a beep. The radio will begin seeking up or down for a station, and will stop on reception. Each time you push the button, the stations will be searched automatically one after another.

(c) When the "TAPE" mode is selected

" ∨ PROG ∧ " button: Push this button to select the other side of a cassette tape.

" ∨ TRACK ∧ " button: Push the left or right side to skip forward or backward to locate the song you want to hear. For details, see "SEEK TRACK button" on page 160.

(d) When the "CD" mode is selected

" ∨ DISC ∧ " button: Use this button to search a desired disc.

" ∨ TRACK ∧ " button: Use this button to search a desired track or push this button and hold it to fast forward or reverse.

(e) Some basics

This system cannot be used if the audio system is not turned on.

You cannot select "AM" or "FM" mode in the rear seat if the "FM" or "AM" mode is used on the front seats side.

If you select the same mode as the front seats side, operating the controller will affect the mode on the front seats side.

⚠ CAUTION

This system is not designed for a driver. So, the driver should not use this system while driving.

Audio remote controls (steering switches)

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

"MODE" switch: Use this switch to change the mode. If a tape or compact disc is not inserted, the "TAPE" or "CD" mode is skipped. When you push the switch with the audio system turned off, the audio system turns on.

" 🔈 " switches: Use this switches to adjust the volume. Push "+" to increase the volume and "–" to decrease the volume. The volume continues to increase or decrease while the switch is being pressed.

(a) When the radio mode is selected

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

- To select a preset station, push the switch briefly. Do this again to select the next preset station.
- To seek a station, push and hold the switch until you hear a beep. Do this again to find the next station. If you push the switch on either side of the "∨" or "∧" during the seek mode, seeking will be canceled.
- To step up or down the frequency, push and hold the switch even after you hear a beep. When you release from the switch, the radio will begin seeking up or down for a station. Do this again to find the next station.

(b) When the "TAPE" mode is selected

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

- Push this switch until you hear a beep to fast forward or rewind the tape. To stop fast forwarding or rewinding, push the same side on the switch until you hear a beep.
- Push this switch briefly for automatic program selection. When automatically selecting a program, you can skip up to 9 programs at a time. For details, see "SEEK TRACK button" on page 160.

(c) When the "CD" mode is selected

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

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

⚠ CAUTION

Operate the switches with due care while you are driving to avoid accidents.

SECTION 1 – 9

OPERATION OF INSTRUMENTS AND CONTROLS

Air conditioning system

Front air conditioning system:
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Rear air conditioning system:
Controls 178
Air flow selector settings 180

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

Front air conditioning system— —Controls

1. Temperature selector knob
2. “AUTO” button
3. Temperature display
4. Fan speed display
5. Air flow display
6. “MODE” button
7. “A/C” button
8. Front windshield button
9. Fan speed control button
10. Air intake control button
11. “OFF” button

“AUTO” button

For automatic operation of the air conditioning, press the “AUTO” button. An indicator light will illuminate to show that the automatic operation mode has been selected.

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

You may use manual controls if you want to select your own settings.

To turn off the automatic operation, press the “MODE” or fan speed control button.

Fan speed control button

Push the “∧” (increase) or “∨” (decrease) button to adjust the fan speed.

In automatic operation, you do not have to adjust the fan speed unless you desire another fan speed mode.

Temperature selector knob

To increase the temperature, turn the knob to right side, to decrease it, turn the knob to left side.

“MAX COLD” appears when you adjust to maximum cooling, and “MAX HOT” appears when you adjust to maximum warming.

“OFF” button

Push the button to turn off the air conditioning system.

“MODE” button

Push the button to select the vents used for air flow.

In automatic operation, you do not have to select the air flow unless you desire another air flow mode.

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.

   It is recommended that you close the lower vent. For details about this, see “Instrument panel vents” described below.

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

   It is recommended that you close the lower vent. For details about this, see “Instrument panel vents” described below.

For details about air flow selector settings, see “Air flow selector settings” described below.

Front windshield button

When this button is pressed, air flows mainly from the windshield vents.

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

Pressing the front windshield button turns on the defroster–linked air conditioning. At this time, the “A/C” button indicator comes on when the air intake control is in recirculate mode regardless of whether or not the “A/C” button is pressed in. This is to clean up the front view more quickly.

To turn off the air conditioning alone, press the “A/C” button once again.

When the “A/C” button is not pressed in, pressing “MODE” button turns off the air conditioning.

For details about air flow selector setting, see “Air flow selector settings” described below.

Air intake control button

Press the button to select the air source. An indicator light will illuminate to show which air intake mode is being selected.

1. **Recirculate—**Recirculates the air inside the vehicle.
2. **Fresh—**Draws outside air into the system.

"A/C" button

To turn on the air conditioning, press the "A/C" button. The "A/C" button indicator will come on. To turn the air conditioning off, press the button again.

If the "A/C" button indicator flashes, there is a problem in the air conditioning system and the air conditioning automatically shuts off. If this happens, take your vehicle to a Toyota dealer for service.

—Air flow selector settings

⇨ See “Instrument panel vents” described below.

—Operating tips

- To cool off your Toyota after it has been parked in the hot sun, drive with the windows open for a few minutes. This vents the hot air, allowing the air conditioning to cool the interior more quickly.
- Make sure the air intake grilles in front of the windshield are not blocked (by leaves or snow, for example).
- 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 control button be set to FRESH and the fan speed control button to any setting except “OFF”.
- If following another vehicle on a dusty road, or driving in windy and dusty conditions, it is recommended that the air intake control button be temporarily set to RECIRCULATE, which will close off the outside passage and prevent outside air and dust from entering the vehicle interior.

Heating

For best results, set controls to:

Fan speed—“AUTO”
Temperature—To the desired temperature
Air intake—FRESH (outside air)
Air flow—“AUTO”
Lower vent—CLOSED
Air conditioning—OFF

- For quick heating, select recirculated air for a few minutes. To keep the windows from fogging, select fresh after the vehicle interior has been warmed.
- Press the “A/C” button on for dehumidified heating.
- Choose floor/windshield air flow to heat the vehicle interior while defrosting or defogging the windshield.

Air conditioning

For best results, set controls to:

Fan speed—"AUTO" **Temperature—**To the desired temperature **Air intake—FRESH** (outside air) **Air flow—**"AUTO"

- For quick cooling, select recirculated air for a few minutes.

Ventilation

For best results, set controls to:

Fan speed—"AUTO" **Temperature—**To the desired temperature **Air intake—FRESH** (outside air) **Air flow—**"AUTO" **Air conditioning—OFF**

Defogging

The inside of the windshield

For best results, set controls to:

Temperature—Towards high temperature to heat; low temperature to cool **Air intake—FRESH** (outside air) **Air flow—WINDSHIELD** **Lower vent—CLOSED**

When pressing the front windshield button, the air intake selects "Fresh" automatically. This is to clean up the front view more quickly.

Press 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.

Defrosting

The outside of the windshield

For best results, set controls to:

Temperature—Towards high temperature **Air intake—FRESH** (outside air) **Air flow—WINDSHIELD** **Lower vent—CLOSED**

When pressing the front windshield button, the air intake selects "Fresh" automatically. This is to clean up the front view more quickly.

Press 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.

—Instrument panel vents

Center vents

Lower vent

Side vents

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

For removing frost or fog, it is recommended that you close the lower vent when you use the “Floor”, the “Floor/Windshield” or the “Windshield” mode.

Rear air conditioning system—
—Controls

1. Rear air conditioning on–off switch
2. “AUTO” button
3. Air flow selector
4. Fan speed selector
5. Temperature selector
6. “OFF” button

Rear air conditioning on–off switch

To turn the rear air conditioning on, press the “REAR” switch. To turn the rear air conditioning off, press the switch again.

“AUTO” button

For automatic operation of the rear air conditioning, press the “AUTO” button. An indicator light will illuminate to show that the automatic operation mode has been selected.

In the automatic operation mode, the rear air conditioning selects the most suitable fan speed and air flow according to the temperature.

You may use manual controls if you want to select your own settings.

Fan speed selector

Press the buttons to adjust the fan speed.

In automatic operation, you do not have to adjust the fan speed unless you desire another fan speed mode.

Temperature selector

Move the lever to adjust the temperature—to the right to warm, to the left to cool.

“OFF” button

Push the button to turn off the rear air conditioning system.

Air flow selector

Press one of the buttons to select the vents used for air flow. An indicator light will illuminate to show which air flow mode is being selected.

In automatic operation, you do not have to select the air flow unless you desire another air flow mode.

1. **Panel—**Air flows mainly from the roof vents.
2. **Bi–level—**Air flows from both the floor vents and the roof vents.
3. **Floor—**Air flows mainly from the floor vents.

Air at higher than room temperature does not flow from the roof vents.

Air at lower than room temperature does not flow from the floor vents.

—Air flow selector settings

Warm air
Cool air

SECTION 1 – 10

OPERATION OF INSTRUMENTS AND CONTROLS

Other equipment

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Clock

The digital clock indicates the time.

The key must be in the “ACC” or “ON” position.

To reset the hour: Push the “H” button.
To reset the minutes: Push the “M” button.

If quick adjustment to a full hour is desired, push the “:00” button.

For example, if the “:00” 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 electrical power source has been disconnected from the clock, the time display will automatically be set to 1:00 (one o’clock).

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

Outside temperature display

The outside temperature display indicates the outside air temperature.

The key must be in the “ON” position.

The display indicates between the range of –22°F and 122°F.

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 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 supplement 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 Toyota dealer.**
- **If the temperature changes rapidly, such as when hot water is poured on the vehicle in cold weather, the system may not operate normally.**
- **If the camera lens becomes dirty, it cannot transmit a clear image. If water droplets, snow, or mud adhere to the lens, rinse with water and wipe with a soft cloth. If the lens is extremely dirty, wash it with a mild cleanser and rinse.**
- **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.**

When replacing the tires, please consult your Toyota dealer. If you replace the tires, the area displayed on the screen may change.

AREA DISPLAYED ON SCREEN

Image is displayed approximately level on screen.

- **The area detected 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.**

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.

Cigarette lighter and ashtray

CIGARETTE LIGHTER

To use the cigarette lighter, press it in. After it finishes heating up, it automatically pops out ready for use.

If the engine is not running, the key must be in the “ACC” position to use the lighter.

Do not hold the cigarette lighter pressed in.

Use a Toyota genuine cigarette lighter or equivalent for replacement.

ASHTRAY

To use the ashtray, pull it out.

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

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

⚠ CAUTION

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

Power outlets

The power outlets are designed for power supply for car accessories. To use them, open the lids as shown in the following illustrations.

The key must be in the “ACC” or “ON” position to be used.

NOTICE

- ***To prevent the fuse from being blown, do not use the electricity over the total vehicle capacity of 12V/120W (all the outlets together).***
- ***To prevent the battery from being discharged, do not use the power outlets longer than necessary when the engine is not running.***
- ***Close the power outlet lids when the power outlets are not in use. Inserting a foreign object other than plug that fits the outlet, or pouring juice or other liquid into the outlet may cause troubles or short circuits.***

Instrument panel

Rear console box (Vehicles with navigation system)

Rear console box (Vehicles without navigation system)

Luggage compartment

Roll sensing of curtain shield airbags off switch

The roll sensing of curtain shield airbags off switch can turn off the curtain shield airbags and front seat belt pretensioners in a vehicle rollover. This switch should only be used in a situation where the inflation is not desired (such as extreme off–road driving).

When you push the roll sensing of curtain shield airbags off switch for a few seconds with the ignition switch on, the roll sensing of curtain shield airbags 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.

In a severe side impact, the curtain shield airbags on impacted side will inflate even if the roll sensing function is turned off.

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 be back on automatically.

For details, “Front seat belt pretensioners” on page 55 or “SRS side airbags and curtain shield airbags with roll sensing function” on page 65.

⚠ CAUTION

- **Make sure the roll sensing of curtain shield airbags off indicator light is not on.**
- **When the roll sensing of curtain shield airbags off switch is turned on (and the roll sensing of curtain shield airbags off indicator light is on), the curtain shield airbags and front seat belt pretensioners will not inflate in a vehicle rollover and turning off the curtain shield airbags can reduce the occupant protection which your vehicle safety systems can provide to you in certain accidents and increase the likelihood of death or serious injuries.**

Rear console box

To use the rear console box, open as shown in the illustration.

1. For upper box
2. For lower box

Glove box

To use the glove box, do this.

To open: Pull the lever.

With the instrument panel lights on, the glove box light will come on when the glove box is open.

To lock: Insert the master key and turn it clockwise.

