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
• CANADIAN OWNERS:	Toyota Canada Customer Interaction Centre	Toll-free:1-888-TOYOTA-8 (1-888-869-6828)

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

© 2001 TOYOTA MOTOR CORPORATION

All rights reserved. This material may not be reproduced or copied, in whole or in part, without the written permission of Toyota Motor Corporation.

Important information about your Toyota

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 that 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, please refer to the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".

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, cruise control system, anti-lock brake 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.

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.

Sequential manual transmission driving tips (Models equipped with Sequential Manual Transmission only)

The sequential manual transmission is a 5-speed forward/ reverse transmission. With the basics of the traditional manual transmission, the clutch operation and transmission shifting is controlled electronically. Unlike automatic transmissions, this system does not upshift automatically at the time of acceleration.

To understand the unique system and operation method of the sequential manual transmission, read Section 1-6 on page 77 thoroughly before driving. For starting procedures, see "How to start the engine— " on page 140 in Section 3. Please refer to the "Important Information For Your Sequential Manual Transmission" equipped in your vehicle as well.

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.

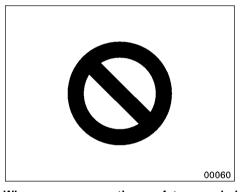
The types of warnings, what they look like, and how they are used in this manual are explained as follows:

This is a warning against something 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 avoid or reduce the risk to yourself and other people.

NOTICE

This is a warning against something 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".

¿U−4

Quick index

• If a service reminder indicator or warning buzzer comes on
• If your vehicle will not start 148
• If your engine stalls while driving 151
• If your vehicle overheats 152
• If you have a flat tire 153
• If your vehicle needs to be towed 161
• Tips for driving during break-in period 125
• How to start the engine 140
General maintenance 177
Complete index NO TAG

Gas station information

Fuel type:

1ZZ-FE engine: UNLEADED gasoline, Octane Rating 87 (Research Octane Number 91) or higher

See page 125 for detailed information.

Fuel tank capacity:

48 L (12.7 gal., 10.6 lmp. gal.)

Engine oil:

API grade SJ "Energy-Conserving", SL "Energy-Conserving" or ILSAC multigrade engine oil is recommended.

See page 190 for detailed information.

Tire information: See pages 194 through 199.

Tire pressure: See page 220.

Publication No. OM17493U Part No. 01999-17493 Printed in Japan 01-0108-00 C MR2(22U)

<u>SECTION 1-1</u>

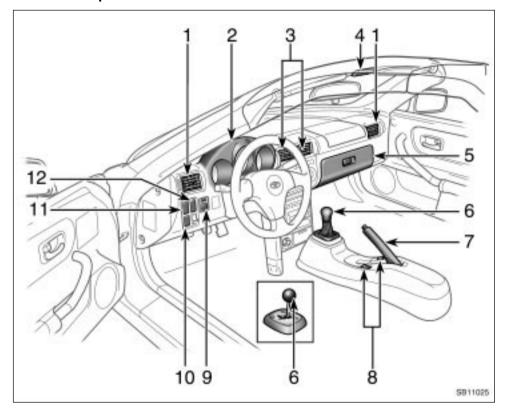
OPERATION OF INSTRUMENTS AND CONTROLS

Overview of instruments and controls

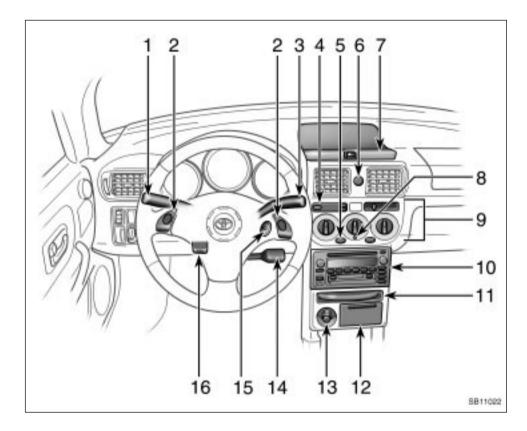
Instrument panel overview	2
Instrument cluster overview	4
Indicator symbols on the instrument panel	5

1

Instrument panel overview

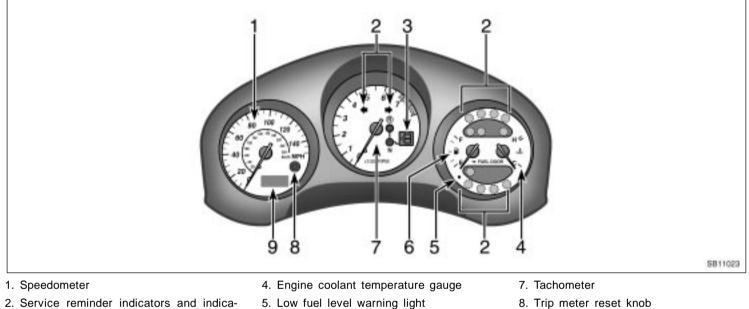


- 1. Side vents
- 2. Instrument cluster
- 3. Center vents
- 4. Interior light
- 5. Glove box
- 6. Manual transmission gear shift lever or sequential manual transmission selector lever
- 7. Parking brake lever
- 8. Power window switches
- 9. Power rear view mirror control switches
- 10. Instrument panel light control switch
- 11. Power door lock switch
- 12. Power window lock switch



- 1. Headlight and turn signal switch
- 2. Transmission shift switches (with sequential manual transmission, on some models)
- 3. Wiper and washer switches
- 4. Clock
- 5. Rear window defogger switch
- 6. Emergency flasher switch
- 7. Auxiliary box
- 8. Engine immobiliser system indicator light
- 9. Air conditioning controls
- 10. Car audio
- 11. Cup holders
- 12. Ashtray
- 13. Cigarette lighter
- 14. Cruise control switch (sequential manual transmission)
- 15. Ignition switch
- 16. Tilt steering lock release lever

Instrument cluster overview



- 2. Service reminder indicators and indicator lights
- 3. Gear position indicators (sequential manual transmission)
- 6. Fuel gauge

- 8. Trip meter reset knob
- 9. Odometer and two trip meters

Indicator symbols on the instrument panel

BRAKE	Brake system warning light*1	*	SRS warning light*1
Ä	Driver's seat belt reminder light*1	P/S	Power steering system warning light*1
PASSENGER	Passenger's seat belt reminder light*1	\odot	Sequential manual transmission warning light*1
	Discharge warning light*1		Headlight high beam indicator light
, 7 <u>T</u> ¢	Low engine oil pressure warning light*1	令令	Turn signal indicator lights
H CHECK	Malfunction indicator lamp ^{*1}	<u>گ</u> 8	Gear position indicator light*2
ABS	Anti-lock brake system warning light*1	CRUISE	Cruise control indicator light*3
昏	Open door warning light*1	*1: For details, see "Service reminder indicators and warning buzzers" on page 70 in Section 1–5.	

*2: If this light flashes, see "Sequential manual transmission" on page 77 in Section 1–6.

 $^{\ast 3}$: If this light flashes, see "Cruise control" on page 90 in Section 1–6.

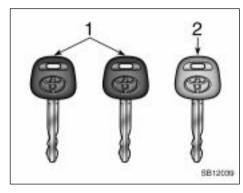
<u>SECTION 1-2</u>

OPERATION OF INSTRUMENTS AND CONTROLS

Keys and Doors

Keys
Engine immobiliser system 10
Side doors 11
Power windows
Trunk lid 14
Engine hood
Fuel tank cap18
Soft top

Keys



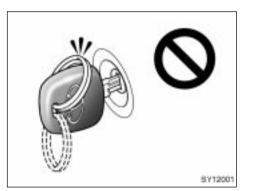
Your vehicle is supplied with two kinds of keys.

- Master key (black)—This key works in every lock. Your Toyota dealer will need it to make you a new key with built–in transponder chip.
- 2. Sub key (gray)—This key will not work in the glove box and luggage space.

A transponder chip for engine immobiliser system has been filled 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 things locked in the glove box or luggage space when you have your vehicle parked, leave the sub key with the attendant.

Since the 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.



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.

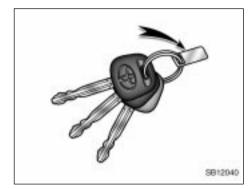


When starting the engine, do not use the key with other transponder keys around (including keys of other vehicles) and do not press other key plates against the key grip. Otherwise the engine may not start, or may stop soon after it starts. If this happens, remove the key once and then insert it again after taking off other transponder keys (including keys of other vehicles) from the ring or while gripping or covering them with your hand to start the engine.

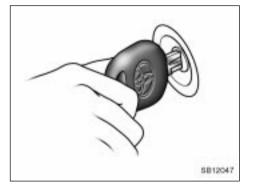


♦ Do not bend the key grip.

- 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.



Engine immobiliser system



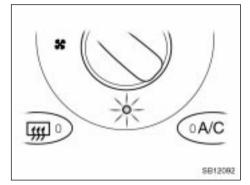
KEY NUMBER PLATE

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 to write down the key number and keep it in safe place.

The engine immobiliser 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.
- 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 you a new key with built-in transponder chip, your dealer will need your key number and master key. However, there is a limit to the number of additional keys your 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.

NOTICE

Do not modify, remove or disassemble the engine immobiliser system. If any unauthorized changes or modifications are made, the proper operation of the system cannot be guaranteed. For vehicles sold in U.S.A.

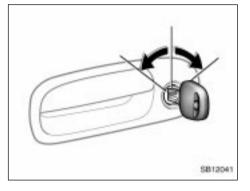
FCC ID: MOZ RI-8FTY MADE IN. JAPAN

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.

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

Side doors

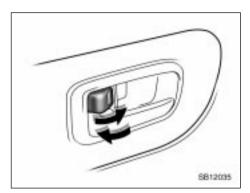


LOCKING AND UNLOCKING WITH KEY Insert the key into the keyhole and turn

it.

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

Both the doors lock and unlock simultaneously with either side door. In the driver's door lock, turning the key once will unlock the driver's door and twice in succession will unlock both the doors simultaneously.



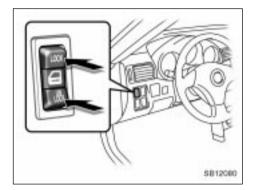
LOCKING AND UNLOCKING WITH INSIDE LOCK KNOB

Move the lock knob.

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

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

The doors cannot be locked if you leave the key in the ignition switch.



LOCKING AND UNLOCKING WITH POWER DOOR LOCK SWITCH

Push the switch.

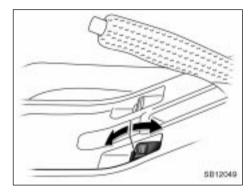
To lock: Push the switch on the "LOCK" side.

To unlock: Push the switch on the "UNLOCK" side.

Both the doors lock or unlock simultaneously.

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.

Power windows



The windows can be operated with the switch on the center console.

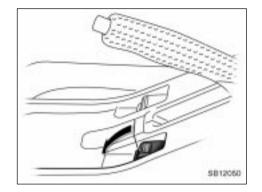
The power windows work when the ignition switch is in the "ON" position.

OPERATING THE DRIVER'S WINDOW

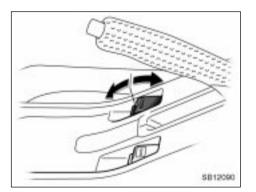
Use the switch on the driver's side of the center console.

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

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



Automatic operation (to open only): Push the switch completely down and then release it. The window will fully open. To stop the window partway, lightly pull the switch up and then release it.

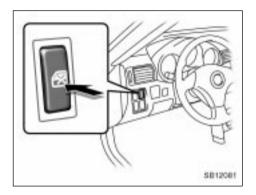


OPERATING THE PASSENGER'S WINDOW

Use the switch on the passenger's side of the center console.

The window moves as long as you hold the switch.

To open: Push down the switch. To close: Pull up the switch.

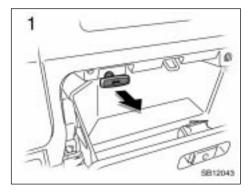


If you push in the window lock switch on the instrument panel, the passenger's window cannot be operated.

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

- Always make sure the heads, hands and other parts of the bodies of all occupants are kept completely inside the vehicle before you close the power windows. If someone's neck, head or hands gets caught in a closing window, it could result in a serious injury. When anyone closes the power windows, make sure that he/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.
- Never leave small children alone in the vehicle, especially with the ignition key still inserted. They could use the power window switches and get trapped in a window. Unattended children can be involved in serious accidents.

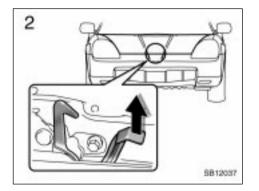
Trunk lid—



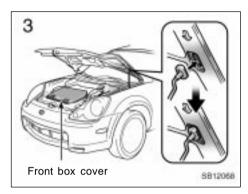
To open the trunk lid:

1. Open the glove box door, and then pull the trunk lid lock release lever. The trunk lid will spring up slightly.

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



2. In front of the vehicle, pull up the auxiliary catch lever and lift the trunk lid.



3. Hold the trunk lid open by inserting the support rod into the slot.

Before closing the trunk lid, return the support rod to its clip—this prevents rattles. Then lower the trunk lid and make sure it locks into place. If necessary, press down gently on the front edge to lock it.

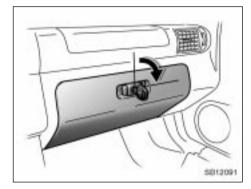
CAUTION

- After inserting the support rod into the slot, make sure the rod supports the trunk lid securely from falling down on to your head or body.
- Before closing the trunk lid, lock the front box cover securely.
- This prevents the front box from being damaged.
- Keep the trunk lid closed while driving. This keeps the luggage from being thrown out.