⚠ CAUTION

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

Garage door opener

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

(a) Programming the HomeLink®

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. Push and hold down one of the buttons until the indicator corresponding to the selected channel begins to flash.
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 activate the garage door up/down.
4. Repeat steps 1 through 3 for each remaining HomeLink® button to program another rolling code system.

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

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

   Keep the indicator light on the HomeLink® in view while programming.
3. Press and hold the selected HomeLink® button.
4. Continuously press and release (cycle) the hand–held gate/device transmitter button every two seconds until step 5 is complete.
5. When the indicator light on the HomeLink® changes from a slow to a rapid flash after 20 seconds, you can release both buttons.
6. Test the operation of the HomeLink® by pressing the newly programmed button. Check to see if the gate/device operates correctly.
7. Repeat steps 1 through 6 for each remaining HomeLink® button to program another device.

Programming other devices

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

Reprogramming a button

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

(b) Operating the HomeLink®

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

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

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

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

⚠ CAUTION

- **When programming the HomeLink® Universal Transceiver, you may be operating a garage door or other device. Make sure people and objects are out of the way of the garage door or other device to prevent potential harm or damage.**
- **Do not use this HomeLink® Universal Transceiver with any garage door opener that lacks the safety stop and reverse feature as required by federal safety standards. (This includes any garage door opener model manufactured before April 1, 1982.) A garage door opener which cannot detect an object (signaling the door to stop and reverse), does not meet current federal safety standards. Using a garage door opener without these features increases risk of serious injury or death.**

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

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

Auxiliary boxes—

To use the auxiliary boxes, open the lids as shown in the following illustrations.

⚠ CAUTION

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

NOTICE

Auxiliary boxes on the ceiling—In hot weather, inside of the vehicle ceiling becomes very hot. Do not leave anything flammable or deformable such as a lighter, the glasses, etc. inside.

Type A (luggage compartment)

Type C (rear console)

Type B (luggage compartment)

—First–aid kit holder

An auxiliary box is equipped with a band to hold the first–aid kit.

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

Hold the first–aid kit with a band.

Make sure the first–aid kit is securely held.

—Warning reflector holder

An auxiliary box is equipped with a band to hold the warning reflector.

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

Hold the warning reflector kit with a band.

Make sure the warning reflector is securely held.

Cup holders

The cup holder is designed for holding cups or drink–cans securely. To use them, observe the following illustrations.

⚠ CAUTION

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

For front seats

For front seat

For second seats

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

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

To use a cup holder in the console box.

1. Open the console box lid. Pull down the knob so that the cup holder swings down.
2. While holding the console box lid with your hand, push down the cup holder to be secured.

NOTICE

- ***When you use the cup holder in the console box, make sure it is securely locked.***
- ***Do not rest your arm on the cup holder in the console box.***
- ***Wipe up spilt drink at once.***

For third seats (right–hand side)

For third seats (left-hand side)

Card holder

You can store a card in the slot as shown in the illustration.

Tie-down hooks

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

See “Cargo and luggage” on page 224 for precautions when loading luggage.

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

Cargo net hooks

These hooks are designed to hang cargo net.

To hang the cargo net, use the cargo net hooks and rear tie–down hooks.

Although the cargo net itself is not included as an original equipment, these hooks can be used to hang the cargo net.

NOTICE
To prevent damage to the hook, avoid hanging things other than a cargo net on it.

Roof luggage carrier

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

ADJUSTING THE POSITION OF CROSS RAILS:

1. **Turn the upper and side knobs counterclockwise to loosen the cross rails.**

2. **Slide the cross rails to the appropriate position for loading the luggages and turn the side knobs clockwise to tighten the cross rails securely.**

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

NOTICE

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

3. **In order to fix the cross rails to the appropriate length, turn the upper knobs clockwise after tightening all of the side knobs.**

⚠ 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 manufacture's instructions and precautions when installing the attachments or their equivalent.

⚠ 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 "Dimensions and weights" on page 316 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 70 kg (154 lb.) cargo weight on the roof luggage carrier.**

NOTICE

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

Floor mat

Use a floor mat of the correct size.

If the floor carpet and floor mat have a hole, then it is designed for use with a locking clip. Fix the floor mat with locking clip into the hole 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.

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 airbags inflate, those items will be hurled away with great force or the curtain shield airbags may not active correctly. When you hang clothes, hang them on the coat hook directly.

SECTION 2

INFORMATION BEFORE DRIVING YOUR TOYOTA

Information before driving your Toyota

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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 cross-winds. 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.**
- **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.

Your vehicle does not need an elaborate break–in. 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).

Fuel

FUEL TYPE

Your new vehicle must use only unleaded gasoline.

To help prevent gas station mix–ups, your Toyota 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, the emission control system to function improperly, and damage to the engine. 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 gasoline with an octane rating or research octane number lower than stated above will cause persistent heavy knocking. If it is severe, this will lead to engine damage.

If your engine knocks...

If you detect heavy knocking even when using the recommended fuel, or if you hear steady knocking while holding a steady speed on level roads, consult your Toyota 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

Toyota 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.

Toyota recommends the use of cleaner burning gasoline and appropriately blended reformulated gasoline. These types of gasoline provide excellent vehicle performance, reduce vehicle emissions, and improve air quality.

OXYGENATES IN GASOLINE

Toyota 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 Toyota, be sure that it has an octane rating no lower than 87.

Toyota does not recommend the use of gasoline containing methanol.

GASOLINE CONTAINING MMT

Some gasoline contain an octane enhancing additive called MMT (Methylcyclopentadienyl Manganese Tricarbonyl).

Toyota 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 Toyota dealer for service.

GASOLINE QUALITY

In a very few cases, you may experience driveability problems caused by the particular gasoline that you are using. If you continue to have unacceptable driveability, try changing gasoline brands. If that does not rectify your problem, then consult your Toyota dealer.

NOTICE

- ***Do not use gasohol other than stated above. It will cause fuel system damage or vehicle performance problems.***
- ***If drive ability problems are occur (poor hot starting, vaporizing, engine knock, etc.), discontinue the use.***
- ***Take care not to spill gasohol during refueling. Gasohol may cause paint damage.***

FUEL TANK CAPACITY

96 L (25.4 gal., 21.1 Imp. gal.)

Fuel pump shut off system

The fuel pump shut off system stops supplying fuel to the engine when the engine stalls or an airbag inflates upon collision. To restart the engine after the fuel pump shut off system activates, turn the ignition switch to “ACC” or “LOCK” once and start it.

⚠ CAUTION

Inspect the ground under the vehicle before restarting the engine. If you find that liquid has leaked onto the ground, it is the fuel system has been damaged and it is in need of repair. In this case, do not restart the engine.

Operation in foreign countries

If you plan to drive your Toyota in another country...

First, comply with the vehicle registration laws.

Second, confirm the availability of the correct fuel (unleaded and minimum octane number).

Three-way catalytic converter

The three-way catalytic converter is the emission control devices installed in the exhaust system.

Its purpose is to reduce pollutants in the exhaust gas.

⚠ CAUTION

- **Keep people and combustible materials away from the exhaust pipe while the engine is running. The exhaust gas is very hot.**
- **Do not idle or park your vehicle over anything that might burn easily such as grass, leaves, paper or rags.**

NOTICE

A large amount of unburned gases flowing into the three-way catalytic converter may cause it to overheat and create a fire hazard. To prevent this and other damage, observe the following precautions:

- ***Use only unleaded gasoline.***
- ***Do not drive with an extremely low fuel level; running out of fuel could cause the engine to misfire, creating an excessive load on the three-way catalytic converter.***
- ***Do not allow the engine to run at idle speed for more than 20 minutes.***
- ***Avoid racing the engine.***
- ***Do not push-start or pull-start your vehicle.***
- ***Do not turn off the ignition while the vehicle is moving.***
- ***Keep your engine in good running order. Malfunctions in the engine electrical system, 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 Toyota 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 Toyota Maintenance Schedule. For scheduled maintenance information, refer to the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".*

Engine exhaust cautions

⚠ 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 and quarter windows closed while driving. An open or unsealed back door and quarter windows may cause exhaust gases to be drawn into the vehicle.**
- **To allow proper operation of your vehicle's ventilation system, keep the inlet grilles in front of the windshield clear of snow, leaves, or other obstructions.**
- **If you smell exhaust fumes in the vehicle, drive with the windows open and the back door closed. Have the cause immediately located and corrected.**

Facts about engine oil consumption

FUNCTIONS OF ENGINE OIL

Engine oil has the primary functions of lubricating and cooling the inside of the engine, and plays a major role in maintaining the engine in proper working order.

ENGINE OIL CONSUMPTION

It is normal that an engine should consume some engine oil during normal engine operation. The causes of oil consumption in a normal engine are as follows.

- Oil is used to lubricate pistons, piston rings and cylinders. A thin film of oil is left on the cylinder wall when a piston moves downwards in the cylinder. High negative pressure generated when the vehicle is decelerating sucks some of this oil into the combustion chamber. This oil as well as some part of the oil film left on the cylinder wall is burned by the high temperature combustion gases during the combustion process.
- Oil is also used to lubricate the stems of the intake valves. Some of this oil is sucked into the combustion chamber together with the intake air and is burned along with the fuel. High temperature exhaust gases also burn the oil used to lubricate the exhaust valve stems.

The amount of engine oil consumed depends on the viscosity of the oil, the quality of the oil and the conditions the vehicle is driven under.

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, note that the oil may become diluted and make it difficult to judge the true level accurately.

As an example, if a vehicle is used for repeated short trips, and consumes a normal amount of oil, the dipstick may not show any drop in the oil level at all, even after 1000 km (600 miles) or more. This is because the oil is gradually becoming diluted with fuel or moisture, making it appear that the oil level has not changed.

The diluting ingredients evaporate out when the vehicle is then driven at high speeds, as on an expressway, making it appear that oil is excessively consumed after driving at high speeds.

IMPORTANCE OF ENGINE OIL LEVEL CHECK

One of the most important points in proper vehicle maintenance is to keep the engine oil at the optimum level so that oil function will not be impaired. Therefore, it is essential that the oil level be checked regularly. Toyota recommends that the oil level be checked every time you refuel the vehicle.

NOTICE
Failure to check the oil level regularly could lead to serious engine trouble due to insufficient oil.

For detailed information on oil level check, see “Checking the engine oil level” on page 288.

Iridium–tipped 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.

Brake system

BRAKE SYSTEM

This brake system has two 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 sound 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 Toyota dealer.

The brake system warning light may stay on for about 60 seconds after the ignition key is turned to “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 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.

⚠ 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 (with “ABS” warning light)

The anti–lock brake system is designed to automatically help prevent lock–up of the wheels during a sudden braking or braking on slippery road surfaces. This assists in providing 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 body and steering wheel. You may also hear the motor sound in the engine compartment even after the vehicle is stopped.
- At the end of the anti–lock brake system activation, the brake pedal may move a little forward.

⚠ CAUTION

Do not overestimate the anti-lock brake system: Although the anti-lock brake system assists in providing vehicle control, it is still important to drive with all due care and maintain a moderate speed and safe distance from the vehicle in front of you, because there are limits to the vehicle stability and effectiveness of steering wheel operation even with the anti-lock brake system on.

If tire grip performance exceeds its capability, or if hydroplaning occurs during high speed driving in the rain, the anti-lock brake system does not provide vehicle control.

Anti-lock brake system is not designed to shorten the stopping distance: Always drive at a moderate speed and maintain a safe distance from the vehicle in front of you. Compared with vehicles without an anti-lock brake system, your vehicle may require a longer stopping distance in the following cases:

- **Driving on rough, gravel or snow-covered roads.**
- **Driving with tire chains installed.**
- **Driving over the steps such as the joints on the road.**
- **Driving on roads where the road surface is pitted or has other differences in surface height.**

Install all 4 tires of specified size at appropriate pressure: The anti-lock brake system detects vehicle speeds using the speed sensors for respective wheels' turning speeds. The use of tires other than specified may fail to detect the accurate turning speed, resulting in a longer stopping distance.

"ABS" warning light

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.

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 vehicle stability control system and/or active traction 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 Toyota 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 Toyota 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 “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.

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 Toyota dealer perform the bedding–down.

BRAKE ASSIST SYSTEM

When you slam the brakes on, the brake assist system judges as an emergency stop and provides more powerful braking for a driver who cannot hold down the brake pedal firmly.

When you slam the brakes on, more powerful braking will be applied. At this time, you may hear a sound in the engine compartment and feel the vibrations of the brake pedal. This does not indicate a malfunction.

The brake assist system becomes operative after the vehicle has accelerated to a speed in excess of approximately 10 km/h (6 mph). It stops operating when the vehicle decelerates to a speed below approximately 5 km/h (3 mph).

The brake assist system may not work for about 60 seconds after the engine is started.

For an explanation of this system's warning light, see "Service reminder indicators and warning buzzers" on page 122.

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 where replacement is required.

If you hear a squealing or scraping noise while driving, have the brake pads checked and replaced by your Toyota dealer as soon as possible. Expensive rotor damage can result if the pads are not replaced when necessary.

Rear step bumper

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

To get on the rear step bumper, use the shaded area between the arrows in the illustration.

⚠ 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.**

Limited–slip differential

Some Toyotas are equipped with a limited–slip differential. If one of the rear wheels begins to spin, the limited–slip differential is designed to aid traction by automatically transmitting driving force to the other rear wheel. If you are not sure whether your vehicle is equipped with one, you can ask your Toyota dealer.

⚠ 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 Toyota because damage to the limited–slip differential could possibly occur with another tire type.

Your Toyota's identification——Vehicle identification number

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 Toyota. It is used in registering the ownership of your vehicle.

The vehicle identification number (VIN) is also on the Certification Label.

—Engine number

The engine number is stamped on the engine block as shown.

Theft prevention labels

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.

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.

Tire information—
—Tire symbols

This illustration indicates typical tire symbols.

1. **Tire size—**For details, see “Tire size” on page 218.
2. **DOT and Tire Identification Number (TIN)—**For details, see “DOT and Tire Identification Number (TIN)” on page 217.
3. **Tire ply composition and materials—**Plies mean a layer of rubber–coated parallel cords. Cords mean the strands forming the plies in the tire.
4. **Location of tread wear indicators—**For details, see “Checking and replacing tires” on page 296.
5. **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 227.
6. **Radial tires or bias–ply tires—**A radial tire has “RADIAL” on the sidewall. The tire not marked with “RADIAL” is a bias–ply tire.

7. **“TUBELESS” or “TUBE TYPE”—**A tubeless tire does not have a tube inside the tire and air is directly filled in the tire. A tube type tire has a tube inside the tire and the tube maintains the air pressure.
8. **Uniform tire quality grading—**For details, see “Uniform tire quality grading” that follows.
9. **Load limit at maximum cold tire inflation pressure—**For details, see “Checking and replacing tires” on page 296.
10. **Maximum cold tire inflation pressure—**This means the pressure to which a tire may be inflated. For recommended cold tire inflation pressure, see “Tires” on page 320.

—DOT and Tire Identification Number (TIN)

This 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

This 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 inch)
6. Load index (2 digits or 3 digits)
7. Speed symbol (alphabet with one letter)

1. Section width
2. Tire height
3. Wheel diameter

—Name of each section of tire

1. Bead
2. Sidewall
3. Shoulder
4. Tread
5. Belt
6. Inner liner
7. Reinforcing rubber
8. Carcass
9. Rim lines
10. Bead wires
11. Chafer

—Uniform tire quality grading

This information has been prepared in accordance with regulations issued by the National Highway Traffic Safety Administration of the U.S. Department of Transportation. It provides the purchasers and/or prospective purchasers of Toyota vehicles with information on uniform tire quality grading.

Your Toyota dealer will help answer any questions you may have as you read this information.

DOT quality grades—All passenger vehicle tires must conform to Federal Safety Requirements in addition to these grades. Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example: Treadwear 200 Traction AA Temperature A.

Tread wear—The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and a half (1–1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction AA, A, B, C—The traction grades, from highest to lowest, are AA, A, B, and C, and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

Warning: The traction grade assigned to this tire is based on braking (straight ahead) traction tests and does not include cornering (turning) traction.

Temperature A, B, C—The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Warning: The temperature grades for this tire are established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

—Tire related terms

Cold tire inflation pressure	Tire inflation pressure when the vehicle has been parked at least 3 hours or more, or it has not been driven more than 1.5 km or 1 mile under that condition
Maximum inflation pressure	The maximum cold inflation pressure to which a tire may be inflated and shown on the sidewall of the tire
Recommended inflation pressure	Cold tire inflation pressure recommended by a manufacturer
Accessory weight	The combined weight (in excess of those standard items which may be replaced) of automatic transmission, power steering, power brakes, power windows, power seats, radio, and heater, to the extent that these items are available as factory–installed equipment (whether installed or not)
Curb weight	The weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil, and coolant, and, if so equipped, air conditioning and additional weight optional engine
Maximum loaded vehicle weight	The sum of— (a) Curb weight; (b) Accessory weight; (c) Vehicle capacity weight; and (d) Production options weight
Normal occupant weight	68 kg (150 lb.) times the number of occupants specified in the second column of Table 1 that follows
Production options weight	The combined weight of those installed regular production options weighing over 2.3 kg (5 lb.) in excess of those standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim

Vehicle capacity weight (Total load capacity)	The rated cargo and luggage load plus 68 kg (150 lb.) times the vehicle's designated seating capacity
Intended outboard sidewall	(A) The sidewall that contains a whitewall, bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire, or (B) The outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle
Occupant distribution	Distribution of occupants in a vehicle as specified in the third column of Table 1 that follows
Rim	A metal support for a tire or a tire and tube assembly upon which the tire beads are seated
Rim diameter (Wheel diameter)	Nominal diameter of the bead seat
Rim size designation	Rim diameter and width
Rim type designation	The industry of manufacturer's designation for a rim by style or code
Rim width	Nominal distance between rim flanges
Vehicle maximum load on the tire	The load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two
Vehicle normal load on the tire	The load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight (distributed in accordance with Table 1 that follows) and dividing by two
Weather side	The surface area of the rim not covered by the inflated tire

Table 1–Occupant loading and distribution for vehicle normal load for various designated seating capacities

Designated seating capacity, number of occupants	Vehicle normal load, number of occupants	Occupant distribution in a normally loaded vehicle
2 through 4	2	2 in front
5 through 10	3	2 in front, 1 in second seat

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:
545 kg (1200 lb.)
Total load capacity means combined weight of occupants, cargo and luggage. Tongue load is included when trailer towing.

Seating capacity:
Total 8 (Front 2, Rear 6)
Seating capacity means the maximum number of occupants whose weight is supposed to be 68 kg (150 lb.) per person. Depending on the weight of person, the seating capacity given may exceed the total load capacity.

NOTICE

Even if the number of occupants are within the seating capacity, do not exceed the total load capacity.

Towing capacity:
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 or on 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 balanced. Locating the weight as far forward as possible helps maintain the balance.
- For better fuel economy, do not carry unneeded weight.

⚠ CAUTION

- **To prevent cargo and luggage from sliding forward during braking, do not stack anything in the luggage compartment higher than the seatbacks.**
- **Do not place anything on the flattened seat or it may slide forward during braking.**

- **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. Such items may be thrown about and possibly injure people in the vehicle during sudden braking or an accident. Secure all items in a safe place.**
- **Do not drive with objects left on top of the instrument panel. They may interfere with the driver's field of view. Or they may move during sharp vehicle acceleration or turning, and impair the driver's control of the vehicle. In an accident they may injure the vehicle occupants.**

NOTICE

Do not load the vehicle beyond the vehicle capacity weight given in Section 8.

—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 (5x150)=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 235.

EXAMPLE ON YOUR VEHICLE

In case that 2 people with the combined weight of 166 kg (366 lb.) are riding in your vehicle with the total load capacity of 545 kg (1200 lb.), the available amount of cargo and luggage load capacity will be as follows:

545 kg – 166 kg = 379kg.
(1200 lb. – 366 lb. = 834 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:

379 kg – 176 kg = 203 kg.
(834 lb. – 388 lb. = 446 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 224.

⚠ 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.

SEATING CONFIGURATION VARIATION

In case of removing the third seat, it is possible to load as much cargo as the weight of the removed seat.

(Cargo capacity) = (Total load capacity) – (Total weight of occupants) + (weight of the removed third seat)

Third seat weight, kg (lb.):

Right	20 (44)
Left	20 (44)

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 216.

⚠ 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 do not mix tires or wheels of the sizes different from the originally equipped tires and wheels as this could result in loss of control and could cause death or serious injury.**

SECTION 3

STARTING AND DRIVING

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.

How to start the engine– (a) 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.

(b) 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.

(c) Starting the engine

Before starting the engine, be sure to follow the instructions in “(b) 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, turning the ignition key to “START” position, then release it.

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 246.

NOTICE

- ***Do not race a cold engine.***
- ***If the engine becomes difficult to start or stalls frequently, have the engine checked immediately.***

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 Toyota dealer for assistance.

⚠ CAUTION

- **Before driving off, make sure the parking brake is fully released and that the parking brake reminder light is off.**
- **Do not leave your vehicle unattended while the engine is running.**
- **Do not rest your foot on the brake pedal while driving. It can cause dangerous overheating, needless wear, and poor fuel economy.**
- **To drive down a long or steep hill, reduce your speed and downshift. Remember, if you ride the brakes excessively, they may overheat and not work properly.**
- **Be careful when accelerating, upshifting, downshifting or braking on a slippery surface. Sudden acceleration or engine braking could cause the vehicle to spin or skid.**

- **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.**

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.**

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 "Scheduled Maintenance Guide" or "Owner's Manual Supplement".***

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.

See "Checking the engine coolant level" on page 290 for details of coolant type selection.

"Toyota Super Long Life Coolant" is premixed with 50% coolant and 50% deionized water. This coolant provides protection down to about –35°C (–31°F).

NOTICE
Do not use plain water alone.

Check the condition of the battery and cables.

Cold temperatures reduce the capacity of any battery, so it must be in top shape to provide enough power for winter starting. It tells you how to visually inspect the battery on page 304. Your Toyota dealer and most service stations will be pleased to check the level of charge.

Make sure the engine oil viscosity is suitable for the cold weather.

See page 289 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 Toyota dealer–he will be pleased to help.

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 Toyota dealer and most auto parts stores. Follow the manufacturer's directions for how much to mix with water.

NOTICE
Do not use engine antifreeze or any other substitute as washer fluid because it may damage your vehicle's paint.

Do not use your parking brake when there is a possibility it could freeze.

When parking, put the transmission into "P" and block the front wheels. Do not use the parking brake, or snow or water accumulated in and around the parking brake mechanism may freeze, making it hard to release.

Keep ice and snow from accumulating under the fenders.

Ice and snow built up under your fenders can make steering difficult. During bad winter driving, stop and check under the fenders occasionally.

Depending on where you are driving, we recommend you carry some emergency equipment.

Some of the things you might put in the vehicle are tire chains, window scraper, bag of sand or salt, flares, small shovel, jumper cables, etc.

Dinghy towing

Your vehicle is not designed to be dinghy towed (with four wheels on the ground) behind a motorhome.

NOTICE

Do not tow your vehicle with four wheels on the ground. This may cause serious damage to your vehicle.

Trailer towing

Your vehicle is designed primarily as a passenger–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. Ask your local Toyota dealer for further details before towing.

WEIGHT LIMITS

Before towing, make sure the total trailer weight, gross combination 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.

⚠ CAUTION

- **The maximum gross trailer weight (trailer weight plus cargo weight) must never exceed 2948 kg (6500 lb.). If towing a trailer and cargo weighing over 907 kg (2000 lb.), it is necessary 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 5625 kg (12400 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.**

- **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 of weights of the unloaded vehicle, driver, passengers, luggage, hitch and trailer tongue load. It also includes the weight of any special equipment installed on your vehicle.**

- **The load on either the front or rear axle resulting from distribution of the gross vehicle weight on both axles must not exceed the Gross Axle Weight Rating (GAWR) listed on the Certification Label.**

- **The trailer cargo load should be distributed so that the tongue load is 9 to 11% for weight carrying hitch (*1) or 15% for weight distributing hitch (*2) of the total trailer weight, not exceeding the maximum load of the following**
  Weight carrying hitch
  295 kg (650 lb.)
  Weight distributing hitch
  442 kg (975 lb.)

Never load the trailer with more weight in the back than in the front. About 60% of the trailer load should be in the front half of the trailer and the remaining 40% in the rear.

HITCHES

- If you wish to install a trailer hitch, you should consult with your Toyota dealer.
- Use only a hitch recommended by the hitch manufacturer and the one which conforms to the total trailer weight requirement.
- The hitch must be bolted securely to the vehicle frame and installed according to the hitch manufacturer's instructions.
- The hitch ball and king pin should have a light coat of grease.
- Toyota recommends removing the trailer hitch whenever you are not towing a trailer to reduce the possibility of additional damage caused by the hitch if your vehicle is struck from behind. After removing the hitch, seal any mounting holes in the vehicle body to prevent entry of pollutants such as exhaust fumes, dirt, water, etc.