NOTICE

Be sure to return the support rod to its clip before closing the trunk lid. Closing the trunk lid with the support rod up could cause the trunk lid to bend.

-Luggage security system



If you do not want to activate the trunk lid lock release lever, insert the master key to the glove box, and turn it clockwise.

Engine hood

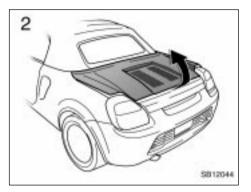


To open the engine hood:

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

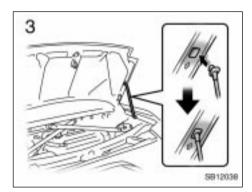
The engine hood lock release lever can be locked by the key.

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



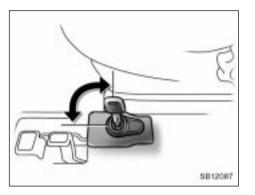
2. In rear of the vehicle, lift the engine hood.

Be careful not to touch the engine hood, the support rod, or surrounding area which could be hot after driving, to prevent burning yourself.



NOTICE

Be sure to return the support rod to its clip before closing the engine hood. Closing the engine hood with the support rod up could cause the engine hood to bend.



LOCKING AND UNLOCKING WITH ENGINE HOOD

To lock: Turn the key clockwise.

The engine hood lock release lever can be locked by the key.

When leaving the vehicle with the soft top lowered, make sure to lock the engine hood lock release lever with the key.

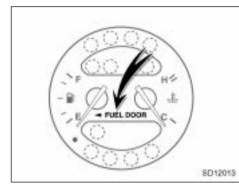
The fuel filler door opener lever is locked at the same time.

3. Hold the engine hood open by inserting the support rod into the slot.

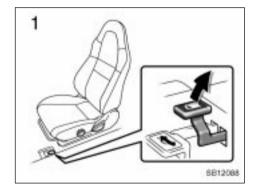
Before closing the engine hood, check to see that you have not forgotten any tools, rags, etc. and return the support rod to its clip—this prevents rattles. Then lower the engine hood and make sure it locks into place. If necessary, press down gently on the rear edge to lock it.

After inserting the support rod into the slot, make sure the rod supports the engine hood securely from falling down on to your head or body.

Fuel tank cap



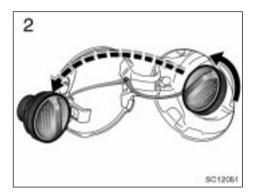
This indicates that the fuel filler door is on the left side of your vehicle.



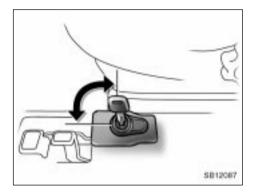
1. To open the fuel filler door, pull the lever up.

When refueling, turn off the engine. The fuel filler door opener lever can be locked by the key.

- 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.



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



LOCKING AND UNLOCKING WITH FUEL TANK CAP

To lock: Turn the key clockwise.

The fuel filler door opener lever can be locked by the key.

When leaving the vehicle with the soft top lowered, make sure to lock the fuel filler door opener lever with the key.

The engine hood lock release lever is locked at the same time.

2. To remove the fuel tank cap, turn the cap slowly counterclockwise, then pause slightly before removing it. After removing the cap, hang the tether as shown in the illustration.

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.

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.

Soft top— —Soft top precautions

Sequential manual transmission: Before raising or lowering the soft top, lower both side windows, apply the parking brake, put the selector lever in the "S(1)" position and stop the engine.

Manual transmission: Before raising or lowering the soft top, lower both side windows, apply the parking brake, stop the engine and put the transmission lever in the first position.

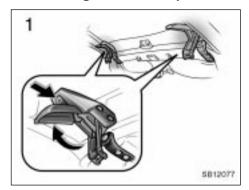
- When raising or lowering the soft top, keep hands off from the hinges of the top side rails and any part of the top linkage.
- To prevent personal injury, do not raise or lower the soft top when the wind is strong.
- The vehicle should never be driven with the soft top partially lowered. Make sure the top has been either fully latched to the windshield frame or fully lowered before driving.

NOTICE

- Make sure there are no items or packages in the folding board when lowering in the soft top. Even small items may interfere with the soft top operation and can cause damage.
- Do not sit or place excessive weight on the soft top when the top is up or down. Damage to the top may occur.
- Do not raise or lower the soft top when the temperature is below 5°C (41°F). Damage to the top or rear window may result. If necessary to do so, warm the vehicle in a heated garage prior to operating the soft top mechanism.
- Do not lower the soft top if the top is damp or wet. Possible interior water damage, water stains or mildew on the top material may result.

- When the soft top is completely lowered, keep the rear window defogger turned off to avoid damage to the top.
- It may be hard to fix the soft top when raising it after having kept it open for a long time.

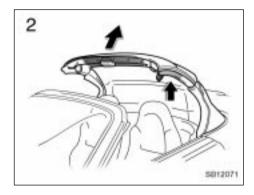
-Lowering the soft top



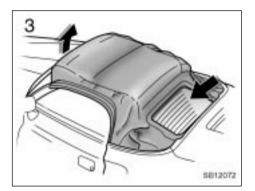
1. Lower both side windows and sun visors. Then pull down the lock levers on both sides of the vehicle fully while pushing down the button.

Be sure not to leave any object on the folding board.

If the battery is discharged and the windows cannot be lowered, open both the doors.



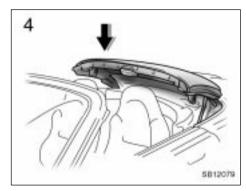
2. Stand outside of the vehicle and pull the soft top up holding the part shown in dark color in the illustration.



3. Lower the soft top backward pressing the rear window glass down softly.



To prevent personal injury, do not grasp the part shown in dark color in the illustration.

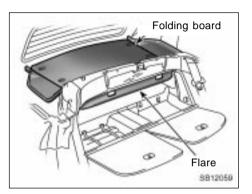


4. Fold the soft top slowly and house it completely.

Press down the soft top toward the front from the rear and lock it. You will hear click sound when the soft top is completely housed.

Shake the soft top up and down softly to check whether the soft top is fixed securely.

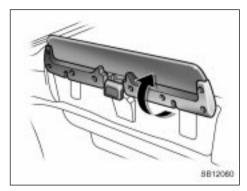
Raise both sun visors.



NOTICE

- Do not lower the soft top while placing a luggage which is higher than the bottom edge of the flare inside the luggage space. The luggage may be damaged by hitting the folding board or the improperly folded soft top may flap in the wind and cause an accident.
- Do not place any objects on the folding board. Such objects may damage the folding board or cause an unexpected accident by moving while the vehicle is driven.

—Air deflector

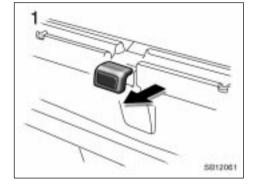


The air deflector will reduce the wind from the rear of the vehicle when the vehicle is running with the soft top lowered. Pull up to use.

NOTICE

Do not use alcohol or other solvents for the air deflector. Because they could damage the air deflector's resin material.

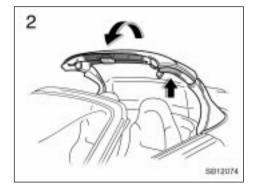
-Raising the soft top



1. Lower both side windows and sun visors. Then pull down the lock release lever towards the front of the vehicle and release the lock of the soft top.

NOTICE

Always lower the sun visor when raising the soft top. The sun visor may be damaged if the soft top is locked with the sun visor raised.



2. Stand outside of the vehicle and pull the soft top out slowly holding the part shown in dark color in the illustration. Then move the soft top toward the upper part of the frame of the front window glass.

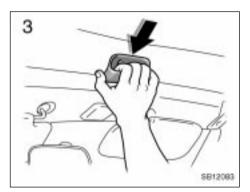
NOTICE

Lower the windows before raising the soft top. Otherwise, the soft top may not lock securely.

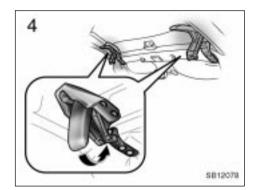




To prevent personal injury, do not grasp the part shown in dark color in the illustration.

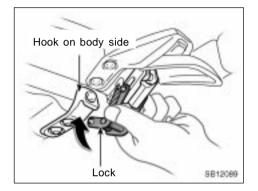


3. Be seated in the seat and hold the handle on the center of the front soft top frame. Then press the soft top softly against the frame of the front window glass.



4. Keep pressing the soft top against the frame of the front window glass and fix the soft top by pushing up the right and the left lock levers until a click is heard.

Check that lock is securely hung on the hook on the body side when pushing the lock levers up.



If the lock is not hung easily, give your hand to the lock for helping to hang it on the hook on the body side.

Fix the lock on the hook of the body side and check whether or not it is securely locked by swinging the lock to the front and the rear, and the right and the left.

Confirm that the levers are locked secure-ly.

Raise both sun visors.

<u>SECTION 1-3</u>

OPERATION OF INSTRUMENTS AND CONTROLS

Seats, Seat belts, Steering wheel and Mirrors

Seats
Seat belts
SRS driver and passenger airbags
Passenger airbag manual on–off switch
Child restraint
Tilt steering wheel57
Outside rear view mirrors
Anti-glare inside rear view mirror

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.

- Do not drive the vehicle unless the occupants are properly seated. Do not allow any passengers sitting in the luggage space. Persons not properly seated and/or properly restrained by seat belts can be severely injured in the event of emergency braking or a collision.
- While the vehicle is moving, do not allow any passenger to stand up in the vehicle. Severe injuries can occur in the event of emergency braking or a collision.

-Seat adjustment precautions

Adjust the driver's seat so that the foot pedals, steering wheel and instrument panel controls are within easy reach of the driver.

- Adjustments should not be made while the vehicle is moving, as the seat may unexpectedly move and cause the driver to lose control of the vehicle.
- When adjusting the seat, be careful not to hit the seat against a passenger or luggage.
- After adjusting the seat position, try sliding it forward and backward to make sure it is locked in position.
- After adjusting the seatback, exert body pressure to make sure it is locked in position.
- Do not put objects under the seats. The objects may interfere with the seat-lock mechanism or unexpectedly push up the seat position adjusting lever; 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. You may jam your hands or fingers.

—Adjusting seats

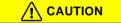


1. SEAT POSITION ADJUSTING LEVER

Hold the center of the lever and pull it up. Then slide the seat to the desired position with slight body pressure and release the lever.

2. SEATBACK ANGLE ADJUSTING LEVER

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



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 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 CUSHION ANGLE ADJUSTING KNOB (driver's seat only)

Turn the knob either way.

Seat belts— —Seat belt precautions

Toyota strongly urges that the driver and passenger 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.

Child. Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belts. See "Child restraint—" on page 46 in this section for details.

If a child is too large for a child restraint system, the child must be restrained using the vehicle's seat belt.

If a child must sit in the 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 the child to stand up or kneel on the seat. 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. It 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.

Persons should ride in their seats properly wearing their seat belts whenever the vehicle is moving. Otherwise, they are much more likely to suffer serious bodily injury or death in the event of sudden braking or a collision.

When using the seat belts, observe the following:

 Use the belt for only one person at a time. Do not use a single belt for two or more people—even children. Avoid reclining the seatbacks too much. The seat belts provide maximum protection when the seatbacks are in the upright position. (Refer to the seat adjustment instructions.)

- Be careful not to damage the belt webbing or hardware. Take care that they do not get caught or pinched in the seat or side 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—they may severely weaken the belts. (See "Cleaning the interior" on page 172 in Section 5.)
- 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.

-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.

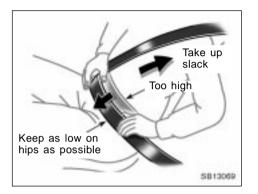
The seat belt length automatically adjusts to your size and the seat position.

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.

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.

When a passenger's shoulder belt is completely extended and is then retracted even slightly, the belt is locked in that position and cannot be extended. This feature is used to hold the child restraint system securely. (For details, see "Child restraint—" on page 46 in this section.) To free the belt again, fully retract the belt and then pull the belt out once more.

- After inserting the tab, make sure the tab and buckle are locked and that the belt is not twisted.
- Do not insert coins, clips, etc. in the buckle as this may prevent you from properly latching the tab and buckle.
- If the seat belt does not function normally, immediately contact your Toyota dealer. Do not use the seat until the seat belt is fixed. 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.

- 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 result. Keep the lap belt positioned as low on hips as possible.
- For your safety, do not place the shoulder belt under your arm.



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

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

-Seat belt extender

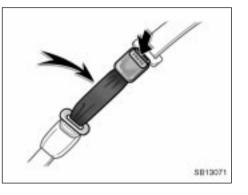
If your seat belt cannot be fastened securely because it is not long enough, a personalized seat belt extender is available from your Toyota dealer free of charge.

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.

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 vehicle accident, increasing the chance of personal injury.

• Never use the seat belt extender if you can fasten the seat belt without it.

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



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.

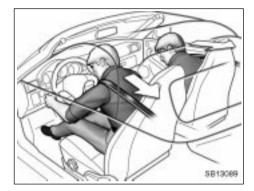
You will hear a click when the tab locks into the buckle.

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.

- After inserting the tab, make sure the tab and buckle are locked and that the seat belt extender 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. It cannot protect an adult occupant or your child from injury.

-Seat belt pretensioners

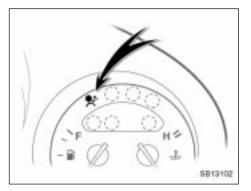


The driver and passenger's seat belt pretensioners are designed to be activated in response to a severe frontal impact.

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

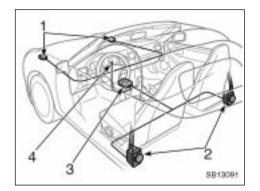
The seat belt pretensioners are activated if there is no passenger in the seat.

Collisions occurring at certain speeds and angles may cause the seat belt pretensioners and SRS airbags not to operate all together.



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, seat belt pretensioner assemblies, inflators, warning light, interconnecting wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" on page 70 in Section 1-5.)



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

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

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 smoke–like gas may be released. This gas is harmless and does not indicate that a fire is occurring.

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

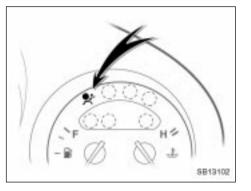
Do not modify, remove, strike or open the seat belt pretensioner assemblies, airbag sensor or surrounding area or wiring. Doing any of these may cause sudden operation of the seat belt pretensioners or disable the system, which could result in death or serious injury.

Failure to follow these instructions can result in death or serious injuries.

NOTICE

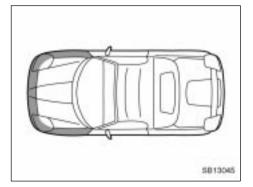
Do not perform any of the following changes without consulting your Toyota dealer. Such changes can interfere with proper operation of the seat belt pretensioners in some cases.

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



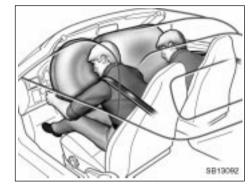
This seat belt pretensioner system has a service reminder indicator to inform the driver of operating problems. If any of the following conditions occurs, this indicates a malfunction of the airbags or pretensioners. Contact your Toyota dealer as soon as possible to service the vehicle.

- The light does not come on when the ignition key is turned to the "ON" position, or the light remains on.
- The light comes on or flashes while driving.
- If either seat belt does not retract or cannot be pulled out due to a malfunction or activation of the relevant seat belt pretensioner.



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 and passenger

airbags

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

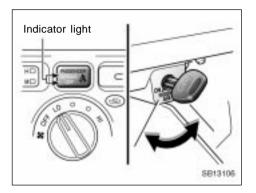
In response to a severe frontal impact, the SRS airbags work together with the seat belts to help reduce injury by inflating. The SRS airbags help to reduce injuries mainly to the driver's or passenger's head or chest caused by directly hitting the steering wheel or dashboard. When the passenger airbag manual on-off switch is in the "ON" position, the passenger airbag is activated if there is no passenger in the seat.

Be sure to 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 airbags are inflated.

A driver or passenger 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 passenger sit as far back as possible from the dashboard.
- All vehicle occupants be properly restrained using the available seat belts.



The passenger airbag system is equipped with a manual on-off switch and indicator light. Turning the passenger airbag manual on-off switch clockwise to the "ON" position makes the passenger airbag system operational. Turning the passenger airbag manual on-off switch counterclockwise to the "OFF" position disables the passenger airbag system. The indicator light on the passenger airbag manual on-off switch will come on when the passenger airbag system has been disabled.

See "Passenger airbag manual on-off switch" on page 45 in this section for detail.

 Make sure that the indicator light is off.

- Do not turn off the passenger airbag manual on-off switch except when a member of a passenger risk group identified in TABLE 1 is occupying the passenger seating position.
- When the passenger airbag manual on-off switch is turned off, the passenger airbag will not inflate in a collision and turning off the passenger airbag can reduce the occupant protection which your vehicle safety systems can provide to you in certain accidents and increase the likelihood of serious personal injuries.

TABLE 1: A PASSENGER RISK GROUP

Infant. An infant (less than 1 year old) who must ride in the front seat because:Vehicle has no rear seat;

- Vehicle has a rear seat too small to accommodate a rear-facing infant seat; or
- The infant has a medical condition which, according to the infant's physician, makes it necessary for the infant to ride in the front seat so that the driver can constantly monitor the child's condition.

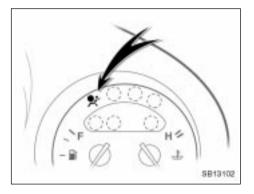
Child age 1 to 12. A child age 1 to 12 must ride in the front seat because:

- Vehicle has no rear seat:
- Although children ages 1 to 12 ride in the rear seat(s) whenever possible, children ages 1 to 12 sometimes must ride in the front because no space is available in the rear seat(s) of vehicle; or
- The child has a medical condition which, according to the child's physician, makes it necessary for the child to ride in the front seat so that the driver can constantly monitor the child's condition.

Medical condition. A passenger has a medical condition which according to his or her physician:

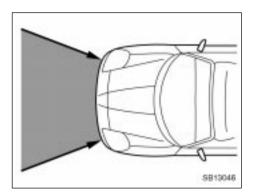
- Causes the passenger airbag to pose a special risk for the passenger: and
- Makes the potential harm from the passenger airbag in a crash greater than the potential harm from turning off the airbag and allowing the passenger, even if belted, to hit the dashboard, or windshield in a crash.

For more detailed information concerning about the passenger risk group, please contact NHTSA at 1-800-424-9393.



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

This warning light system monitors the airbag sensor assembly, front airbag sensors, seat belt pretensioner assemblies, inflators, warning light, interconnecting wiring and power sources. (For details, see "Service remainder indicators and warning buzzers" on page 70 in Section 1–5.)



The SRS airbag system is designed to activate in response to a severe frontal impact within the shaded area between the arrows in the illustration.

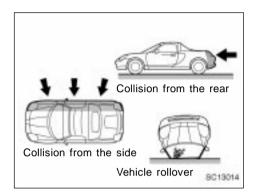
The SRS airbags will deploy if the severity of the impact is above the designed threshold level, comparable to an approximate 25 km/h (15 mph) collision when impacting straight into a fixed barrier that does not move or deform.

If the severity of the impact is below the above threshold level, the SRS airbags may not deploy.

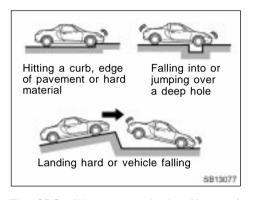
However, this threshold velocity will be considerably higher if the vehicle strikes an object, such as a parked vehicle or sign pole, which can move or deform on impact, or if it is involved in an underride collision (e.g. a collision in which the nose of the vehicle "underrides", or goes under, the bed of a truck, etc.).

It is possible that in some collisions at the lower zone of airbag sensor detection and activation, the SRS airbags and seat belt pretensioners will not operate all together.

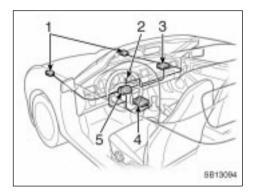
For the safety of all occupants, always wear your seat belts properly.



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



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



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

- 1. Front airbag sensor
- 2. SRS warning light
- 3. Airbag module for passenger (airbag and inflator)
- 4. Airbag sensor assembly
- 5. Airbag module for driver (airbag and inflator)

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

In a severe frontal impact, the sensors detect deceleration and the system triggers the airbag inflators. At this time a chemical reaction in the inflators quickly fills the airbags with non-toxic gas to help restrain the forward motion of the occupants.

When the airbags inflate, they produce a fairly loud noise and release some smoke and residue along with non-toxic gas. This does not indicate a fire. This gas is normally harmless; however, for those who have delicate skin, it may cause a minor skin irritation. Be sure to wash off any residue as soon as possible to prevent any potential skin irritation.

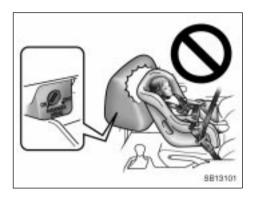
Deployment of the airbags happens in a fraction of a second, so the airbags must inflate with considerable force. While the system is designed to reduce serious injuries, it may also cause minor burns or abrasions and swelling.

Parts of the airbag module (steering wheel hub, dashboard) may be hot for several minutes, but the airbags themselves will not be hot. The airbags are designed to inflate only once.

A crash severe enough to inflate the airbags may break the windshield as the vehicle buckles. In vehicles with a passenger airbag the windshield may also be damaged by absorbing some of the force of the inflating airbag.

• The SRS airbag system is designed only as a supplement to the primary protection of the driver side and passenger side seat belt systems. The occupants 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 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 passenger 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 30 in this section.

• 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. For instructions concerning the installation of a child restraint system, see "Child restraint" on page 46 in this section.



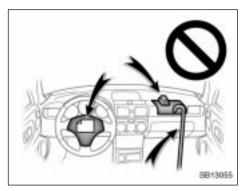
• Never put a rear-facing child restraint system on the passenger seat with the passenger airbag manual on-off switch in the "ON" position. In the event of an accident, the force of the rapid inflation of the passenger airbag can cause death or serious injury to the child. • A forward-facing child restraint system which belongs to a passenger risk group should never be put on the passenger seat with the passenger airbag manual on-off switch in the "ON" position, because the force of the deploying passenger airbag could cause death or serious injury to the child in forward seating position.

For instructions concerning the installation of a child restraint system, see "Child restraint" on page 46 in this section.



• Do not sit on the edge of the seat or lean over the dashboard when the vehicle is in use. When the airbags inflate with considerable speed and force; Otherwise, you may be killed or seriously injured. Sit up straight and well back in the seat, and always use your seat belt properly.





• Do not allow a child to stand up or to kneel on the passenger seat. When the airbag inflates with considerable speed and force; Otherwise, the child may be killed or seriously injured.

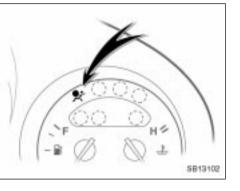
• Do not hold a child on your lap or in your arms. Use a child restraint system in the seat. For instructions concerning the installation of a child restraint system, see "Child restraint—" on page 46 in this section. • Do not put objects or your pets on or in front of the dashboard or steering wheel pad that houses the 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 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, passenger airbag cover, passenger airbag or airbag sensor assembly. Doing so may cause sudden SRS airbag inflation or disable the system, which could result in death or serious injury.

Failure to follow these instructions can result in death or serious injury.

NOTICE

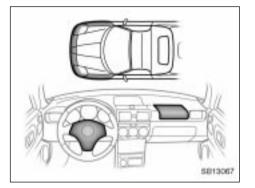
Do not perform any of the following changes without consulting your Toyota dealer. Such changes can interfere with proper operation of the SRS airbag system in some cases.

- 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 passenger airbag



This SRS airbag system has a service reminder indicator to inform the driver of operational problems. If either of the following conditions occurs, this indicates a malfunction of the airbags. 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 the light remains on.
- The light comes on or flashes while driving.



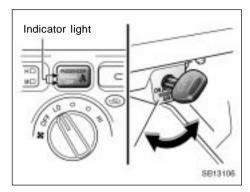
In the following cases, contact your Toyota dealer as soon as possible:

- 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 passenger airbag cover (shaded in the illustration) is scratched, cracked, or otherwise damaged.

NOTICE

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

Passenger airbag manual on-off switch



The indicator comes on when the passenger airbag system is off.

To check the airbag cut-off system status, turn the ignition switch to the "ON" position. The "AIRBAG" warning light and the "OFF" indicator light should go on for approximately 4 seconds. If the airbag switch is turned off, the "OFF" indicator will continue to illuminate, and if the airbag switch is turned on, the "OFF" indicator will not illuminate. • Make sure that the indicator light is off.

- Do not turn off the passenger airbag manual on-off switch except when a member of a passenger risk group identified in TABLE 1 (on page 38) is occupying the passenger seating position.
- When the passenger airbag manual on-off switch is turned off, the passenger airbag will not inflate in a collision and turning off the passenger airbag can reduce the occupant protection which your vehicle safety systems can provide to you in certain accidents and increase the likelihood of serious personal injuries.

For details, see "SRS driver and passenger airbags" on page 36 in this section.

This on-off switch is designed to disable the passenger airbag in order to allow usage, if necessary, of a member of a passenger risk group identified in TABLE 1 (on page 38) is occupying the passenger seating position (For details, see "SRS driver and passenger airbags" on page 36 in this section.)

Operate on-off switch as follows:

Insert key into the keyhole and turn it in the glove box.

To turn passenger airbag on: Turn the key clockwise to the "ON" position. To turn passenger airbag off: Turn the key counterclockwise to the "OFF" position.

Child restraint— —Child restraint precautions

Toyota strongly urges the use of child restraint systems for children small enough to use them.

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.

- 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 that conforms to the size of the child.

• Never put infant or child age 1 to 12 in a passenger risk group on the passenger seat with the passenger airbag manual on-off switch in the "ON" position. In the event of an accident, the force of the rapid inflation of the passenger airbag can cause death or serious injury to the child.

- If you must put infant or child age 1 to 12 in a passenger risk group on the passenger seat, make sure the passenger airbag manual on-off switch is in the "OFF" position and that the indicator light is on. (For details, see "SRS driver and passenger airbags" on page 36 in this section.
- Make sure that you have complied with all installation instructions provided by the child restraint manufacturer and that the system is properly secured.

-Child restraint system

A child restraint system for a small child or baby must be properly restrained on the seat with the lap portion of the lap/shoulder belt. You must carefully consult the manufacturer's instructions which accompany the child restraint system.