NOTICE

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, if so equipped.

1 Trailer ball load rating
2 Ball diameter
3 Shank length
4 Shank diameter

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 will most likely find stamped on the coupler are:

Trailer Class	Typical Trailer Ball Size
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.
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.

1 Coupler
2 Trailer ball

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.

BRAKES AND SAFETY CHAINS

- **Toyota recommends trailers with brakes that conform to any applicable federal and state/provincial regulations.**
- **A safety chain must always be used between the towing vehicle and the trailer. Leave sufficient slack in the chain for turns. The chain should cross under the trailer tongue to prevent the tongue from dropping to the ground in case it becomes damaged or separated. For correct safety chain procedures, follow the hitch or trailer manufacturer's recommendations.**

⚠ CAUTION

- **If the total trailer weight exceeds 453 kg (1000 lb.), trailer brakes are required.**
- **Never tap into your vehicle's hydraulic system as it would 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 danger of the trailer wandering over into another lane.**

TIRES

- Ensure that your vehicle's tires are properly inflated. Adjust the tire inflation pressure indicated below:

  tire inflation pressure, kPa (psi)
  Front 220 (32)
  Rear 240 (35)

  See Section 7–2 and Section 8 for instructions.
- 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 under body. Your vehicle is fitted with a socket for trailer lights under the rear bumper. 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

- Toyota 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 "Scheduled Maintenance Guide" or "Owner's Manual Supplement".
- Retighten all fixing bolts of the towing ball and bracket after approximately 1000 km (600 miles) of trailer driving.

PRE–TOWING SAFETY CHECK

- Check that your vehicle remains level when a loaded or unloaded trailer is hitched. Do not drive if the vehicle has an abnormal nose–up or nose–down condition, and check for improper tongue load, overload, worn suspension or other possible causes.
- Make sure the trailer cargo is securely loaded so that it cannot shift.

- Check that your rear view mirrors conform to any applicable federal, state/provincial or local regulations. If not, install the rear view mirrors required for towing purpose.

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 operation of the lights and all vehicle–trailer connections. After driving a short distance, stop and recheck the lights and connections. Before actually towing a trailer, practice turning, stopping and backing with a trailer in an area away from traffic until you learn the feel.
- 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 necessity 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.
- 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.
- 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. Steer straight ahead. If you make no extreme correction with the steering or brakes, the vehicle and trailer will stabilize itself.
- 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 engine braking and electrical charging performance, do not use the overdrive. Transmission must be in the “4” position.

- 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 off the road and stop in a safe spot. Refer to "If your vehicle overheats" on page 250.
- Always place wheel blocks under both the vehicle and trailer wheels when parking. Apply the parking brake firmly. Put the transmission in "P". Avoid parking on a slope with a trailer, but if it cannot be avoided, do so only after performing the following:
  1. Apply the brakes and keep them applied.
  2. Have someone place wheel blocks under both the vehicle and trailer wheels.
  3. When the wheel blocks are in place, release your brakes slowly until the blocks absorb the load.
  4. Apply the parking brake firmly.
  5. Shift into "P" and turn off the engine.

When restarting out after parking on a slope:

1. With the transmission in "P" position, start the engine. Be sure to keep the brake pedal depressed.
2. Shift into the "3", "2", "L" or "R" position.
3. Release the parking brake and brake pedal and slowly pull or back away from the wheel blocks. Stop and apply your brakes.
4. Have someone retrieve the blocks.

⚠ CAUTION

- **Do not exceed 72 km/h (45 mph) or the posted towing speed limit, whichever is lower. Because instability (swaying) of a towing vehicle–trailer combination usually increases as the speed increases, exceeding 72 km/h (45 mph) may cause loss of control.**
- **Slow down and downshift before descending steep or long downhill grades. Do not make sudden downshifts.**
- **Avoid holding the brake pedal down too long or too frequently. This could cause the brakes to overheat and result in reduced braking efficiency.**

How to save fuel and make your vehicle last longer, too

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.** Underinflation causes tire wear and wastes fuel. See page on 293.
- **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.
- **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 travelling.
- **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 “Scheduled Maintenance Guide” or “Owner’s Manual Supplement”.)

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.

SECTION 4

IN CASE OF AN EMERGENCY

In case of an emergency

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If your vehicle will not start— (a) Simple checks

Before making these checks, make sure you have followed the correct starting procedure given in "How to start the engine" on page 230 and that you have sufficient fuel. Also check whether the other keys will start the engine. If they work, your key may be broken. Have the key checked at your Toyota dealer. If none of your keys work, there may be a malfunction in the immobilizer system. Call your Toyota dealer. (See "Keys" on page 10.)

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 instructions.

If the light is O.K., but the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop.

NOTICE

Do not pull- or push-start the vehicle. It may damage the vehicle or cause a collision when the engine starts. Also the three-way catalytic converter may overheat and become a fire hazard.

If the engine turns over at its normal speed but will not start—

1. The engine may be flooded because of repeated cranking. See "(b) Starting a flooded engine" for further instructions.
2. If the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop.

(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 Toyota dealer or qualified repair shop for assistance.

(c) Jump starting

To avoid serious personal injury and damage to your vehicle which might result from battery explosion, acid burns, electrical burns, or damaged electronic components, these instructions must be followed precisely.

If you are unsure about how to follow this procedure, we strongly recommend that you seek the help of a competent mechanic or towing service.

⚠ CAUTION

- **Batteries contain sulfuric acid which is poisonous and corrosive. Wear protective safety glasses when jump starting, and avoid spilling acid on your skin, clothing, or vehicle.**
- **If you should accidentally get acid on yourself or in your eyes, remove any contaminated clothing and flush the affected area with water immediately. Then get immediate medical attention. If possible, continue to apply water with a sponge or cloth while en route to the medical office.**
- **The gas normally produced by a battery will explode if a flame or spark is brought near. Use only standardized jumper cables and do not smoke or light a match while jump starting.**

NOTICE

The battery used for boosting must be 12 V. Do not jump start unless you are sure that the booster battery is correct.

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.
2. If required, remove all the vent plugs from the booster and discharged batteries. Lay a cloth over the open vents on the batteries. (This helps reduce the explosion hazard, personal injuries and burns.)
3. If the engine in the vehicle with the booster battery is not running, start it and let it run for a few minutes. During jump starting, run the engine at about 2000 rpm with the accelerator pedal lightly depressed.

4. Make the cable connections in the order a, b, c, d.

   a. Connect the clamp of the positive (red) jumper cable to the positive (⊡) terminal on the discharged battery.

   b. Connect the clamp at the other end of the positive (red) jumper cable to the positive (⊡) terminal on the booster battery.

   c. Connect the clamp of the negative (black) jumper cable to the negative (–) terminal on the booster battery.

   d. Connect the clamp at the other end of the negative (black) jumper cable to a solid, stationary, unpainted, metallic point of the vehicle with the discharged battery.

   The recommended connecting point is shown in the following illustration:

Connecting point

Do not connect the cable to or near any part that moves when the engine is cranked.

⚠ CAUTION

When making the connections, to avoid serious injury, do not lean over the battery or accidentally let the jumper cables or clamps touch anything except the correct battery terminals or the ground.

5. Start your engine in the normal way. After starting, run it at about 2000 rpm for several minutes with the accelerator pedal lightly depressed.
6. Carefully disconnect the cables in the exact reverse order: the negative cable and then the positive cable.
7. Carefully dispose of the battery cover cloths—they may now contain sulfuric acid.
8. If removed, replace all the battery vent plugs.

If the cause of your battery discharging is not apparent (for example, lights left on), you should have it checked at your Toyota dealer.

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. Try starting the engine again.

If the engine will not start, see “If your vehicle will not start” on page 246.

⚠ 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 you cannot increase the engine speed

If the engine speed does not increase when the accelerator pedal is depressed, the electronic throttle control system may be faulty. Move the vehicle to a safe place by means of creeping and call a Toyota dealer for assistance:

1. Depress the brake pedal and shift to the “D” position.
2. Gradually release the brake pedal, and the vehicle starts to move by creeping. After arriving at a safe place, stop the vehicle and call a Toyota dealer for assistance.

⚠ CAUTION

- **The above method of moving the vehicle is for emergency. Use it only for moving minimum distances to a safe place.**
- **Be especially careful to prevent erroneous pedal operation.**

If your vehicle overheats

If your engine coolant temperature gauge indicates overheating, if you experience a loss of power, or if you hear a loud knocking or pinging noise, the engine has probably overheated. You should follow this procedure...

1. Pull safely off the road, stop the vehicle and turn on your emergency flashers. Put the transmission in “P” and apply the parking brake. Turn off the air conditioning if it is being used.
2. If coolant or steam is boiling out of the radiator or reservoir, stop the engine. Wait until the steam subsides before opening the hood. If there is no coolant boiling over or steam, leave the engine running.

⚠ CAUTION

To help avoid personal injury, keep the hood closed until there is no steam. Escaping steam or coolant is a sign of very high pressure.

3. Visually check to see if the engine drive belt (fan belt) is broken or loose. Look for obvious coolant leaks from the radiator, hoses, and under the vehicle. However, note that water draining from the air conditioning is normal if it has been used.

⚠ CAUTION

When the engine is running, keep hands and clothing away from the moving fan and engine drive belts.

4. If the engine drive belt is broken or the coolant is leaking, stop the engine immediately. Call a Toyota dealer for assistance.
5. If the engine drive belt is O.K. and there are no obvious leaks, you may help the engine cool down more quickly by running it at about 1500 rpm for a few minutes with the accelerator pedal lightly depressed.
6. Check the coolant reservoir. If it is dry, add coolant to the reservoir while the engine is running. Fill it about half full.

CAUTION

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.

7. After the engine coolant temperature has cooled to normal, again check the coolant level in the reservoir. If necessary, bring it up to half full again. Serious coolant loss indicates a leak in the system. You should have it checked as soon as possible at your Toyota dealer.

If you have a flat tire—

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place well away from the traffic. Avoid stopping on the center divider of a highway. Park on a level spot with firm ground.
2. Stop the engine and turn on your emergency flashers.
3. Firmly set the parking brake and put the transmission in “P”.
4. Have everyone get out of the vehicle on the side away from traffic.
5. Read the following instructions thoroughly.

CAUTION

When jacking, be sure to observe the following to reduce the possibility of personal injury:

- **Follow jacking instructions.**
- **Do not put any part of your body under the vehicle supported by the jack. Otherwise, personal injury may occur.**
- **Do not start or run the engine while your vehicle is supported by the jack.**
- **Stop the vehicle on a level firm ground, firmly set the parking brake and put the transmission in reverse. 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.

—Required tools and spare tire

1. Get the required tools and spare tire.

1 Tool bag
2 Jack
3 Spare tire

To prepare yourself for an emergency, you should familiarize yourself with the use of the jack, each of the tools and their storage locations.

When storing the jack, put it in place and secure to prevent it from flying forward during a collision or sudden braking.

Turn the jack joint by hand.

To remove: Turn the joint in direction 1 until the jack is free.
To store: Turn the joint in direction 2 until the jack is firmly secured to prevent it flying forward during a collision or sudden braking.

To remove the spare tire under the luggage compartment:

1. Put a jack handle, jack handle extensions and jack handle end together as shown in the illustration.
   1 Jack handle end
   2 Jack handle extension
   3 Jack handle

⚠ CAUTION

Make sure they are each securely fixed with screws.

When connecting a jack handle extension with a jack handle end, use a jack handle to tighten the bolts on the joints as shown in the illustration. When connecting the jack handle with extension, tighten the wing bolt on the joint securely. Make sure the hollow meets the bolt on every joint when you tighten the bolts.

NOTICE

Tighten all the joints securely. Otherwise, the extension may come off and it may damage the paint or vehicle body.

2. Remove the access hole cover on the rear bumper with a flat–bladed screwdriver.

To protect the paint, place several sheets of paper over the paintwork.

3. Insert the jack handle end into the lowering screw through the access hole and turn it counterclockwise with pushing it to the front lightly.

4. After the tire is lowered completely to the ground, remove the holding bracket as shown in the illustration.

When storing the spare tire, put it in place with the outer side of the wheel facing up and hook the holding bracket as shown in the illustration. Then secure the tire, taking care that the tire goes straight up without catching on any other part, to prevent it from moving during a collision or sudden braking.

Check the tire from the side to see that the tire is stored horizontally.

—Blocking the wheel

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.

—Removing wheel ornament

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.

—Loosening wheel nuts

4. Loosen all the wheel nuts.

Always loosen the wheel nuts before raising the vehicle.