To provide proper restraint, use a child restraint system following the manufacturer's instructions about the appropriate age and size of the child for the child restraint system.

Install the child restraint system correctly following the instructions provided by its manufacturer. General directions are also provided under the following illustrations.

• Never put infant or child age 1 to 12 in a passenger risk group on the passenger seat with the passenger airbag manual on-off switch in the "ON" position. In the event of an accident, the force of the rapid inflation of the passenger airbag can cause death or serious injury to the child.

If you must put infant or child age 1 to 12 in a passenger risk group on the passenger seat, make sure the passenger airbag manual on-off switch is in the "OFF" position and that the indicator light is on. (For details, see "SRS driver and passenger airbags" on page 36 in this section.)

 After installing the child restraint system, make sure it is secured in place according to the manufacturer's instructions. If it is not restrained securely, it may cause death or serious injury to the child in the event of a sudden stop or accident. When not using the child restraint system, keep it secured with the seat belt or place it in somewhere other than the passenger compartment. This will prevent it from injuring passenger in the event of a sudden stop or accident.

-Types of child restraint system

Child restraint systems are divided into the following 3 types according to 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.

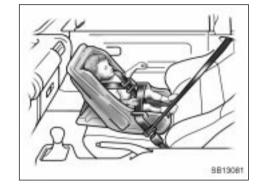


(A) Infant seat



(C) Booster seat

-Installation with seat belt

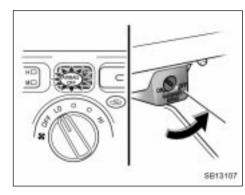


(A) INFANT SEAT INSTALLATION An infant seat is used in rear-facing position only.



(B) Convertible seat





If you must put a rear-facing child restraint system on the passenger seat, make sure the passenger airbag manual on-off switch is in the "OFF" position and that the indicator light is on.

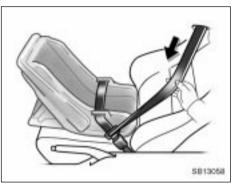
Never put a rear-facing child restraint system on the passenger seat with the passenger airbag manual on-off switch in the "ON" position. In the event of an accident, the force of the rapid inflation of the passenger airbag can cause death or serious injury to the child. When you put a rear-facing child restraint system which belongs to a passenger risk group on the passenger seat, turn the passenger airbag manual on-off switch counterclockwise to the "OFF" position. (For details, see "SRS driver and passenger airbags" on page 36 in this section.)

The indicator comes on when the system is off.



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.

- 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 can prevent your child from properly latching the tab and buckle.
- If the seat belt does not function normally, it cannot protect your child from injury. Contact your Toyota dealer immediately. Do not use the child restraint 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.

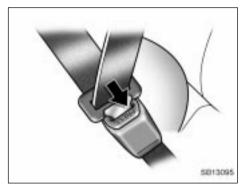
To hold the infant seat securely, make sure the belt is in the lock mode before letting the belt retract.



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 secure-ly.



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.

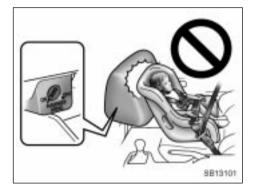


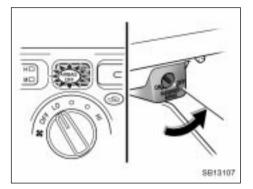
4. To remove the infant seat, press the buckle-release button and allow the belt to retract completely. The belt will move freely again and be ready to work for an adult or older child passenger.



(B) CONVERTIBLE SEAT INSTALLATION

A convertible seat is used in forwardfacing or rear-facing position depending on the child's age and size. When installing, follow the manufacturer's instruction about the applicable child's age and size as well as directions for installing the child restraint system.

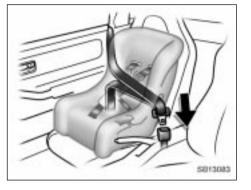




Rear-facing child restraint system: Never put a rear-facing child restraint system on the passenger seat with the passenger airbag manual on-off switch in the "ON" position. In the event of an accident, the force of the rapid inflation of the passenger airbag can cause death or serious injury to the child. When you put a forward-facing or a rear-facing child restraint system which belongs to a passenger risk group on the passenger seat, turn the passenger airbag manual on-off switch counter-clockwise to the "OFF" position. (For details, see "SRS driver and passenger airbags" on page 36 in this section.)

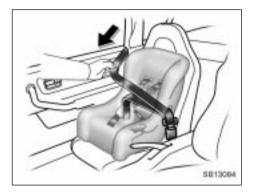
The indicator comes on when the system is off.

- If you must put a rear-facing child restraint system on the passenger seat, make sure the passenger airbag manual on-off switch is in the "OFF" position and that the indicator light is on.
- Forward-facing child restraint system: A forward-facing child restraint system which belongs to a passenger risk group should never be put on the passenger seat with the passenger airbag manual on-off switch in the "ON" position, because the force of the deploying passenger airbag could cause death or serious injury to the child in forward seating position. (For details, see "SRS driver and passenger airbags" on page 36 in this section.)



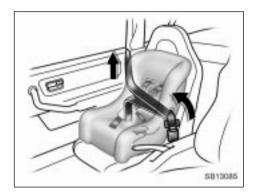
 Run the lap and shoulder belt through or around the convertible seat following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt. Keep the lap portion of the belt tight.

- After inserting the tab, make sure the tab and buckle are locked and that the lap and shoulder portions 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 injury. Contact your Toyota dealer immediately. Do not use the child restraint 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 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.



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.

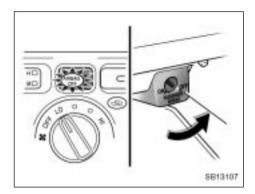


4. To remove the convertible seat, press the buckle–release button and allow the belt to retract completely. The belt will move freely again and be ready to work for an adult or older child passenger.



(C) BOOSTER SEAT INSTALLATION A booster seat is used in forward-facing position only.

A forward-facing child restraint system which belongs to a passenger risk group should never be put on the passenger seat with the passenger airbag manual on-off switch in the "ON" position, because the force of the deploying passenger airbag could cause death or serious injury to the child in forward seating position. (For details, see "SRS driver and passenger airbags" on page 36 in this section.)



When you put a forward-facing child restraint system which belongs to passenger risk group on the passenger seat, turn the passenger airbag manual on-off switch counterclockwise to the "OFF" position. (For details, see "SRS driver and passenger airbags" on page 36 in this section.)

The indicator comes on when the system is off.

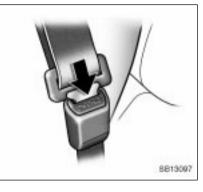


 Sit the child on a booster seat. Run the lap and shoulder belt through or around the booster seat and child following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt.

Make sure the shoulder belt is correctly across the child's shoulder and that the lap belt is positioned as low as possible on child's hips. See "Seat belts" on page 30 in this section for details.

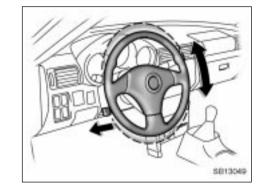
- Always make sure the shoulder belt is positioned across the center of child's shoulder. The belt should be kept away from child's neck, but not falling off child's shoulder. Failure to do so could reduce the amount of protection in an accident and increase the chance of injury.
- Both high-positioned lap belts and loose-fitting belts could cause serious injuries due to sliding under the lap belt during a collision or other unintended result. Keep the lap belt positioned as low on a child's hips as possible.
- For child's safety, do not place the shoulder belt under child's arm.
- After inserting the tab, make sure the tab and buckle are locked and that the lap and shoulder portions of the belt are not twisted.
- Do not insert coins, clips, etc. in the buckle as this may prevent your child from properly latching the tab and buckle.

 If the seat belt does not function normally, it cannot protect your child from injury. Contact your Toyota dealer immediately. Do not use 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.

Tilt steering wheel



To change the steering wheel angle, hold the steering wheel, push the lock release lever, tilt the steering wheel to the desired angle and return the lever to its original position.

- Do not adjust the steering wheel while the vehicle is moving. It may cause the driver to mishandle the vehicle and an accident may occur resulting in death or serious injuries.
- After adjusting the steering wheel, try moving it up and down to make sure it is locked in position.

Outside rear view mirrors—

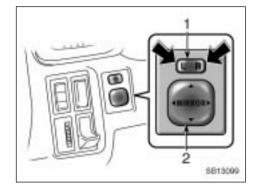


Adjust the mirror so that you can see the side of your vehicle in the mirror.

Be careful when judging the size or distance of any object seen in the outside rear view mirror. It is a convex mirror with a curved surface. Any object seen in a convex mirror will look smaller and farther away than when seen in a flat mirror.

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.

—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).

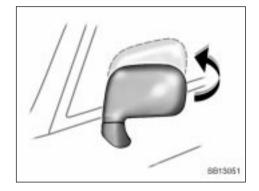
2. Control switch—To move the mirror Push the switch in the desired direction.

Mirror can be adjusted when 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

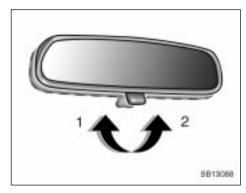


The rear view mirrors can be folded backward for parking in restricted areas.

To fold the rear view mirror, push back-ward.

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



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 personal death or injuries.

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

To reduce glare from the headlights of the vehicle behind you during night driving, operate the lever on the lower edge of the mirror.

Daylight driving—Lever at position 1

The reflection in the mirror has greater clarity at this position.

Night driving—Lever at position 2

Remember that by reducing glare you also lose some rear view clarity.

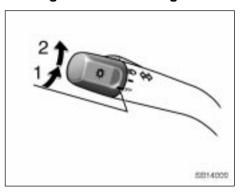
<u>SECTION 1-4</u>

OPERATION OF INSTRUMENTS AND CONTROLS

Lights, Wipers and Defogger

Headlights and turn signals 6	32
Emergency flashers 6	33
Instrument panel light control 6	34
Interior light	34
Windshield wipers and washer 6	34
Rear window defogger 6	35

Headlights 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

Position 2—Headlights and all of the above

Light reminder buzzer

A buzzer will remind you to turn the lights off when the driver's door is opened if you remove the key with the headlights left on.

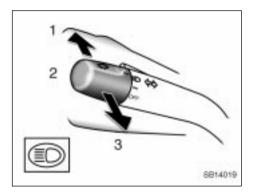
NOTICE

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 or position 1. They will not go off until the ignition switch is turned off.

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

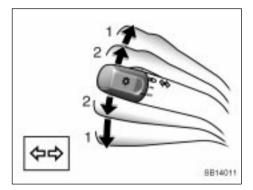


High-low beams—For high beams, turn the headlights on and push the lever away from you (position 1). Pull the lever toward you (position 2) for low beams.

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 206 in Section 7–3.

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.

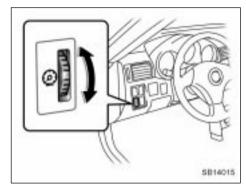
Turn on the emergency flashers to warn other drivers if your vehicle must be stopped where it might be a traffic hazard. Always pull as far off the road as possible.

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

NOTICE

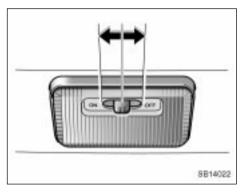
To prevent the battery from being discharged, do not leave the switch on longer than necessary when the engine is not running.

Instrument panel light control



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

Interior light



To turn on the interior light, slide the switch.

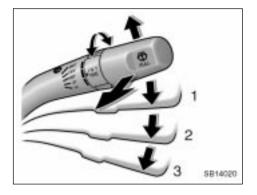
The interior light switch has the following positions:

"ON"-The light stays on all the time.

"DOOR"—Turns the light on when either side door is opened. The light goes off when both the doors are closed.

"OFF"—Turns the light off.

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.

Lever position	Speed setting
Position 1	Intermittent
Position 2	Slow
Position 3	Fast

For a single sweep of the windshield, push the lever up and release it.

The "INT TIME" band lets you adjust the wiping time interval when the wiper lever is in the intermittent position (position 1). Twist the band upward to increase the time 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.

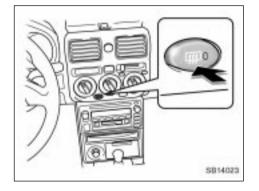
For instructions on adding washer fluid, see "Adding washer fluid" on page 205 in Section 7–3.

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

NOTICE

Do not operate the wipers if the windshield 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 window is clear. Leaving the defogger on for a long time could cause the battery to discharge, especially during stop-andgo 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.
- When the soft top is completely lowered, keep the rear window defogger turned off to avoid damage to the top.

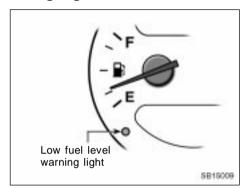
<u>SECTION 1-5</u>

OPERATION OF INSTRUMENTS AND CONTROLS

Gauges, Meters and Service reminder indicators

Fuel gauge 6	8
Engine coolant temperature gauge 6	8
Tachometer 6	9
Odometer and two trip meters 6	9
Service reminder indicators and warning buzzers	0

Fuel gauge



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

Nearly full—Needle at "F" Nearly empty—Needle at "E"

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

The needle moves when braking, accelerating or making turns. This is cause by the movement of the fuel in the tank.

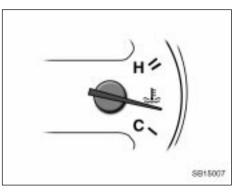
If the fuel level approaches "E" or the low fuel level warning light comes on, fill the fuel tank as soon as possible.

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.

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 moves to the "H" position, your engine is too hot. If your vehicle overheats, stop your vehicle and allow the engine to cool.

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

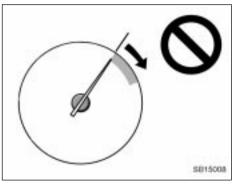
- Driving up a long hill on a hot day.
- Reducing speed or stopping after high speed driving.
- Idling for a long period with the air conditioning on in stop-and-go traffic.

If the engine coolant temperature gauge needle is not displayed, there may be a problem in the system. In this case, contact your Toyota dealer as soon as possible.

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 152 in Section 4.

Tachometer



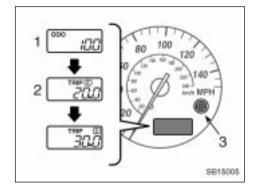
The tachometer indicates engine speed in thousands of rpm (revolutions per minute). Use it while driving to select correct shift points and to prevent engine lugging and over-revving.

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

NOTICE

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

Odometer and two trip meters



This meter displays the odometer and two trip meters.

- 1. Odometer—Shows the total distance the vehicle has been driven.
- 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.

Service reminder indicators and warning buzzers

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 trip 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 Β.

			Г			
	If the indicator or buzzer comes on	Do this.			If the indicator or buzzer comes on	Do this.
(a)	BRAKE	If parking brake is off, stop immediately and contact Toyota dealer.		(h)	¢	Take vehicle to Toyota dealer immediately. If the vehicle cannot be driven, contact your
(b)	ž.	Fasten driver's				Toyota dealer.
	÷.	seat belt.		(i)	ABS	Take vehicle to
(c)	DARCENCED	Fasten			ABO	Toyota dealer.
	PASSENGER	passenger's seat belt.		(j)	∕₽	Close both the doors
(d)	[]	Stop and check.				
				(k)		Take vehicle to
(e)	27	Stop and check.		()	×	Toyota dealer immediately.
(f)		Take vehicle to Toyota dealer.		(I)	P/S	Take vehicle to Toyota dealer.
(g)	Low fuel level warning light	Fill up tank.		(m)	Key reminder buzzer	Remove key.
			L			

If the indicator Do this. or buzzer comes on... Light reminder-(n) Turn off lights. buzzer (o) Warning "Sequential See function of the manual sequential transmission" on manual page 77 in Section transmission 1-6.

(a) Brake System Warning Light

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

- When the parking brake is applied...
- When the brake fluid level is low...

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

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

• The light does not come on even if the parking brake is applied when the ignition key is in the "ON" position.

If the light does not turn off even after the parking brake is released while the engine is running, immediately stop your vehicle at a safe place and contact your Toyota dealer. In this case, the brakes may not work properly and your stopping distance will become longer. Depress the brake pedal firmly and bring the vehicle to an immediate stop.

(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 buzzer sounds if the driver's seat belt is not fastened. Unless the driver fastens the belt, the light keeps flashing and the buzzer stops after about 4 to 8 seconds.

(c) Passenger's Seat Belt Reminder Light

This light reminds you to buckle up the passenger's seat belt.

Once the ignition key is turned to "ON" or "START", the reminder light flashes if a passenger sits in the passenger seat and does not fasten the seat belt. Unless the passenger fastens the belt, the light stays flashing. However, if a passenger uses an additional seat cushion, the light may not flash even when the seat belt is not buckled up.

If luggage load is placed on the 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. 72

NOTICE

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

(e) Low Engine Oil Pressure Warning Light

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

If it flickers or stays on while you are driving, pull off the road to a safe place and stop the engine immediately. Call a Toyota dealer or qualified repair shop for assistance.

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

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

NOTICE

Do not drive the vehicle with the warning light on—even for one block. It may ruin the engine.

(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 operation properly.

If the lamp remains on, or the lamp comes on while driving, first check the following.

• 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 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 down to about the middle position, there may be a problem somewhere in your electronic throttle control system.

At this time, 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.

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" in Section 6.

(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.

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

(h) "Sequential Manual Transmission" Warning Light (Sequential manual transmission only)

This light will come on when the ignition key is turned to the "ON" position. After a few seconds, the light will go off. This means the sequential manual transmission system is operating properly.

In case the "Sequential Manual Transmission" warning light comes on, pull off the road, stop the engine and contact your Toyota dealer. Although you may be able to drive your vehicle, the vehicle may jerk when shifted or the clutch may not engage properly, causing the vehicle to jerk due to the malfunction. In some cases the shift requirement may be canceled, and the gear may be locked.

(i) "ABS" Warning Light

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

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

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

If either of the following conditions occurs, this indicates a malfunction somewhere in the parts 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.

73

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

(j) Open Door Warning Light

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

(k) 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 systems of the airbag and seat belt pretensioners are operating properly.

This warning light system monitors the airbag sensor assembly, front airbag sensors, occupant detection sensor, seat belt buckle switch, seat belt pretensioner assemblies, inflators, warning light, interconnecting wiring and power sources.

If either of the following conditions occurs, this indicates a malfunction somewhere in the parts monitored by the warning light system. Contact your 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 the light remains on.
- The light comes on or flashes while driving.

(I) Power Steering System Warning Light

This light warns that there is a problem in your power steering system.

If the light comes on while you are driving, have your vehicle checked by your Toyota dealer as soon as possible.

(m) 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.

(n) Light reminder buzzer

The buzzer will sound if the headlight switch is left on and the driver's door is opened with the key removed from the ignition switch.

(o) Warning function of the Sequential Manual Transmission (sequential manual transmission only)

When driving, if any incorrect operation that may cause damage to this system is performed or if the gear is not shifted as desired by the driver, the warning buzzer will sound and the gear position indicator will flash to warn the driver in some cases. For details, see "(k) Warning functions" on page 86 in Section 1–6.

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

- 1. Apply the parking brake.
- Open either side door. The open door warning light should come on.
- Close the door. The open door warning light should go off.

4. 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" and power steering system warning lights go off after a few seconds. The SRS warning light goes off after about 6 seconds.

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

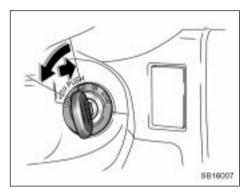
<u>SECTION 1-6</u>

OPERATION OF INSTRUMENTS AND CONTROLS

Ignition switch, Transmission and Parking brake

Ignition switch with steering lock	76
Sequential manual transmission	77
Manual transmission	88
Parking brake	89
Cruise control	90

Ignition switch with steering lock



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

For starting tips, see page 139 in Section 3.

"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.

You must push in the key to turn it from "ACC" to the "LOCK" position.

Once you remove the key, the engine immobiliser system is automatically set. (See "Engine immobiliser system" on page 10 in Section 1-2.)

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.

Never remove the key when the vehicle is moving, as this will lock the steering wheel and result in loss of steering control.

NOTICE

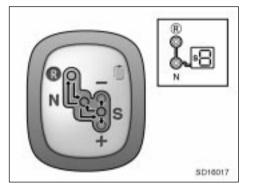
Do not leave the key in the "ON" position if the engine is not running. The battery will discharge and the ignition could be damaged.

Sequential manual transmission

The sequential manual transmission is a 5-speed forward/reverse transmission. With the basics of the traditional manual transmission, the clutch operation and shifting are controlled electronically. The system has the following features:

- The electronically controlled clutch operation and transmission enables gear shift by the operation of the selector lever (or the steering switch) only.
- When starting the engine, turn the ignition switch to the "ON" position. While holding down the brake pedal firmly, shift the selector lever to the "N" position. Make sure that the "N" indicator in the instrument cluster comes on, and then start the engine. In case the selector lever is in a position other than "N", or the if the brake pedal is not held down, the engine cannot be started.
- When the vehicle is going to stop and the speed is reduced to a certain speed, the gear will be downshifted to 1st if the selector lever is in "S" position.

To understand this unique system and operation method of the sequential manual transmission, read this section thoroughly before driving.



The sequential manual transmission has a shift lock system. This system locks the selector lever to keep the transmission gear and the selector lever position in the same position when the ignition switch is turned to the "ACC" or "LOCK" position. However, if the selector lever is locked in the "S" position, the lever can be moved to the "+" or "-" direction, but the gear will not be actually shifted.

(a) Selector lever

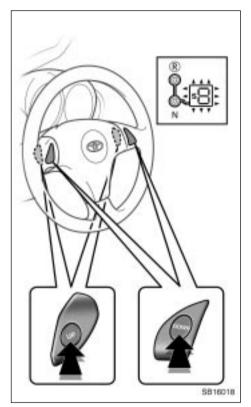
- "Reverse
- "N"UNeutral and engine starting
- "Sequential driving (normal driving)
- "+": Upshifting

Pull the selector lever to the "+" direction and release it. Every time the lever is operated, the transmission is upshifted 1 step in the order of $1 \text{ st} \rightarrow 2 \text{ nd} \rightarrow 3 \text{ rd} \rightarrow 4 \text{ th} \rightarrow 5 \text{ th gear.}$

"-": Downshifting

Push the selector lever to the "-" direction and release it. Every time the lever is operated, the transmission is downshifted in the order of 5th \rightarrow 4th \rightarrow 3rd \rightarrow 2nd \rightarrow 1st gear.

The gear position is displayed on the gear position indicator. The gear position indicator shows the transmission gear position. Before starting off, always make sure by using the gear position indicator that the gear is engaged in 1st or reverse, then depress the accelerator pedal.



(b) Transmission shift switches

78

 $UP \ensuremath{\underline{\exists}} Up shift switches (Back of the steering wheel)$

Push the upshift switch on the back of the steering wheel. Every time the switch is operated, the transmission is shifted up 1 step in the order of 1st \rightarrow 2nd \rightarrow 3rd \rightarrow 4th \rightarrow 5th gear.

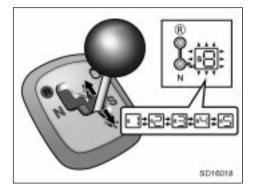
DOWN Downshift switches (Face of the steering wheel)

Push the downshift switch on the face of the steering wheel. Every time the switch is operated, the transmission is downshifted 1 step in the order of 5th \rightarrow 4th \rightarrow 3rd \rightarrow 2nd \rightarrow 1st gear.

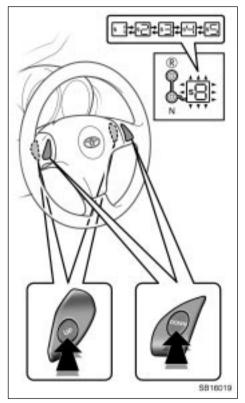
Gear shift from "1st" to "5th" by the steering switch is possible when the selector lever is in the "S" position. The gear position is displayed on the gear position indicator. The gear position indicator shows the transmission gear position.

(c) System Operation

When the driver's door is opened, the system is activated, and the motor pump operates to accumulate pressure. The system enters stand-by mode when the accumulated pressure reaches the specified level. A motor sound may be heard from the engine compartment at this time, but it does not indicate malfunction. The motor will stop after a certain period of time.



Selector lever



Transmission shift switches

(d) Upshift and downshift

The sequential manual transmission is not an automatic transmission (A/T), therefore, the gears are not shifted automatically. To shift the transmission, the driver must operate the selector lever to the "+" or "-" direction, or the steering switch with the selector lever in the "S" position. When driving, the driver should shift the gear at the most appropriate timing. As on the traditional manual transmission vehicles, releasing the accelerator pedal a little will help the transmission to upshift smoothly.

Upshift: Pull the selector lever to the "+" direction and release it (or push the upshift switch on the back of the steering wheel.) Every time the switch or the lever is operated, the transmission is upshifted 1 step in the order of $1 \text{ st} \rightarrow 2 \text{ nd} \rightarrow 3 \text{ rd} \rightarrow 4 \text{ th} \rightarrow 5 \text{ th gear.}$

Downshift: Push the selector lever to the "-" direction and release it (or push the downshift switch on the face of the steering wheel.) Every time the switch or the lever is operated, the transmission is downshifted 1 step in the order of 5th \rightarrow 4th \rightarrow 3rd \rightarrow 2nd \rightarrow 1st gear.

In case of operating the selector lever and switch operation on the steering wheel at the same time, the selector lever operation has priority. In case of operating the two switches of upshifting or downshifting on the steering wheel at the same time, it is regarded to operate the switch once. Also, in case of operating the upshift and downshift switches on the steering wheel at the same time, demand is canceled and no shifting is performed.

- To shift down smoothly, the engine runs fast in some cases. This is done intentionally by the system and is not a malfunction.
- When the accumulated pressure of the actuator is consumed due to shifting operation, and the pressure decreases to a specified level, the pump motor starts running again. A motor sound may be heard from the engine compartment at this time, but it does not indicate malfunction.
- When driving down a hill, downshift and use the engine brakes appropriately. If necessary, continuous shiftingdown is possible. However, if downshifting more than 3 steps continuously, the gear shifting will take more time.

- When the outside temperature is extremely low, the gear may not downshift from 2nd to 1st until the vehicle stops.
- In case the gear jumps out of position while driving, the system will shift the gear where it was before it jumps out.
- If operating the selector lever to the "N" position while driving, and operating it to the "S" position again, the gear will be shifted to its most proper position in accordance with the speed.
- In case the transmission cannot be engaged to a certain gear position during shifting due to mechanical malfunction, the system will disengage the gear for a few seconds, and select the next gear. Therefore, the vehicle may not accelerate according to the driver's intention.