Turn the wheel nuts counterclockwise to loosen. To get maximum leverage, fit the wrench to the nut so that the handle is on the right side, as shown above. Grab the wrench near the end of the handle and pull up on the handle. Be careful that the wrench does not slip off the nut.

Do not remove the nuts yet—just unscrew them about one–half turn.

⚠ CAUTION

Never use oil or grease on the bolts or nuts. The nuts may loosen and the wheels may fall off, which could cause a serious accident.

—Positioning the jack

5. Position the jack at the correct jack point as shown.

JACK POINTS:

Front—Under the frame side rail
Left rear—Under the rear axle housing
Right rear—Under the bracket on the rear axle housing

Make sure the jack is positioned on a level and solid place.

Put a jack handle, jack handle extensions, and jack handle end together as shown in the illustration.

1 Jack handle end
2 Jack handle extensions
3 Jack handle

⚠ CAUTION

Make sure they are each securely fixed with screws.

When connecting a jack handle extension with another extension and a jack handle end, use a jack handle to tighten the bolts on the joints as shown in the illustration. When connecting the jack handle with extension, tighten the wing bolt on the jack handle securely. Make sure the hollow meets the bolt on any joint when you tighten the bolts.

NOTICE

Tighten all the joints securely. Otherwise, the extension may come off and it may damage the paint or vehicle body.

—Raising your vehicle

6. **After making sure no one is in the vehicle, raise it high enough so that the spare tire can be installed.**

Remember you will need more ground clearance when putting on the spare tire than when removing the flat tire.

To raise the vehicle, insert the jack handle end into the joint of 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 end. 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.

—Changing wheels

7. Remove the wheel nuts and change tires.

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.

Before putting on wheels, 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.

—Reinstalling wheel nuts

8. Reinstall all the wheel nuts finger tight.

Reinstall the wheel nuts (tapered end inward) and tighten them as much as you can by hand. Press back on the tire and see if you can tighten them more.

CAUTION

- **Never use oil or grease on the bolts or nuts. Doing so may lead to overtightening the nuts and damaging the bolts. The nuts may loosen and the wheels may fall off, which could cause a serious accident. If there is oil or grease on any bolt or nut, clean it.**

—Lowering your vehicle

9. Lower the vehicle completely and tighten the wheel nuts.

Turn the jack handle extension counterclockwise with handle to lower the vehicle, making sure the handle remains firmly fitted onto the jack handle extension.

Use only the wheel nut wrench and turn it clockwise 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 a torque wrench to 131 N·m (13.4 kgf·m, 96.6 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.**

—Reinstalling wheel ornament

10. Reinstall the wheel ornament.

Put the wheel ornament into position. And press hand firmly on one side of wheel ornament and then firmly tap the other side around the edge of wheel ornament with the heel of your hand to snap into place.

⚠ CAUTION

Take due care in handling the ornament to avoid unexpected personal injury.

—After changing wheels

11. Check the air pressure of the replaced tire.

Adjust the air pressure to the specification designated on page 320. If the pressure is lower, drive slowly to the nearest service station and fill to the correct pressure.

Do not forget to reinstall the tire inflation valve cap as dirt and moisture could get into the valve core and possibly cause air leakage. If the cap is missing, have a new one put on as soon as possible.

12. Restow all the tools, jack and flat tire securely.

As soon after changing wheels as possible, tighten the wheel nuts to the torque specified on page 320 with a torque wrench. Have a technician repair the flat tire.

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.

If your vehicle is equipped with the traction control system, turn off the system to become unstuck to allow the tires to spin enough to remove the vehicle from the obstruction. (For details, see "Vehicle stability control system" on page 147.)

⚠ CAUTION

Do not attempt to rock the vehicle free by moving it forward and backward if people or objects are anywhere near the vehicle. During the rocking operation the vehicle may suddenly move forward or backward as it becomes unstuck, causing injury or damage to nearby people or objects.

NOTICE

If you rock your vehicle, observe the following precautions to prevent damage to the transmission and other parts.

- ***Do not depress the accelerator pedal while shifting the selector lever or before the transmission is completely shifted to forward or reverse gear.***
- ***Do not race the engine and avoid spinning the wheels.***
- ***If your vehicle remains stuck after rocking the vehicle several times, consider other ways such as towing.***

If your vehicle needs to be towed—

(a) Towing with wheel lift type truck—

—From front

—From rear

(b) Using flat bed truck

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If towing is necessary, we recommend you have it done by your Toyota dealer or a commercial tow truck service. In consultation with them, have your vehicle towed using either (a) or (b).

Only when you cannot receive a towing service from a Toyota dealer or commercial tow truck service, tow your vehicle carefully in accordance with the instructions given in "—Emergency towing" in this section.

Proper equipment will help ensure that your vehicle is not damaged while being towed. Commercial operators are generally aware of the state/provincial and local laws pertaining to towing.

Your vehicle can be damaged if it is towed incorrectly. Although most operators know the correct procedure, it is possible to make a mistake. To avoid damage to your vehicle, make sure the following precautions are observed. If necessary, show this page to the tow truck driver.

TOWING PRECAUTIONS:

Use a safety chain system for all towing, and abide by the state/provincial and local laws. The wheels and axle on the ground must be in good condition. If they are damaged, use a towing dolly.

(a) Towing with wheel lift type truck

Use a towing dolly under the wheels not lifted by the truck.

(b) Using flat bed truck

(c) Towing with sling type truck

NOTICE
Do not tow with sling type truck, either from the front or rear. This may cause body damage.

—Emergency towing

If towing is necessary, we recommend you to have it done by your Toyota 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 front emergency towing hook.

Use extreme caution when towing the vehicle.

A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard–surfaced roads for a short distance and at low speeds. Also, the wheels, axles, drive train, steering and brakes must all be in good condition.

⚠ CAUTION

Use extreme caution when towing vehicle. Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing hook and towing cable or chain. The hook and towing cable or chain may break and cause serious injury or damage.

NOTICE

- ***Do not use front and rear eyelets. It is not designed for towing.***
- ***Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.***
- ***Never tow a vehicle from the rear with four wheels on the ground. This may cause serious damage to the transmission.***

Before towing, release the parking brake and put the transmission in “N”. Unlock the center differential. The key must be in “ACC” (engine off) or “ON” (engine running).

⚠ CAUTION

If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.

—Emergency towing hook precautions

- Before emergency towing, check that the hook is not broken or damage and that the installation bolts are not loose.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply steady and even force.
- To avoid damaging the hook, do not pull from the side or at a vertical angle. Always pull straight ahead.

⚠ CAUTION

If the emergency towing hook is used to get out when your vehicle becomes struck in 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 hook 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 Toyota 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 vehicles. In addition, keep away from the vehicles and towing cable or chain when towing.

- Remove the sand 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" position. Make sure the parking brake is applied.**
2. **Pry up the cover with a flat–bladed screwdriver or equivalent.**
3. **Insert your finger into the hole to push down the shift lock override button. You can shift out of "P" position only while pushing the button.**
4. **Shift into "N" position.**
5. **Reinstall the cover.**
6. **Start the engine. For your safety, keep the brake pedal depressed.**

Be sure to have the system checked by your Toyota dealer as soon as possible.

If you lose your keys

You can purchase a new key at your Toyota dealer if you can give them the key number and master key.

Even if you lose only one key, contact your Toyota 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 10.

You can use the wireless remote control system with the new key. Contact your Toyota dealer for detailed information.

If your keys are locked in the vehicle and you cannot get a duplicate, many Toyota dealers can still open the door for you, using their special tools. If you must break a window to get in, we suggest breaking the smallest side window because it is the least expensive to replace. Be extremely cautious to avoid cuts from the glass.

SECTION 5

CORROSION PREVENTION AND APPEARANCE CARE

Corrosion prevention and appearance care

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Cleaning the interior 271

Protecting your Toyota from corrosion

Toyota, through its diligent research, design and use of the most advanced technology available, helps prevent corrosion and provides you with the finest quality vehicle construction. Now, it is up to you. Proper care of your Toyota 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.

Care is especially important if you live in particular areas or operate your vehicle under certain environmental conditions:

- Road salt or dust control chemicals will accelerate corrosion, as will the presence of salt in the air near the sea–coast or in areas of industrial pollution.
- High humidity accelerates corrosion especially when temperatures range just above the freezing point.
- Wetness or dampness to certain parts of your vehicle for an extended period of time, may cause corrosion even though other parts of the vehicle may be dry.
- High ambient temperatures can cause corrosion to those components of the vehicle which do not dry quickly due to lack of proper ventilation.

The above signifies the necessity 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.

To help prevent corrosion on your Toyota, follow these guidelines:

Wash your vehicle frequently. It is, of course, necessary to keep your vehicle clean by regular washing, but to prevent corrosion, the following points should be observed:

- 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 your Toyota" on page 269 for more tips.

Check the condition of your vehicle's paint and trim. If you find any chips or scratches in the paint, touch them up immediately to prevent corrosion from starting. If the chips or scratches have gone through the bare metal, have a qualified body shop make the repair.

Check the interior of your vehicle. Water and dirt can accumulate under the floor mats and could cause corrosion. Occasionally check under the mats to make sure the area is dry. Be particularly careful when transporting chemicals, cleansers, fertilizers, salt, etc.; these should be transported in proper containers. If a spill or leak should occur, immediately clean and dry the area.

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 Toyota 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 and it will cause corrosion. Even if your garage is heated, a wet vehicle can corrode if the ventilation is poor.

Washing and waxing your Toyota

Washing your Toyota

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 having coal tar, tree sap, bird droppings and carcass of an insect
- When driving in the areas where there is a lot of smoke, soot, dust, iron dust and chemical substances
- When the vehicle becomes remarkably dirty with dust and mud

Hand–washing your Toyota

Work in the shade and wait until the vehicle body is not hot to the touch.

CAUTION

When cleaning under floor or chassis, be careful not to injure your hands.

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.

Plastic wheel ornaments: The plastic wheel ornaments are damaged easily by organic substances. If any organic substances 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.

Aluminum wheels: Use only a mild soap or neutral detergent.

Plastic bumpers: Wash carefully. Do not scrub with abrasive cleaners. The bumper faces are soft.

Road tar: Remove with turpentine or cleaners that are marked safe for painted surfaces.

NOTICE

Do not use organic substances (gasoline kerosene, benzine or strong solvents) which may be toxic or cause damage.

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.

NOTICE

To prevent damage to the antenna, make sure it is retracted before driving your Toyota through an automatic car wash.

Waxing your Toyota

Polishing and waxing is recommended to maintain the original beauty of your Toyota's 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.

Windshield washer nozzles: Make sure that the nozzles do not become blocked when waxing. If a nozzle becomes blocked, contact your Toyota dealer to have the vehicle serviced.

NOTICE

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

3. Wax the vehicle again when water does not bead but remains on the surface in large patches.

NOTICE

Always remove the plastic bumpers if your vehicle is re–painted and placed in a high heat paint waxing booth. High temperatures could damage the bumpers.

Cleaning the interior

CAUTION

- **Vehicles with side airbags and curtain shield airbags:**

  Be careful not to splash water or spill liquid on the floor. This may prevent the side and curtain shield airbags from activating correctly, resulting in serious injury.
- **Do not wash the vehicle floor with water, or allow water to get onto the floor when cleaning the vehicle interior or exterior. Water may get into audio components or other electrical components above or under the floor carpet (or mat) and cause a malfunction; and it may cause body corrosion.**

Vinyl interior

The vinyl upholstery 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 vinyl. 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 do not come off, repeat the procedure. Commercial foaming–type vinyl cleaners are also available which work well. Follow the manufacturer's instructions.

NOTICE

Do not use solvent, thinner, gasoline or window cleaner on the interior.

Carpets

Use a good foam–type shampoo to clean the carpets.

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.

Seat belts

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

- ***Do not use dye or bleach on the belts—it may weaken them.***
- ***Do not use the belts until they become dry.***

Windows

The windows may be cleaned with any household window cleaner.

NOTICE

When cleaning the inside of the rear window, be careful not to scratch or damage the heater wires or connectors.

Air conditioning control panel, car audio, instrument panel, console panel, and switches

Use a soft damp cloth for cleaning.

Soak a clean soft cloth in water or lukewarm water then lightly wipe off dirt.

NOTICE

- ***Do not use organic substances (solvents, kerosene, alcohol, gasoline, etc.) or alkaline or acidic solutions. These chemicals can cause discoloring, staining or peeling of the surface.***
- ***If you use cleaners or polishing agents, make sure their ingredients do not include the substances mentioned above.***
- ***If you use a liquid car freshener, do not spill the liquid onto the vehicle's interior surfaces. It may contain the ingredients mentioned above. Immediately clean any spill using the method mentioned above.***

Leather Interior

The leather upholstery may be cleaned with neutral detergent for wool.