Recommended shifting speeds

For the best compromise between fuel economy and vehicle performance, you should upshift or downshift at approximately the following speeds;

gear	km/h (mph)
1 to 2 or 2 to 1	24 (15)
2 to 3 or 3 to 2	40 (25)
3 to 4 or 4 to 3	64 (40)
4 to 5 or 5 to 4	72 (45)

Upshifting too soon or downshifting too late will cause lugging, and possibly pinging. Regularly revving the engine to maximum speed in each gear will cause excessive engine wear and high fuel consumption.

Minimum allowable speeds

Try to keep speed higher than that shown below. When the speed comes to decrease the speed shown below, do downshift.

gear	km/h	(mph)
3	30	(19)
4	40	(25)
5	50	(31)

NOTICE

If driving at the speed lower than that shown above at each gear position, it may cause early wear of the clutch.

Maximum allowable speeds

To get on a highway or to pass slower traffic, maximum acceleration may be necessary. Make sure you observe the following maximum allowable speeds in each gear:

gear	km/h	(mph)
1	53	(33)
2	88	(55)
3	120	(75)
4	163 (101)

- 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.
- To drive down a long or steep hill, reduce your speed and downshift. Remember, if you ride the brakes excessively, they may overheat and fail.
- Do not place the selector lever in the "N" position while driving. Otherwise the engine brake may not work, and you may get involved in an unexpected accident.
- Do not apply the parking brake while driving. Otherwise, it could cause a skid and you may get involved in an unexpected accident.

NOTICE

- ◆ The system will not allow shifting up or down to a gear that would cause engine over-revving or under-revving. When engine over-revving occurs, a warning buzzer (short pulse sound) will sound. In either case, the demand will be cancelled.
- If frequently driving at low speed using a high gear position, a warning buzzer (long pulse sound) will sound. Such driving will cause the reduction of clutch life.
- Frequent downshifting (more than 3 positions continuously) causes the reduction of transmission life.
- Do not drive with your foot on the brake pedal. Otherwise, it will cause the "Sequential manual transmission" warning light to come on.
- (e) Starting off
- 1. Start the engine as instructed in "How to start the engine" on page 140 in Section 3.

- 2. With your foot holding down the brake pedal, shift the selector lever to the "S" position properly. When the selector lever is shifted to "S" position, the gear will be shifted to 1st. On a slippery surface, it is possible to start off with the gear in 2nd. To start off with the gear in 2nd, shift the selector lever from "N" to "S" position, then operate the lever to "+" direction. The gear will be shifted to 2nd. Before starting off, always make sure that the gear is engaged by the gear position indicator, then depress the accelerator pedal.
 - If the gear cannot be engaged to 1st when the selector lever is shifted from the "N" to "S" position, the "N" indicator will flash and a warning buzzer (long pulse sound) will sound. In this case, the system will re-try shifting or the driver can operate the selector lever to shift, as follows.
- The system will re-try shifting automatically. This will take some time, noise may be heard from the gears, and shift shock may occur. However, they do not indicate malfunction.
- The driver may shift the selector lever to the "N" position once, then shift to the "S" position.

3. Release the parking brake and brake pedal. Depress the accelerator pedal slowly for smooth staring.

Unlike automatic transmission models, the sequential manual transmission models do not creep.

NOTICE

- On a slippery surface, it is possible to start off with the gear in 2nd, but to protect the clutch, try to start using the 1st gear whenever possible.
- ♦ If the gear cannot be engaged to 1st when the selector lever is shifted from the "N" to "S" position, try to shift the selector lever to the "N" position once, then shift it to "S" position a few seconds later.

(f) Starting off on an uphill/downhill

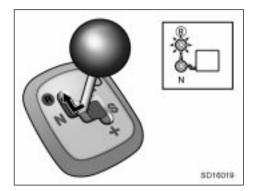
- —Uphill
- 1. Apply the parking brake firmly so that the vehicle does not roll backwards.

- 2. Shift the selector lever to the "S" position while holding down the brake pedal. Make sure that the gear position indicator in the instrumental cluster displays 1st gear.
- 3. Release the brake pedal and depress the accelerator pedal gradually, and when the vehicle starts to move, release the parking brake and depress the accelerator pedal to start off.
- —Downhill
- Hold down the brake pedal and shift the selector lever to the "S" position. Make sure by using the gear position indicator that the gear is in 1st.
- 2. Release the brake pedal, and depress the accelerator pedal slowly. Even though the accelerator pedal is not depressed, when the vehicle speed increases, the clutch will be engaged and the engine brake will be applied.

Unlike automatic transmission models, the sequential manual transmission models will not creep.

NOTICE

Do not hold the vehicle on an uphill with the accelerator pedal applied. Doing so may damage the clutch. Always use the brake pedal or parking brake.



(g) Backing up

While holding down the brake pedal, shift the selector lever to the "R" position. The reverse warning buzzer will sound at this time. Depress the accelerator pedal slowly, as when starting off. Before driving off, make sure by using the gear position indicator that the gear is in reverse.

When the gear will not engage even though the selector lever is shifted to the "R" from "N" position, the "N" indicator will flash and a warning buzzer (long pulse sound) will sound. In this case, the system will re-try shifting, or the driver can operate the selector lever to shift, as follows.

- The system will re-try shifting automatically. This will take some time, noise may be heard from the gears, and shift shock may occur. However, they do not indicate malfunction.
- The driver can shift the selector lever to the "N" position once, then shift to the "R" position.

NOTICE

- ♦ The system will not allow shifting to the "R" position if the vehicle speed is over 3 km/h (2 mph). In case the selector lever is operated under this condition, the "N" indicator in the instrument cluster will flash. However, when the vehicle speed drops below 3 km/h (2 mph), the gear is shifted to reverse. Make sure that the vehicle has stopped completely before shifting to the "R" position.
- Do not hold the vehicle on an uphill with the accelerator pedal applied. Doing so may damage the clutch. Always use the brake pedal or parking brake.

♦ If the gear cannot be engaged to reverse when the selector lever is shifted from the "N" to "R" position, try to shift the selector lever to the "N" position once, then shift it to "R" position a few seconds later.

(h) Stopping

The vehicle can be stopped by depressing the brake pedal regardless of the gear position. This is because the clutch is automatically disengaged to prevent the engine from stopping. If the selector lever is in the "S" position, the gear will be downshifted to 1st when the vehicle stops. However, if you do not drive the vehicle over 40 km/h (24 mph) or convert the drive position after starting with the gear in 2nd, the gear will not be downshifted to 1st when the vehicle stops the next time and the gear is left in 2nd.

When stopping, for example, at a traffic light, be sure to shift the selector lever to the "N" position, and depress the brake pedal firmly. For your safety, apply parking brake, too, when stopping on a hill.

If you stop for more than 90 seconds with the selector lever in the "S" position without holding down the brake pedal while the engine is running, a warning buzzer (long pulse sound) will sound, and the "N" indicator in the instrument cluster will flash, and the system will automatically shift the transmission gear to the neutral gear position.

If the driver's door is opened with the selector lever in the "S" position without depressing the brake pedal, warning buzzer (long pulse sound) will also sound. 10 seconds later, the "N" indicator in the instrument cluster will also flash, and the system will automatically shift the transmission gear to the neutral gear position.

The gear will resume to 1st or 2nd when the system is operated as follows:

- Brake pedal "ON": The gear position before the system selected the "N" position is resumed.
- Operate the selector lever to the "+" direction: Resume to 2nd gear.
- Operate the selector lever to the "-" direction: Resume to 1st gear.
- Push upshift switch on the steering wheel: Resume to 2nd gear.

- Push downshift switch on the steering wheel.: Resume to 1st gear.
- "S" \rightarrow "N" \rightarrow "S": Resume to 1st gear.

When starting off again, always confirm the gear position by the gear position indicator.

- Unlike automatic transmission models, the sequential manual transmission models do not creep.
- When racing the engine, make sure that the gear position is in the "N" position by the gear position indicator. In case the accelerator is operated with the gear in any other position, the vehicle may move resulting in an unexpected accident.

• When you stop the vehicle, hold the brake pedal down or shift the selector lever to the "N" position. If the selector lever is left in the "S" position without depressing the brake pedal for more than 90 seconds while stopping, a warning buzzer (long pulse sound) will sound, and the "N" position indicator in the instrument cluster will flash, and the system will automatically shift the transmission gear to the neutral gear position. If this happens on a hill, when starting off the vehicle, the vehicle may move unexpectedly and cause an accident.

 Do not leave your vehicle unattended while the engine is running.

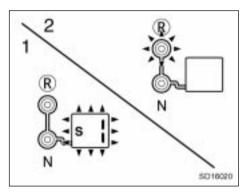
• When leaving the vehicle, stop the engine and park the vehicle with the gear engaged. In case you need to leave the vehicle with the engine running, apply the parking brakes firmly, and shift the selector lever in the "N" position. When the driver's door is opened with the selector lever in the "S" position while stopping with the engine running, warning buzzer (long pulse sound) will sound, 10 seconds later, the "N" indicator in the instrument cluster will also flash, and the system will automatically shift the transmission gear to the neutral gear position. If this happens on a hill when starting off the vehicle, the vehicle may move unexpectedly and cause an accident.

NOTICE

- Do not hold or stop the vehicle on a hill with the accelerator pedal applied. Otherwise, the warning buzzer (long pulse sound) will sound, and in some cases the engine will stall. It will also cause excessive damage to the clutch.
- If the selector lever is operated more than necessary, the system may not allow operation of the selector lever for a certain period of time, and the gear may not be shifted appropriately. Therefore, do not operate the selector lever if not necessary.

(i) Parking

Unlike the automatic transmission, the sequential manual transmission does not have a parking position. The vehicle can be parked with the selector lever in any position. Apply the parking brake firmly, and while depressing the brake pedal, shift the selector lever into the "R" position on a level or downhill, and into the "S(1)" position on an uphill.



1: Uphill 2: Level or downhill

To stop the engine:

Check the transmission gear position by the gear position indicator, then turn the ignition switch off to stop the engine. Release the brake pedal after a few seconds. The selector lever will be locked in the position just before the ignition switch was turned off.

You can check the gear position by the gear position indicator within 5 seconds after turning the ignition switch off.

In case the gear shift is not completed before the ignition switch is turned off, the gear may not be engaged properly preventing the vehicle from parking with gear. When parking, always confirm the gear position by the gear position indicator. On a level surface or a downhill, the gear should be put in reverse, and in the 1st on an uphill. Otherwise, the vehicle may move, and cause an unexpected accident. If the gear is left in the neutral gear position, the vehicle can not be parked with the gear engaged.

(j) Cancel from parking with gear

Depress the brake pedal, and turn the ignition switch to the "ON" position. The selector lever lock will be released.

Then, shift the selector lever to the "N" position. The gear will be disengaged.

(k) Warning Functions

A warning buzzer will sound or the indicator will flash under the following conditions:

Warning buzzer (long pulse sound)

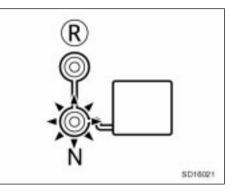
- It may sound when the selector lever is shifted to the "S" or "R" position while racing the engine.
- The clutch is heated with excessive load.
- The ignition switch is turned to the "OFF" position with the gear in 2nd or either 3rd, 4th or 5th.

In this case, turn the ignition switch to the "ON" position once and shift the selector lever to the "1st" or "R" position, then turn the ignition switch to "OFF" position.

• During a stop, the driver's door is opened with the selector lever in the "S" position while the engine is running.

Warning buzzer (short pulse sound)

 The transmission is shifted down to a gear where the engine is over-revving.



"N" indicator flashing

- The selector lever is shifted to the "R" position while the vehicle speed is over 3 km/h (2 mph).
- The selector lever is shifted to the "S" from "R" position while backing up with the vehicle speed over 8 km/h (5 mph).
- The selector lever is operated excessively and continuously, then shifted to the "S" or "R" position.

In this case, shift the selector lever to the "N" position once, and wait for a few seconds, shift the selector lever again to the "S" or "R" position.

• The selector lever is shifted from the "N" position to the "S" or "R" position soon after starting the engine.

In this case, shift the selector lever to the "N" position once, and after a few seconds, shift the selector lever again to the "S" or "R" position.

 When the selector lever is shifted to the "S" position while starting the engine, the selector lever position and the gear position do not match.

In this case, shift the selector lever to the "N" position once and confirm that the engine has started. Then, shift the selector lever to the "S" or "R" position.

 At the same time when turning the ignition switch to the "ON" position and shifting the selector lever from the "N" position to the "S" or "R" position,

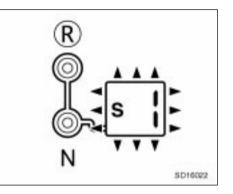
In this case, shift the selector lever to the "N" position once, then shift the selector lever again to the "S" or "R" position.

 At the same time when turning the ignition switch to the "OFF" position and shifting the selector lever from the "N" to the "S" or "R" position, In this case, shift the selector lever to the "N" position once, then shift the selector lever again to the "S" or "R" position.

"N" indicator flashing and warning buzzer (long pulse sound) beeping.

- The system is re-trying shift operation from the "N" to "S" or "R" position due to shift failure.
- Stopping for more than 90 seconds without depressing the brake pedal, while the engine is running with the selector lever in the "S" position.
- 10 seconds after the driver's door is opened with the selector lever in the "S" position while the engine is running.
- Turn the ignition switch to the "OFF" position and shift the selector lever from the "N" to "S" position at the same time.

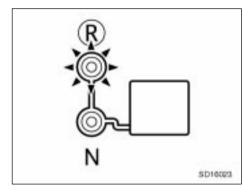
If this condition lasts for a long time, shift the selector lever to the "N" position once and shift the selector lever again to the "S" or "R" position.



"1st" indicator blinking

- At the same time when turning the ignition switch to the "ON" position and shifting the selector lever from the "S" position to the "N" or "R" position.
- At the same time when turning the ignition switch to the "OFF" position and shifting the selector lever from the "S" to "N" position.

In this case, shift the selector lever to the "S" position once, then shift the selector lever again to the "N" position.

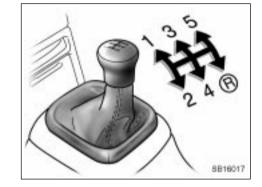


"R" indicator blinking

- At the same time when turning the ignition switch to the "ON" position and shifting the selector lever from the "R" position to the "N" or "S" position.
- At the same time when turning the ignition switch to the "OFF" position and shifting the selector lever from the "R" to "N" position.

In this case, shift the selector lever to the "R" position once, then shift the selector lever again to the "N" position.

Manual transmission



The shift pattern is as shown above.

Press the clutch pedal down fully while shifting, and then release it slowly. Do not rest your foot on the pedal while driving, because it will cause clutch trouble. And do not use the clutch to hold the vehicle when stopped on an uphill grade—use the parking brake.

Recommended shifting speeds

The transmission is fully synchronized and upshifting or downshifting is easy.

For the best compromise between fuel economy and vehicle performance, you should upshift or downshift at the following speeds:

gear	km/h (mpł	ר)
1 to 2 or 2 to 1	24 (15))
2 to 3 or 3 to 2	40 (25))
3 to 4 or 4 to 3	64 (40))
4 to 5 or 5 to 4	72 (45))

Downshift to the appropriate gear if acceleration is needed when you are cruising below the above downshifting speeds.

Upshifting too soon or downshifting too late will cause lugging, and possibly pinging. Regularly revving the engine to maximum speed in each gear will cause excessive engine wear and high fuel consumption.

Maximum allowable speeds

To get on a highway or to pass slower traffic, maximum acceleration may be necessary. Make sure you observe the following maximum allowable speeds in each gear:

gear	km/h (mph)
1	53 (33)
2	88 (55)
3	120 (75)
4	163 (101)

NOTICE

Do not downshift if you are going faster than the maximum allowable speed for the next lower gear.

Good driving practice

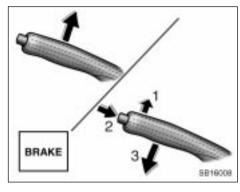
If it is difficult to shift into reverse, put the transmission in neutral, release the clutch pedal momentarily, and then try again.

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

NOTICE

Make sure the vehicle is completely stopped before shifting into 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.

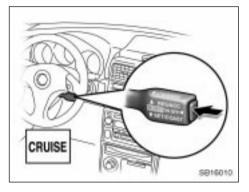
Before driving, be sure the parking brake is fully released and the parking brake reminder light is off.

Cruise control

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

Your cruising speed can be maintained up or down grades 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.

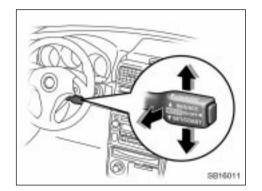
- To help maintain maximum control of your vehicle, do not use the cruise control when driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads.
- Avoid vehicle speed increases when driving downhill. If the vehicle speed is too fast in relation to the cruise control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



TURNING ON THE SYSTEM

To operate the cruise control, press the "CRUISE ON-OFF" button. 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 press will turn the system completely off.

To avoid accidental cruise control engagement, keep the "CRUISE ON-OFF" switch off when not using the cruise control.

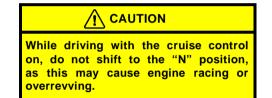


SETTING AT A DESIRED SPEED

On vehicles with sequential manual transmission, the gear position must be "4" or "5" before you set the cruise control speed.

Bring your vehicle to the desired speed, push the lever down in the "SET/COAST" 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 lever in the "CANCEL" direction and releasing it.
- b. Depressing the brake pedal.
- c. Shifting upward or downward.

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 other than for 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/ACC" direction and hold it. Release the lever when the desired speed is attained. While the lever is held upward, the vehicle will gradually gain speed.

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

RESETTING TO A SLOWER SPEED

Push the lever down in the "SET/COAST" 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 lever down in the "SET/COAST" direction.

RESUMING THE PRESET SPEED

If the preset speed is cancelled by pulling the control lever, by depressing the brake pedal, or by shifting upward or downward the selector lever, pushing the lever up in the "RES/ACC" 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 "CRUISE 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.

<u>SECTION 1-7</u>

OPERATION OF INSTRUMENTS AND CONTROLS

Car audio system

Reference
Using your audio system
Car audio system operating hints 102

Reference



AM-FM ETR radio/cassette player/compact disc player (with compact disc auto changer controller)

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", "FM1·2", "TAPE" or "CD" 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 another function was previously playing, it will come on again.

SWITCHING BETWEEN FUNCTIONS

Push "AM", "FM1.2", "TAPE" or "CD" 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

To remove the antenna, carefully turn it counterclockwise.

On some models-

To lower the power antenna, turn off the audio system by pushing "PWR-VOL", or turn the ignition key to "LOCK".

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 compact disc player will play from track 1 through the end of the disc. Then it will play from track 1 again. On models with the compact disc auto changer, next disc will be played from track 1.

NOTICE

Never try to disassemble or oil any part of the compact disc player. Do not insert anything except a compact disc into the slot.

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

-Controls and features



Details of specific buttons, controls, and features are described in the alphabetical listing 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 "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" "FM1.2").

(Eject button)

Push the cassette tape eject button to eject a cassette. Push the compact disc eject button to eject a compact disc.

After you turn the ignition to "LOCK", you will be able to eject a cassette or disc but you will not be able to reinsert it.

(Program)

Push "**\)**" to select the other side of a cassette tape. The display indicates which side is currently selected ("****" indicates

top side, " $\mathbf{\nabla}$ " 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)</p>

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.

АΜ

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. CONTROL / MODE (Audio control and mode adjustment)

Manual tone adjustment function-

This knob is used to adjust the tone manually.

For low-pitch tone adjustment, push "CONTROL / MODE" repeatedly until "BAS" appears on the display. Then turn the knob to suit your preference.

The display will show the range from "BAS -5" to "BAS 5".

For high-pitch tone adjustment, push "CONTROL / MODE" repeatedly until "TRE" appears on the display. Then turn the knob to suit your preference.

The display will show the range from "TRE -5" to "TRE 5".

Sound balance adjustment function-

This knob is also used to adjust the sound balance between the front and rear, and the right and left speakers.

For front/rear adjustment, push "CONTROL / MODE" repeatedly until "FAd" appears on the display. Then turn the knob to adjust the front/rear balance.

The display will show the range from "FAd–F7" to "FAd–R7".

NOTICE

Rear speaker has not been established on this vehicle, therefore, be sure to set the "front/rear adjustment" to the "FAd–F7". When the "front/rear adjustment" is set to "FAd–F7", the volume of the speaker becomes low. Also, setting it to "FAd–R7" may cause a bad effect such as no sound.

For left/right adjustment, push "CONTROL / MODE" repeatedly until "BAL" appears on the display. Then turn the knob to adjust the left/right balance.

The display will show the range from "BAL-L7" to "BAL-R7".

CD (Compact Disc)

error messages.

Push "CD" 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 "CD". 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. Each time you push "CD", the system changes to the automatic changer. If the player malfunctions, your audio sys-

tem will display one of the six following

98

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 or magazine from the player and allow the player to cool down.

If "Err 1" appears on the display, it indicates the disc is dirty, damaged, or it was inserted up-side down. Clean the disc or insert it correctly.

If "Err 2" appears on the display, it indicates no disc is loaded inside the magazine. Insert a disc.

If "Err 3" or "Err 4" appears on the display, it indicates there is a trouble inside the system. Eject the disc or magazine. Set the disc or magazine again.

If "OPEn" appears on the display, it indicates the compact disc auto changer lid is open. Close the compact disc auto changer lid.

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

DISC $\lor \land$

Compact disc auto changer only-

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[®] D B NR^{*}

If you are listening to a tape that was recorded with Dolby[®] B Noise Reduction, push the button marked with the double–D symbol. The double–D symbol 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 III are trademarks of Dolby Laboratories Licensing Corporation.

FM1.2

Push "FM1-2" to turn on the radio and select the FM band. "FM1" or "FM2" will appear on the display. This system allows you to set twelve FM stations, two for each button. If the audio system is off, you can turn on the radio by pushing "FM1·2". Also, push "FM1·2" to switch from cassette or compact disc operation to radio operation.

PWR-VOL (Power and Volume)

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 magazine in random order, or only listen to the tracks on a specific compact disc in random order.

To randomly play the tracks on a disc: Quickly push and release "RAND". "<u>RAND</u>," 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 magazine in random order. To turn off the random feature, push this button again. Compact disc auto changer only-

To randomly play all the tracks in the magazine:

Push and hold "RAND" until you hear a

beep. "LSRAND," will appear on the display and the player will perform all the tracks on all the discs in the magazine in random order. To turn off the random feature, push this button again.

RPT (Repeat)

Cassette Player

Push "RPT" while the track is playing. "<u>RPT</u>" 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. "<u>RPT</u>" 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.

Compact disc auto changer only-

Repeating a disc:

Push and hold "RPT" until you hear a beep. "LSRPT" 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 top track of the disc and replay. This process will be continued until you push the button again to turn off the repeat feature.

SCAN

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 magazine.

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 magazine. To select a track, push "SCAN" again. If the player scanned all the tracks on the disc, it will stop scanning.

Compact disc auto changer only-

Scanning the first track of all the discs in the magazine:

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 (Seeking)

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 " \wedge " or " \vee " under the "SEEK". 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 up or down side of the button. "FF 1" or "REW 1" will appear on the display.

Next, push either side of the 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 down 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.

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.

Car audio system operating hints

TAPE

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.

TRACK (Track up/down button): Compact disc player

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

Push either side of the 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 down side of the button one time, quickly.

TUNE (Tuning)

Your Toyota has an electronic tuning radio (ETR). Turn the knob clockwise to step up the frequency. Turn the knob counterclockwise to step down the frequency.

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:

FΜ

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.

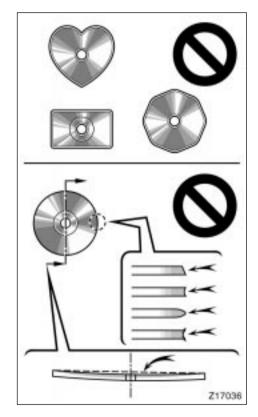


CARING FOR YOUR COMPACT DISC PLAYER AND DISCS

- Use only compact discs labeled as shown above. CD-R (CD-Recordable), CD-RW (CD-Re-writable) and personal computer use CD-ROMs may not be playable on your compact disc player.
- Your compact disc player is intended for use with 12 cm (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.

103

 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.



- Your compact disc player cannot play special shaped or low-quality compact discs such as those shown here. Do not use them as the player could be damaged.
- 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.

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.

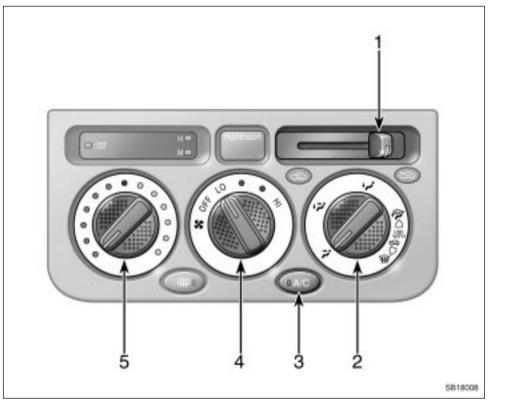
<u>SECTION 1-8</u>

OPERATION OF INSTRUMENTS AND CONTROLS

Air conditioning system

Controls	108
Air flow selector settings	111
Operating tips	111
Side vents	113

Controls



- 1. Air intake selector
- 2. Air flow selector
- 3. "A/C" button
- 4. Fan speed selector
- 5. Temperature selector

Fan speed selector

Turn the knob to adjust the fan speed—to the right to increase, to the left to decrease.

Temperature selector

Turn the knob to adjust the temperature to the right to warm, to the left to cool.



Air flow selector

Turn the knob to select the vents used for air flow.

- **1. Panel**—Air flows mainly from the instrument panel vents.
- Bi-level—Air flows from both the floor vents and the instrument panel vents.
- **3. Floor**—Air flows mainly from the floor vents.

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

Use with the air intake selector positioned in Fresh.

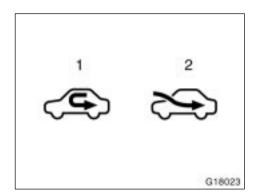
5. Windshield—Air flows mainly from the windshield vents.

Use with the air intake selector positioned in Fresh.

For details about air flow selector settings, see the illustration after "A/C" button.

Turning the air flow control knob to windshield or floor/windshield position turns on the defroster–linked air conditioning. At this time, the "A/C" button indicator comes on regardless of whether or not the "A/C" button is pressed in. This is to clean up the front view more quickly.

When the "A/C" button is not pressed in, turning the air flow control knob to another position turns off the air conditioning.



"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.