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.

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.***

If you have any questions about the cleaning of your Toyota, your local Toyota dealer will be pleased to answer them.

SECTION 6

VEHICLE MAINTENANCE AND CARE

Vehicle maintenance and care

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General maintenance 277
Does your vehicle need repairing? 279
Emissions inspection and maintenance (I/M) programs 280

For scheduled maintenance information, please refer to the ”Scheduled Maintenance Guide” or ”Owner’s Manual Supplement”.

Maintenance requirements

Your Toyota vehicle has been designed for fewer maintenance requirements with longer service intervals to save both your time and money. However, each regular maintenance, as well as day–to–day care, is more important than ever before to ensure smooth, trouble–free, safe, and economical driving.

It is the owner's responsibility to make sure the specified maintenance, including general maintenance service, is performed. Note that both the new vehicle and emission control system warranties specify that proper maintenance and care must be performed. See "Owner's Warranty Information Booklet" or "Owner's Manual Supplement" 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 a qualified technician, or if you prefer, your Toyota dealer will be pleased to do them at a nominal cost.

Scheduled maintenance

The scheduled maintenance items listed in the "Scheduled Maintenance Guide" or "Owner's Manual Supplement" are those required to be serviced at regular intervals.

For details of your maintenance schedule, read the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".

It is recommended that only genuine Toyota parts be used for maintenance or for the repair of the emission control system.

The owner may elect to use non–Toyota 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 Warranty Information Booklet" or "Owner's Manual Supplement" for complete warranty information.

Where to go for service?

Toyota 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 learn to work on Toyotas before they work on your vehicle, rather than while they are working on it.

You can be confident that your Toyota dealer's service department performs the best job to meet the maintenance requirements on your vehicle–reliably and economically.

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 Toyota dealer will promptly take care of it. Again, be sure to keep a copy of the repair order for any service performed on your Toyota.

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 7.

If you are a skilled do–it–yourself mechanic, the Toyota service manuals are recommended. Please be aware that do–it–yourself maintenance can affect your warranty coverage. See “Owner’s Warranty Information Booklet” or “Owner’s Manual Supplement” for the details.

General maintenance

Listed below are the general maintenance items that should be performed as frequently as specified. In addition to checking the items listed, if you notice any unusual noise, smell or vibration, you should investigate the cause or take your vehicle to your Toyota dealer or a qualified service shop immediately. It is recommended that any problem you notice be brought to the attention of your dealer or the qualified service shop for their advice.

⚠ CAUTION

Make these checks only with adequate ventilation if you run the engine.

IN THE 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 307 for additional information.

Engine coolant level
Make sure the coolant level is between the “FULL” and “LOW” lines on the see–through reservoir when the engine is cold. See page 290 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 291 for additional information.

Battery electrolyte level
Make sure the electrolyte level of all battery cells is between upper and lower level lines on the case. Add only distilled water when replenishing. See page 304 for additional information.

Brake fluid level
Make sure the brake fluid level is correct. See page 292 for additional information.

Engine oil level
Check the level on the dipstick with the engine turned off and the vehicle parked on a level ground. See page 288 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 293 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 cautions" on page 207.)

INSIDE THE VEHICLE

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 all working. Check headlight aim.

Service reminder indicators and warning buzzers
Check that all service reminder indicators and warning buzzers function properly.

Steering wheel
Be alert for changes in steering condition, such as hard steering or strange noise.

Seats
Check that all front seat controls such as seat adjusters, seatback recliner, etc. operate smoothly and that all latches lock securely in any position. Check that the head restraint move up and down smoothly and that the locks hold securely in any latched position. For folding–down rear seatbacks, swing–up rear seat cushions and detachable third seats, 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 that the pedal has the proper clearance. Check the brake booster function.

Brakes
At 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.

OUTSIDE THE VEHICLE

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 doors and back door operate smoothly and all latches lock securely. Make sure the engine hood secondary latch secures the hood from opening when the primary latch is released.

Tire inflation pressure

Check the pressure with a gauge every two weeks, or at least once a month. See page 293 for additional information.

Tire surface and wheel nuts

Check the tires carefully for cuts, damage or excessive wear. See page 296 for additional information. When checking the tires, make sure no nuts are missing, and 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 “Scheduled Maintenance Guide” or “Owner’s Manual Supplement”.) See page 298 for additional information.

Does your vehicle need repairing?

Be on the alert for changes in performance, sounds, and visual tip–offs that indicate service is needed. Some important clues are as follows:

- 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 tire; 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 floor; vehicle pulls to one side when braking
- Engine coolant temperature continually higher than normal
- Engine continually runs hot; oil pressure gauge stays low

If you notice any of these clues, take your vehicle to your Toyota dealer as soon as possible. It probably needs adjustment or repair.

⚠ CAUTION

Do not continue driving with the vehicle unchecked. It could result in serious vehicle damage and possibly personal injury.

Emissions Inspection and Maintenance (I/M) programs

Some states have vehicle emission inspection programs which include OBD (On–Board Diagnostics) checks.

The OBD system monitors the operation of the emission control system. When the OBD system determines that a problem exists somewhere in the emission control system, the malfunction indicator lamp comes on. In this case, your vehicle may not pass the I/M test and need to be repaired. Contact your Toyota dealer to service the vehicle.

Even if the malfunction indicator lamp does not come on, your vehicle may not pass the I/M test as readiness codes have not been set in the OBD system.

Readiness codes are automatically set during ordinary driving. However, when the battery is disconnected or run down, the codes are erased. Also, depending on your driving habits, the codes may not be completely set.

Also, if the malfunction indicator lamp had come on recently due to temporary malfunction such as a loose fuel tank cap, your vehicle may not pass the I/M test.

The malfunction indicator lamp will go off after taking several driving trips, but the error code in the OBD system will not be cleared unless about 40 trips or more are taken.

If your vehicle does not pass the I/M test even the malfunction indicator lamp does not come on, contact your Toyota dealer to prepare the vehicle for re–testing.

SECTION 7 – 1

DO–IT–YOURSELF MAINTENANCE

Introduction

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Do–it–yourself service precautions 284
Parts and tools 285

Engine compartment overview

1. Engine oil filler cap
2. Brake fluid reservoir
3. Fuse block
4. Battery
5. Windshield and rear window washer fluid tank
6. Engine oil level dipstick
7. Condenser
8. Radiator
9. Engine coolant reservoir
10. Power steering fluid reservoir

Fuse locations

Do–it–yourself service precautions

If you perform maintenance by 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 Toyota Warranty statement for details and suggestions.

This part gives instructions only for those items that are relatively easy for an owner to perform. As explained in Section 6, there are still a number of items that must be done by a qualified technician with special tools.

For information on tools and parts for do–it–yourself maintenance, see “Parts and tools” on page 285.

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 belts. (Removing rings, watches, and ties is advisable.)**
- **Right after driving, the engine compartment—the engine, radiator, exhaust manifold, power steering fluid reservoir and spark plug boots, etc.—will be hot. So be careful not to touch them. Oil, 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 smoke, cause sparks or allow open flames around fuel or the battery. Their fumes are flammable.**
- **Be extremely cautious when working on the battery. It contains poisonous and corrosive sulfuric acid.**
- **Do not get under your vehicle with just the body jack supporting it. Always use automotive jack stands or other solid supports.**
- **Be sure that the ignition is off if you work near the electric cooling fan or radiator grille. With the ignition on, the electric cooling fan will automatically start to run if the air conditioning is on.**
- **Use eye protection whenever you work on or under your vehicle where you may be exposed to flying or falling material, fluid spray, etc.**
- **Used engine oil contains potentially harmful contaminants which may cause skin disorders such as inflammation or skin cancer, so care should be taken to avoid prolonged and repeated contact with it. To remove used engine oil from your skin, wash thoroughly with soap and water.**
- **Do not leave used oil within the reach of children.**
- **Dispose of used oil and filter only in a safe and acceptable manner. Do not dispose of used oil and filter in household trash, in sewers or onto the ground. Call your dealer or a service station for information concerning recycling or disposal.**

NOTICE

- ***Remember that battery and ignition cables carry high currents or voltages. Be careful of accidentally causing a short circuit.***
- ***Add only "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non–silicate, non–amine, non–nitrite and non–borate coolant with long–life hybrid organic acid technology to fill the radiator. And if you spill some of the coolant, be sure to wash it off with water to prevent it from damaging the parts or paint.***
- ***Do not allow dirt or anything else to fall through the plug holes.***
- ***Do not pry the outer electrode of a spark plug against the center electrode.***
- ***Use only spark plugs of the specified type. Using other types will cause engine damage, loss of performance or radio noise.***
- ***Do not reuse iridium–tipped spark plugs by cleaning or regapping.***

- ***Do not overfill automatic transmission fluid, transfer oil and power steering fluid, or the transmission, transfer and power steering could be damaged.***
- ***Do not drive with the air cleaner filter removed, or excessive engine wear could result. Also backfiring could cause a fire in the engine compartment.***
- ***Be careful not to scratch the glass surface with the wiper frame.***
- ***When closing the engine hood, check to see that you have not forgotten any tools, rags, etc.***

Parts and tools

Here is a list of parts and tools you will need to perform do–it–yourself maintenance. Remember all Toyota 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 "Checking the engine oil level" on page 288 for instructions.

Tools:

- Rag or paper towel
- Funnel (only for adding oil)

CHECKING THE ENGINE COOLANT LEVEL

Parts (if level is low):

- "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non–silicate, non–amine, non–nitrite, and non–borate coolant with long–life hybrid organic acid technology.

  "Toyota Super Long Life Coolant" is pre–mixed with 50% coolant and 50% deionized water.

Tools:

- Funnel (only for adding coolant)

CHECKING BRAKE FLUID

Parts (if level is low):

- SAE J1703 or FMVSS No.116 DOT 3 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 FUSES

Parts (if replacement is necessary):

- Fuse with same amperage rating as original

ADDING WASHER FLUID

Parts:

- Water
- Washer fluid containing antifreeze (for winter use)

Tools:

- Funnel

REPLACING LIGHT BULBS

Parts:

- Bulb with same number and wattage rating as original (See charts in “Replacing light bulbs” on page 307.)

Tools:

- Screwdriver

SECTION 7 – 2

DO–IT–YOURSELF MAINTENANCE

Engine and Chassis

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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 true reading, the vehicle should be on a 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. Standing up on the left side of the vehicle, reinsert the dipstick in the direction so that the "ENGINE OIL" on top should be read correctly and push it in as far as it will go, or the reading will not be correct.
4. Pull the dipstick out and look at the oil level while holding a rag under the end.

⚠ CAUTION

Be careful not to touch the hot exhaust manifold.

NOTICE

Be careful not to drop the engine oil on the vehicle components.

If the oil level is below or only slightly above the low level, add engine oil of the same type as already in the engine.

Remove the oil filler cap and add engine oil in small quantities at a time, checking the dipstick. We recommend that you use a funnel when adding the oil.

The approximate quantity of oil needed to fill between the low level and the full level on the dipstick is indicated below for reference.

When the level reaches within the correct range, install the filler cap hand–tight.

Oil quantity, L (qt., Imp. qt.):
1.5 (1.6, 1.3)

NOTICE

- ***Be careful not to spill the 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 filled in your Toyota vehicle. Use Toyota 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

Temperature range anticipated before next oil change

OIL008

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 oil may be used. However, it should be replaced with SAE 5W–30 at the next oil change.

API service symbol

ILSAC certification mark

Oil identification marks

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) designations such as SL. The center portion of the label shows the SAE viscosity grade such as SAE 5W–30. “Energy–Conserving” shown in the lower portion, indicates that the oil has fuel–saving capabilities.

The ILSAC (International Lubricant Standardization and Approval Committee) Certification Mark is displayed on the front of the container.

To ensure excellent lubrication performance for your engine, “Toyota Genuine Motor Oil” is available, which has been specifically tested and approved for all Toyota engines.

Please contact your Toyota dealer for further details about “Toyota Genuine Motor Oil”.

Checking the engine coolant level

Look at the see–through coolant reservoir when the engine is cold. The coolant level is satisfactory if it is between the “FULL” and “LOW” lines on the reservoir. If the level is low, add the coolant. (For the coolant type, see “Coolant type selection” described below.)

The coolant level in the reservoir will vary with engine temperature. However, if the level is on or below the “LOW” line, add coolant. Bring the level up to the “FULL” line.

If the coolant level drops within a short time after replenishing, there may be a leak in the system. Visually check the radiator, hoses, radiator cap and drain cock and water pump.

If you can find no leak, have your Toyota dealer test the cap pressure and check for leaks in the cooling system.

⚠ CAUTION

To prevent burning yourself, do not remove the radiator cap when the engine is hot.

Coolant type selection

Use of improper coolants may damage your engine cooling system.

Only use “Toyota Super Long Life Coolant” or similar high quality ethylene glycol based non–silicate, non–amine, non–nitrite, and non–borate coolant with long–life hybrid organic acid technology. (Coolant with long–life hybrid organic acid technology consists of the combination of low phosphates and organic acids.)

“Toyota Super Long Life Coolant” is premixed with 50% coolant and 50% deionized water. This coolant provides protection down to about –35°C (–31°F).

NOTICE
Do not use plain water alone.

Toyota 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 Toyota vehicles.

Please contact your Toyota dealer for further details.

Checking the radiator and condenser

If any of the above parts are extremely dirty or you are not sure of their condition, take your vehicle to a Toyota dealer.

⚠ CAUTION
To prevent burning yourself, be careful not to touch the radiator or condenser when the engine is hot.

NOTICE
To prevent damage to the radiator and condenser, do not perform the work by yourself.

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 reservoir.

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 refueling, it may indicate a serious mechanical problem.

If the level is low, add SAE J1703 or FMVSS No. 116 DOT 3 brake fluid to the brake reservoir.

Refilling brake fluid:

1. Turn the ignition switch off.
2. Depress the brake pedal more than 40 times.
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.

⚠ CAUTION

Take care when filling the reservoir because brake fluid can harm your eyes and damage painted surfaces. If fluid gets in your eyes, flush your eyes with clean water immediately. If you still feel uncomfortable with your eyes, go to the doctor.

NOTICE

If you spill the fluid, be sure to wipe it off to prevent it from damaging the parts or painting.

Checking power steering fluid

Check the fluid level on the dipstick. 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.

Clean all dirt from outside of the reservoir tank 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 either 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 filler cap, visually check the steering box case, vane pump and hose connections for leaks or damage.

⚠ CAUTION

The reservoir tank may be hot so be careful not to burn yourself.

NOTICE

Avoid overfilling, or the power steering could be damaged.

Checking tire inflation pressure

Keep your tire inflation pressures at the proper level.

The recommended cold tire inflation pressures, tire sizes and the combined weight of occupants and cargo (vehicle capacity weight) are described on page 320 and 316. They are also described on the tire and loading information label as shown.

You should check the tire inflation pressures every two weeks, or at least once a month. And don't forget the spare!

The following instructions for checking tire inflation pressure should be observed:

- **The pressure should be checked only when the tires are cold.** If your vehicle has been parked for at least 3 hours and has not been driven for more than 1.5 km or 1 mile since, you will get an accurate cold tire inflation pressure reading.
- **Always use a tire inflation pressure gauge.** The appearance of a tire can be misleading. Besides, tire inflation pressures that are even just a few pounds off can degrade ride and handling.
- **Do not bleed or reduce tire inflation pressure after driving.** It is normal for the tire inflation pressure to be higher after driving.
- **Never exceed the vehicle capacity weight.** The passenger and luggage weight should be located so that the vehicle is balanced.

INSPECTION AND ADJUSTMENT PROCEDURE

1. Remove the tire valve cap.
2. Press the tip of the tire inflation pressure gauge to the tire valve.
3. Read the pressure using a graduation of the gauge.
4. In case that the tire inflation pressure is not within the prescribed range, insert the compressed air from the valve. In case of applying too much air, press the center of the valve and release the air to adjust.

5. After completing the tire inflation pressure measurement and adjustment, apply soap water to the valve and check the leakage.
6. Install the tire valve cap.

If the gauge and the air pump are not available, have your vehicle checked by your Toyota dealer.

⚠ CAUTION

Be sure to reinstall the tire valve caps. Without the valve caps, dirt or moisture could get into the valve core and cause air leakage. If the caps have been lost, have new ones put on as soon as possible.

Incorrect tire inflation pressure may waste fuel, reduce the comfort of driving, reduce tire life and make your vehicle less safe to drive.

If a tire frequently needs refilling, have it checked by your Toyota 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 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**

Checking and replacing tires

CHECKING YOUR TIRES

Check the tire tread for the tread wear indicators. If the indicators show, replace the tires. The location of the tread wear indicators is shown by the "TWI" or "Δ" marks, etc., molded on the sidewall of each tire.

The tires on your Toyota 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 lower the tread, the higher the risk of skidding.

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 Toyota dealer.

If an air loss occurs while driving, do not continue driving with a deflated tire. Driving even a short distance can damage a tire beyond repair.

Any tires which are over 6 years old must be checked by a qualified technician even if damage is not obvious.

Tires deteriorate with age even if they have never or seldom been used.

This also applies to the spare tire and tires stored for future use.

REPLACING YOUR TIRES

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 greater. As for the maximum load of the tire, see the load limit at maximum cold tire inflation pressure mentioned on the sidewall of the tire, and as for the Gross Axle Weight Ratings (GAWR), see the Certification Label. For details about the sidewall of the tire and the Certification Label, see pages 216 and 214.

⚠ 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.**

Toyota recommends all four tires, or at least both front or rear tires be replaced as a set.

See "If you have a flat tire" on page 251 for tire change procedure.

When a tire is replaced, the wheel should always be balanced.

An unbalanced wheel may affect vehicle handling and tire life. Wheels can get out of balance with regular use and should therefore be balanced occasionally.

When replacing a tubeless tire, the air valve should also be replaced with a new one.

Rotating tires

To equalize tire wear and help extend tire life, Toyota recommends that you rotate your tires according to the maintenance schedule. (For scheduled maintenance information, please refer to the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".) However, the most appropriate timing for tire rotation may vary according to your driving habits and road surface conditions.

See "If you have a flat tire" on page 251 for tire change procedure.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire inflation pressure, improper wheel alignment, out–of–balance wheels, or severe braking.

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 tires provide better traction than snow 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 those mentioned above. 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.

When storing removed tires, you should store them in a cool dry space.

Mark the direction of rotation and be sure to install them in the same direction when replacing.

⚠ CAUTION

- **Do not drive with the snow tires incorrectly inflated.**
- **Never drive over 105 km/h (65 mph) with any type of snow tires.**

TIRE CHAIN SELECTION

Use the tire chains of correct size.

Use the following type chains.

For P275/65R17 113S and P275/60R18 111H tires

	mm (in.)
A Diameter of side chain:	3.5 (0.14)
B Diameter of cross chain:	4.0 (0.16)

Regulations regarding the use of tire chains vary according to location or type of road, so always check the local regulations before installing chains.

NOTICE

If the wrong combination of tire and chain is used, the chains could damage the vehicle body.

CHAIN INSTALLATION

Install the chains on the 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.

If wheel covers are used, they will be scratched by the chain band, so remove the covers before putting on the chains.

⚠ CAUTION

- **Do not exceed 50 km/h (30 mph) or the chain manufacturer's recommended speed limit, whichever is lower.**
- **Drive carefully avoiding bumps, holes, and sharp turns, which may cause the vehicle to bounce.**
- **Avoid sharp turns or locked–wheel braking, as use of chains may adversely affect vehicle handling.**
- **When driving with chains installed, be sure to drive carefully. Slow down before entering curves to avoid losing control of the vehicle. Otherwise an accident may occur.**

Replacing wheels

WHEN TO REPLACE YOUR WHEELS

If you have wheel damage such as bending, cracks or heavy corrosion, the wheel should be replaced.

If you fail to replace a damaged wheel, the tire may slip off the wheel or cause loss of handling control.

WHEEL SELECTION

When replacing wheels, care should be taken to ensure that the wheels are replaced by ones with the same load capacity, diameter, rim width, and offset.

Correct replacement wheels are available at your Toyota 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.

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 structural damage and therefore should not be used. Never use an inner tube in a leaking wheel which is designed for a tubeless tire.

⚠ 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 the Toyota wheel nuts and wrench designed for your aluminum wheels.
- When balancing your wheels, use only Toyota 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.

SECTION 7 – 3

DO-IT-YOURSELF MAINTENANCE

Electrical components

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Checking battery condition——Precautions

⚠ CAUTION

BATTERY PRECAUTIONS

The battery produces flammable and explosive hydrogen gas.

- **Do not cause a spark from the battery with tools.**
- **Do not smoke or light a match near the battery.**

The electrolyte contains poisonous and corrosive sulfuric acid.

- **Avoid contact with eyes, skin or clothes.**
- **Never ingest electrolyte.**
- **Wear protective safety glasses when working near the battery.**
- **Keep children away from the battery.**

EMERGENCY MEASURES

- **If electrolyte gets in your eyes, flush your eyes with clean water immediately and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while en route to the medical office.**
- **If electrolyte gets on your skin, thoroughly wash the contact area. If you feel pain or burning, get medical attention immediately.**
- **If electrolyte gets on your clothes, there is a possibility of its soaking through to your skin, so immediately take off the exposed clothing and follow the procedure above, if necessary.**
- **If you accidentally swallow electrolyte, drink a large quantity of water or milk. Follow with milk of magnesia, beaten raw egg or vegetable oil. Then go immediately for emergency help.**

—Checking battery exterior

Check the battery for corroded or loose terminal connections, cracks, or loose hold–down clamp.

a. If the battery is corroded, wash it off with a solution of warm water and baking soda. Coat the outside of the terminals with grease to prevent further corrosion.

b. If the terminal connections are loose, tighten their clamp nuts—but do not overtighten.

c. Tighten the hold–down clamp only enough to keep the battery firmly in place. Overtightening may damage the battery case.

NOTICE

- ***Be sure the engine and all accessories are off before performing maintenance.***
- ***When checking the battery, remove the ground cable from the negative terminal ("–" mark) 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 terminal is disconnected or the battery is run down, the moon roof may not operate automatically and the jam protection function will not operate correctly after you reconnect, replace or recharge the battery with the moon roof slide–opened or tilted up. In any of these cases, you should return the moon roof to normal. To return the moon roof to normal, see "Electric moon roof" on page 30.

—Checking battery condition

CHECKING BY INDICATOR

Check the battery condition by the indicator color.

Indicator color		Condition
Type A	Type B	
Green	Blue	Good
Dark	White	Charging necessary. Have battery checked by your Toyota dealer.
Clear or light yellow	Red	Have battery checked by your Toyota dealer.

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. Be sure the power switch on the recharger is off when connecting the charger cables to the battery and when disconnecting them.

⚠ CAUTION

- **Always charge the battery in an unconfined area. Do not charge the battery in a garage or closed room where there is not sufficient ventilation.**
- **Only do a slow charge (5 A or less). Charging at a quicker rate is dangerous. The battery may explode, causing personal injuries.**

NOTICE

Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.

Checking and replacing fuses

If the headlights or other electrical components do not work, check the fuses. If any of the fuses are blown, they must be replaced.

See “Fuse locations” on page 283 for locations of the fuses.

Turn the ignition switch and inoperative component off. Pull a suspected fuse straight out and check it.

Determine which fuse may be causing the problem. The lid of the fuse box shows the name of the circuit for each fuse. See page on 321 for the functions controlled by each circuit.

Type A fuses can be pulled out by the pull–out tool. The location of the pull–out tool is shown in the illustration.

If you are not sure whether the fuse has blown, try replacing the suspected fuse with one that you know is good.

If the fuse has blown, push a new fuse into the clip.

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 “RADIO”, “DOME” or “RR A.C” 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 than, but as close as possible to, the rating. 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 clip.

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 Toyota 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.

Adding washer fluid

If any washer does not work, the washer tank may be empty. Add washer fluid.

You may use plain water as washer fluid. However, in cold areas where temperatures range below freezing point, use washer fluid containing antifreeze. This product is available at your Toyota dealer and most auto parts stores. Follow the manufacturer's directions for how much to mix with water.

NOTICE

- ***Do not use engine antifreeze or any other substitute because it may damage your vehicle's paint.***
- ***Do not fill washer fluid over the "NORMAL" level.***

Replacing light bulbs—

The following illustrations show how to gain access to the bulbs. When replacing a bulb, make sure the ignition switch and light switch are off. Use bulbs with the wattage ratings given in the table.

⚠ CAUTION

- **To prevent burning yourself, do not replace the light bulbs while they are hot.**
- **Halogen bulbs have pressurized gas inside and require special handling. They can burst or shatter if scratched or dropped. Hold a bulb only by its plastic or metal case. Do not touch the glass part of a bulb with bare hands.**

NOTICE

Only use a bulb of the listed type.

The inside of the lens of exterior lights such as headlights may temporarily fog up when the lens becomes wet in the rain or in a car wash. This is not a problem because the fogging is caused by the temperature difference between the outside and inside of the lens, just like the windshield fogged 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 Toyota dealer.

Light bulbs	Bulb No.	W	Type
Headlights (high)	9005	60	A
Headlights (low)	9006	51	B
Front turn signal and front side marker lights	1157NA	27/8	C
Front fog lights	9006	51	B
Parking lights	—	5	D

Light bulbs	Bulb No.	W	Type
Rear turn signal lights	7440	21	G
Stop/tail lights	7443	21/5	D
Back–up lights	7440	21	D
License plate lights	—	5	D
Interior lights	—	8	E
Personal lights Type A Type B	 — —	 5 8	 F E
Glove box light	—	1.4	D
Door courtesy lights	—	3	D
Vanity lights	—	1.5	E

A : HB3 halogen bulbs
B : HB4 halogen bulbs
C : Single end bulbs (amber)
D : Wedge base bulbs
E : Double end bulbs
F : Single end bulbs
G : Wedge base bulbs (amber)

—Headlights

1. **Open the hood.**

   LEFT–HAND HEADLIGHT: Remove the washer inlet.

Be careful not to spill the washer fluid over the “NORMAL” level.

Do not place the washer inlet on the engine or battery.

2. Turn the bulb base counterclockwise to the front of the vehicle as shown.

3. Pull the bulb out of the bulb base.

If the connector is tight, wiggle it.

4. Install a new bulb base by turning it clockwise to the front of the vehicle.

LEFT–HAND HEADLIGHT: Install the washer inlet securely.

Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, contact your Toyota dealer.

—Front fog lights

1. Turn the bulb base counterclockwise to the front of the vehicle as shown.

2. Pull the bulb out of the bulb base.

If the connector is tight, wiggle it.

3. Install a new bulb base by turning it clockwise to the front of the vehicle.

Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, contact your Toyota dealer.

—Front turn signal and front side marker lights

Use a Phillips–head screwdriver.

—Parking lights

Use a Phillips–head screwdriver.

—Stop and tail lights

Use a Phillips–head screwdriver.

—Rear turn signal, stop/tail, and back–up lights

Use a flat–bladed screwdriver.

a: Back–up light
b: Rear turn signal light
c: Stop/tail light

—License plate lights

3
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SECTION 8

SPECIFICATIONS

Specifications

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Dimensions and weights

Overall length	mm (in.)	4890	(192.5)
Overall width	mm (in.)	1940	(76.4)
Overall height	mm (in.)	1875	(73.8)*1
Wheelbase	mm (in.)	2850	(112.2)
Front tread	mm (in.)	1620	(63.8)
Rear tread	mm (in.)	1615	(63.6)
Vehicle capacity weight (occupants + luggage)	kg (lb.)	545	(1200)
Towing capacity (trailer weight + cargo weight)	kg (lb.)	2948	(6500)

*1: Unladen vehicle

Engine

Model:
2UZ–FE

Type:
8 cylinder V type, 4 cycle, gasoline

Bore and stroke, mm (in.):
94.0 × 84.0 (3.70 × 3.30)

Displacement, cm^3 (cu. in.):
4664 (284.6)

Fuel

Fuel type:
Unleaded gasoline, 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, L (gal., Imp. gal.):
96 (25.4, 21.1)

Service specifications

ENGINE

Valve clearance (engine cold), mm (in.):

Intake	0.15—0.25 (0.006—0.010)
Exhaust	0.25—0.35 (0.010—0.014)

Spark plug type:

DENSO	SK20R11
NGK	IFR6A11

Spark plug gap, mm (in.):
1.1 (0.043)

ENGINE LUBRICATION

Oil capacity (drain and refill), L (qt., Imp. qt.)

With filter	6.8 (7.2, 6.0)
Without filter	6.4 (6.8, 5.6)

Oil grade:

"Toyota Genuine Motor Oil" is filled in your Toyota vehicle. Use Toyota 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 oil viscosity:
SAE 5W–30

Temperature range anticipated before next oil change

OIL008

Please contact your Toyota dealer for further details.

COOLING SYSTEM

Total capacity, L (qt., Imp. qt.)

Without rear heater	14.7 (15.5, 12.9)
With rear heater	15.4 (16.3, 13.6)

Coolant type:

"Toyota Super Long Life Coolant" is filled in your Toyota 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.

Do not use plain water alone.

Please contact your Toyota dealer for further details.

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.

AUTOMATIC TRANSMISSION

Fluid capacity (drain and refill), L (qt., Imp. qt.)
Up to 3.0 (3.2, 2.6)

Fluid type:
"Toyota Genuine ATF WS"

Change automatic transmission fluid only as necessary.

Generally, it is necessary to change automatic transmission fluid only if your vehicle is driven under one of the Special Operating Conditions listed in your "Scheduled Maintenance Guide" or "Owner's Manual Supplement". When changing the automatic transmission fluid, use only "Toyota Genuine ATF WS" (ATF JWS3324 or NWS9638) to aid in assuring maximum 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.

TRANSFER

Oil capacity, L (qt., Imp. qt.)
1.3 (1.4, 1.1)

Oil type:
Gear oil API GL–4 or GL–5

Recommended oil viscosity:
SAE 75W–90

DIFFERENTIAL

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

Front	1.6 (1.7, 1.4)
Rear	3.3 (3.5, 2.9)

Oil type:
Hypoid gear oil API GL–5

Recommended oil viscosity:
Above –18°C (0°F)
SAE 90
Below –18°C (0°F)
SAE 80W or 80W–90

CHASSIS LUBRICATION

Wheel bearings:
Lithium base wheel bearing grease, NLGI No.2

Front drive shaft thrust bushings:
Synthetic oil and lithium soap base chassis grease, NLGI No.1

Propeller shafts:
Spiders
Lithium base chassis grease, NLGI No.2
Slide yoke
Lithium base chassis grease, NLGI No.2 or Molybdenum—disulfide lithium base chassis grease, NLGI No.2

BRAKES

Minimum pedal clearance when depressed with the force of 490 N (50 kgf, 110 lbf) with the engine running, mm (in.):
116 (4.6)

Pedal free play, mm (in.):
1—6 (0.04—0.24)

Pad wear limit, mm (in.):
1.0 (0.04)

Lining wear limit, mm (in.):
1.0 (0.04)

Parking brake adjustment when pulled with the force of 196 N (20 kgf, 44 lbf):
4—6 clicks

Fluid type:
SAE J1703 or FMVSS No.116 DOT 3

STEERING

Wheel free play:
Less than 40 mm (1.6 in.)

Power steering fluid type:
Automatic transmission fluid DEXRON®II or III

Tires

Tire size and inflation pressure:

kPa (psi)

Tire size	Front		Rear		Wheel size
	Normal driving	Trailer towing	Normal driving	Trailer towing	
P275/65R17 113S	200 (29)	220 (32)	220 (32)	240 (35)	17 × 8JJ
P275/60R18 111H	200 (29)	220 (32)	220 (32)	240 (35)	18 × 8JJ

Wheel nut torque, N·m (kgf·m, ft·lbf): 131 (13.4, 96.6)

NOTE: For a complete information on tires (e.g. replacing tires or replacing wheels), see "Checking tire inflation pressure" on page 293 through "Aluminum wheel precautions" on page 301.

Fuses

Engine compartment

Left side kick panel

Right side kick panel

Fuses

1. **ABS NO.2 40 A:** Anti–lock brake system
2. **ABS NO.1 50 A:** Anti–lock brake system
3. **AHC 50 A:** No circuit
4. **ST1 7.5 A:** Mutiport fuel injection system/ Sequential multiport fuel injection
5. **TOWING 30 A:** Trailer lights
6. **MIR HTR 15 A:** Outside rear view mirror defogger
7. **RR HTR 10 A:** Rear air conditioning system
8. **HAZ–TRN 15 A:** Emergency flashers, Turn signal lights
9. **ALT–S 7.5 A:** Charging system
10. **NV–IR 20 A:** No circuit
11. **FR FOG 15 A:** Fog lights
12. **TOWING BRK 30 A:** Trailer lights
13. **HEAD CLNER 20 A:** Headlight cleaner
14. **FR–IG 10 A:** Charging system
15. **PANEL 7.5 A:** Instrument panel light
16. **TOWING TAIL 30 A:** Trailer lights
17. **TAIL 15 A:** Parking lights, Tail lights
18. **BAT 30 A:** All components in “ECU–B2”
19. **TEL 7.5 A:** No circuit
20. **AMP 30 A:** Audio system
21. **EFI or ECD No.1 25 A:** Multiport fuel injection system/Sequential multiport fuel injection system
22. **AM2 15 A:** All components in “IGN”
23. **ETCS 10 A:** Multiport fuel injection system/Sequential multiport fuel injection system
24. **HORN 10 A:** Horns
25. **HEAD (RH–LWR) 10 A:** Right–hand headlight (low beam)

26. **HEAD (LH–LWR) 10 A:** Left–hand headlight (low beam)
27. **HEAD (RH–UPR) 20 A:** Right–hand headlight (high beam)
28. **HEAD (LH–UPR) 20 A:** Left–hand headlight (high beam)
29. **PWR OUTLET 15 A:** Power outlets
30. **CIG 15 A:** Cigarette lighter
31. **ACC 7.5 A:** Instrument panel light
32. **AM1 7.5 A:** Multiport fuel injection system/Sequential multiport fuel injection system
33. **DEFOG 20 A:** Rear window defogger
34. **AHC–B 15 A:** Active height control suspension (AHC)
35. **FUEL HTR 20 A:** Fuel heater
36. **POWER HTR 7.5 A:** Power heater
37. **AHC–IG 20 A:** Active height control suspension (AHC)
38. **EFI or ECD No.2 10 A:** Emission control system
39. **GAUGE1 10 A:** Gauges and meters
40. **ECU–IG1 10 A:** Multiport fuel injection system/Sequential multiport fuel injection system
41. **ECU–B1 10 A:** Navigation system
42. **DBL LOCK 15 A:** Double lock system
43. **BATT CHARGE 30 A**
44. **A/C 15 A:** Air conditioning system
45. **STOP 15 A:** Stop lights
46. **OBD–2 7.5 A:** On–board diagnosis system
47. **IDEL UP 7.5 A:** Idle–up system
48. **LH SEAT 30 A:** Power seat system
49. **DOOR 25 A:** Power door lock system, Power windows
50. **SUN ROOF 25 A:** Electronic moon roof
51. **RR WIPER 15 A:** Rear wiper system
52. **ECU–B2 10 A:** Power door lock system, Power window
53. **DIFF 20 A:** Four–wheel drive system
54. **WASHER 15 A:** Windshield washer
55. **RADIO 10 A:** Audio system
56. **DOME 10 A:** Interior lights
57. **VGRS 40 A:** Variable gear ratio steering system
58. **P/W (FL) 20 A:** Power window
59. **P/W (RL) 20 A:** Power window
60. **WIPER 25 A:** Windshield wiper
61. **ECU–IG2 10 A:** Rear air conditioning system
62. **SEAT HTR 15 A:** Seat heater
63. **GAUGE2 10 A:** Back–up lights
64. **MET 7.5 A:** Gauges and meters
65. **IGN 7.5 A:** Multiport fuel injection system/Sequential multiport fuel injection system
66. **SECURITY 7.5 A:** Theft deterrent system
67. **P/W (RR) 20 A:** Power window
68. **P/W (FR) 20 A:** Power window
69. **TIL&TEL 20 A:** Tilt and telescopic steering
70. **RR A/C 30 A:** Rear air conditioning system
71. **RH SEAT 30 A:** Power seat system

SECTION 9

REPORTING SAFETY DEFECTS FOR U.S. OWNERS AND UNIFORM TIRE QUALITY GRADING

Reporting safety defects for U.S. owners and uniform tire quality grading

Reporting safety defects for U.S. ownerss 324

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: 1–800–331–4331).

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.

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Gas station information

Fuel type:
UNLEADED gasoline, 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.

See page 203 for detailed information.

Fuel tank capacity: 96 L (25.4 gal., 21.1 Imp. gal.)

Engine oil:
API grade, SL “Energy–Conserving” or ILSAC multigrade engine oil is recommended.

See page 289 for detailed information.

Automatic transmission fluid:
Toyota Genuine ATF WS

Tire information: See pages 293 through 301.

Tire inflation pressure: See page 320.

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You should know as much about the quality and importance of proper maintenance of your new vehicle as the people who built it.

The Toyota 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 Toyota 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.

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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 LAND CRUISER, written in English, may be purchased as applicable from any Toyota dealer.

Pub. Name: 2004 LAND CRUISER Repair Manual

Pub. No.: Vol.1RM1071U1
Vol.2RM1071U2

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