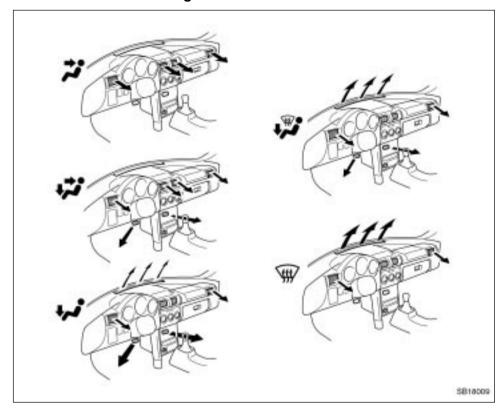
If the "A/C" button indicator flashes, there is a problem in the air conditioning system and the air conditioning automatically shuts off. If this happens, take your vehicle to a Toyota dealer for service.

Air intake selector

Move the lever to select the air source.

- **1. Recirculate**—Recirculates the air inside the vehicle.
- 2. Fresh—Draws outside air into the system.

Air flow selector settings



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 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 selector be set to FRESH and the fan speed selector to any setting except "OFF".

 If following another vehicle on a dusty road, or driving in windy and dusty conditions, it is recommended that the air intake selector 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—Any setting except "OFF" Temperature—Towards WARM (red zone) Air intake—FRESH (outside air) Air flow—FLOOR Air conditioning—OFF

- For quick heating, select recirculated air for a few minutes. To keep the windows from fogging. select 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—Any setting except "OFF" Temperature—Towards COLD (blue zone) Air intake—FRESH (outside air) Air flow—PANEL Air conditioning—ON

• For quick cooling, move the air intake selector to recirculate for a few minutes.

Ventilation

For best results, set controls to:

Fan speed—Any setting except "OFF" Temperature—Towards COLD (blue zone) Air intake—FRESH (outside air) Air flow—PANEL Air conditioning—OFF

Defogging

The inside of the windshield

For best results, set controls to:

Fan speed—Any setting except "OFF" Temperature—Towards WARM (red zone) to heat; COLD (blue zone) tocool Air intake—FRESH (outside air) Air flow—WINDSHIELD

Turning the air flow control knob to windshield position turns on the defrosterlinked air conditioning. At this time, the "A/C" button indicator comes on regardless of whether or not the "A/C" button is pressed in. This is to clean up the front view more quickly.

When the "A/C" button is not pressed in, turning the air flow control knob to a position other than windshield or floor/windshield turns off the air conditioning.

 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:

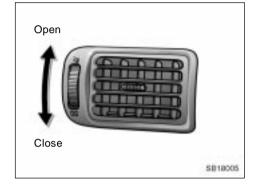
Fan speed—Any setting except "OFF" Temperature—Towards WARM (red zone) Air intake—FRESH (outside air) Air flow—WINDSHIELD

Turning the air flow control knob to windshield position turns on the defrosterlinked air conditioning. At this time, the "A/C" button indicator comes on regardless of whether or not the "A/C" button is pressed in. This is to clean up the front view more quickly.

When the "A/C" button is not pressed in, turning the air flow control knob to a position other than windshield or floor/windshield turns off the air conditioning.

 To heat the vehicle interior while defrosting the windshield, choose floor/ windshield air flow.

Side vents



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

<u>SECTION 1-9</u>

OPERATION OF INSTRUMENTS AND CONTROLS

Other equipment

Clock	116
Cigarette lighter and ashtray	116
Glove box	117
Front box	117
Auxiliary box	118
Luggage space	119
Cup holders	121
Floor mat	121

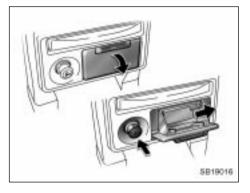
Clock



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.

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.

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.

ASHTRAY

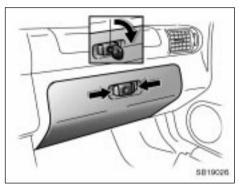
To use the ashtray, pull out the lid.

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

To remove the ashtray, pull the lid and pull it out.

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

Glove box

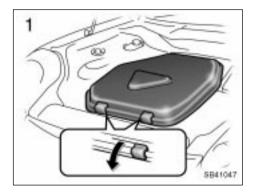


To use the glove box, do this. To open: Compress the lock release buttons.

To lock: Insert the master key and turn it clockwise.

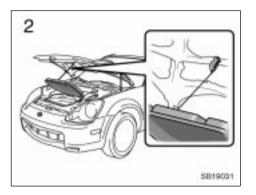


Front box



To use the front box in the trunk, do this.

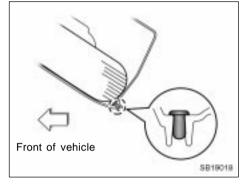
1. Open the trunk lid, and pull the lock release lever.



2. Fix the cover by hitching the inside clip on the hood.

NOTICE

- Do not place valuables in the front box to prevent robbery.
- Do not place anything which weighs over 5 kg (11 lb.) in the front box. If something weighs over 5 kg (11 lb.) is placed in the front box while driving, the front box may be damaged.
- Be sure to lock the cover securely when you close the trunk lid. If the cover is not securely locked, it may cause damage to the trunk lid.



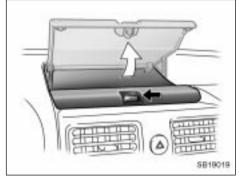
DRAINAGE OF THE FRONT BOX

In case that the water is pooled inside the front box, remove the grommet on the bottom of the box to drain the water.

NOTICE

Since the front box is not waterproof completely, it is possible for the things stored in the box to the drenched.

Auxiliary box



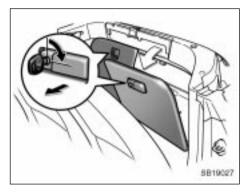
Instrument panel

To use the box, open it as shown in the illustration.

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

118

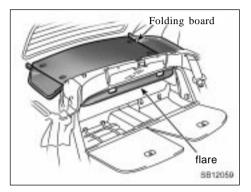
Luggage space



Lean the seatback forward to use the luggage space.

To open: Pull the lever.

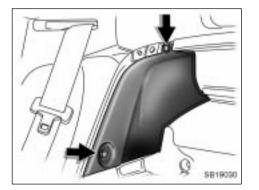
To lock: Insert the master key and turn it clockwise.



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

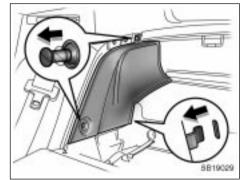
NOTICE

- Do not place valuables in the luggage space to prevent robbery.
- ◆ Do not lower the soft top while placing a luggage which is higher than the bottom edge of the flare inside the luggage space. The luggage may be damaged by
 - hitting the folding board or the improperly folded soft top may flap in the wind and cause an accident.

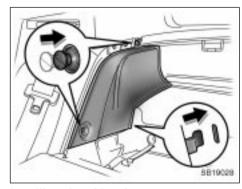


When you load a long luggage

Remove the side trims on the both sides in the luggage space when you need to load a long luggage (except tapered things) such as a golf bag. The side trims can be removed by pulling the clips (at two places).



Removing the side trims

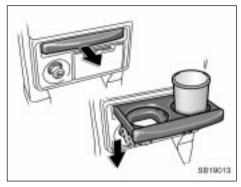


Installing the side trims

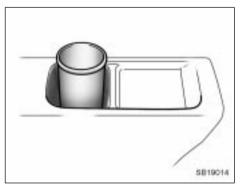
NOTICE

- Do not place tapered things or a long luggage into the luggage space. That may damage the water receiving bag installed behind the side trims.
- Do not lower the soft top with a long luggage loaded. The luggage may touch the lower portion of the soft top side rails and may be damaged.
- Never remove the side trims except when loading a long luggage. Otherwise, the luggage may move while driving and damage the water receiving bag or the luggage may be damaged when the soft top is opened.

Cup holders



Front



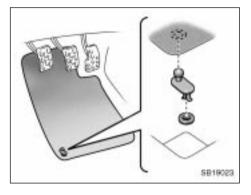
Center console

The cup holders are designed for holding cups or drink-cans securely in its holes.

Front: To use the cup holders, pull them out.

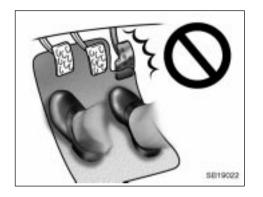
- Do not place anything else other than cups or drink-cans in the cup holders, as such items may be thrown about in the compartment and possibly injure people in the vehicle during sudden braking or an accident.
- Front only: To reduce the chance of injury in case of an accident or a sudden stop while driving, keep the cup holder closed when it is not in use.

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.



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.

SECTION **2**

INFORMATION BEFORE DRIVING YOUR TOYOTA

123

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:

- Do not drive over 88 km/h (55 mph).
- Run the engine at moderate speed between 2000 and 4000 rpm.
- Avoid full-throttle starts.
- Try to avoid hard stops during the first 300 km (200 miles).
- Do not drive slowly with the transmission in a high gear.
- Do not drive for a long time at any single speed, either fast or slow.

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 specifications of ASTM D4814 in the U.S.A.

NOTICE

Do not use leaded gasoline. Use of leaded gasoline will cause the threeway catalytic converter to lose its effectiveness and the emission control system to function improperly. Also, this can increase maintenance costs.

OCTANE RATING

Select Octane Rating 87 (Research Octane Number 91) or higher.

Use of unleaded fuel with an octane number or rating lower than stated above will cause persistent heavy knocking. If severe, this will lead to engine damage.

If your engine knocks...

If you detect heavy knocking even when using the recommended fuel, or if you hear steady knocking while holding a steady speed on level roads, consult your Toyota dealer.

However, now and then, you may notice light knocking for a short time while accelerating or driving up hills. This is no need of concern.

GASOLINES CONTAINING DETERGENT ADDITIVES

Toyota recommends the use of gasolines that contain 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 three 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 (Methylcycropentadienyl 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 drivability problems caused by the particular gasoline that you are using. If you continue to have unacceptable drivability, try changing gasoline brands. If this 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 driveability problems 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

48 L (12.7 gal., 10.6 Imp. gal.)

Fuel pump shut off system

The fuel pump shut off system stops supplying fuel to the engine to minimize the risk of fuel leakage when the engine stalls or an airbag inflates upon collision. To restart the engine after the fuel pump shut off system activates, turn the ignition switch to "ACC" or "LOCK" once and start it.

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.

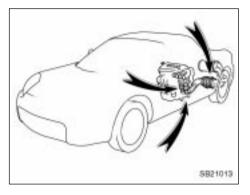
Operation in foreign countries

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 an emission control device 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 drive, idle or park your ve-

hicle 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 threeway catalytic converter.
- Do not allow the engine to run at idle speed for more than 20 minutes.
- ◆ Avoid racing the engine.
- Do not push-start or pull-start your vehicle.
- Do not turn off the ignition while the vehicle is moving.
- Keep your engine in good running order. Malfunctions in the engine electrical system, electronic ignition system/distributor ignition system or fuel system could cause an extremely high three-way catalytic converter temperature.

- If the engine becomes difficult to start or stalls frequently, take your vehicle in for a check-up as soon as possible. Remember, your 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

- 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.

- 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. 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.

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

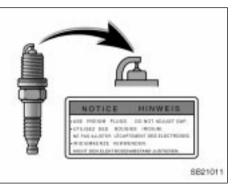
One of the most important points in proper vehicle maintenance is to keep the engine oil at the optimum level so that oil function will not be impaired. Therefore, it is essential that the oil level be checked regularly. Toyota recommends that the oil level be checked every time you refuel the vehicle.

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 190 in Section 7–2.

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 driveability.

Brake system

The tandem master cylinder brake system is a hydraulic system with two separate sub-systems. If either sub-system should fail, the other will still work. However, the pedal will be harder to press, and your stopping distance will be longer. Also, the brake system warning light may come on.



BRAKE BOOSTER

The brake booster uses engine vacuum to power-assist the brakes. If the engine should quit while you are driving, you can bring the vehicle to a stop with normal pedal pressure. There is enough reserved vacuum for one or two stops but no more!

- Do not pump the brake pedal if the engine stalls. Each push on the pedal uses up your reserved vacuum.
- Even if the power assist is completely lost, the brakes will still work. But you will have to push the pedal hard, much harder than normal. And your braking distance will be longer.

ANTI-LOCK BRAKE SYSTEM

The anti-lock brake system is designed to automatically help prevent lock-up of the wheels during a sudden braking or braking on slippery road surfaces. This assists in providing directional stability and steering performance of the vehicle under these circumstances.

Effective way to press the ABS brake pedal:

When the anti-lock brake system function is in action, you may feel the brake pedal pulsating and hear a noise. In this situation, to let the anti-lock brake system work for you, just hold the brake pedal down more firmly. Do not pump the brake in a panic stop. This will result in reduced braking performance.

The anti-lock brake system becomes operative after the vehicle has accelerated to a speed in excess of approximately 10 km/h (6 mph). It stops operating when the vehicle decelerates to a speed below approximately 5 km/h (3 mph).

Depressing the brake pedal on slippery road surfaces such as on the manhole cover, the steel plate under the construction, joints in the bridge, etc. on a rainy day tends to activate the anti-lock brake system.

You may hear a click or motor sound in the front trunk room for a few seconds when the engine is started or just after the vehicle is started. This means that the anti–lock brake system is in the self check mode, and does not indicate a malfunction. When the anti-lock brake system is activated, the following conditions may occur. They do not indicate a malfunction of the system:

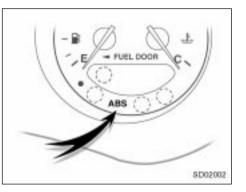
- You may hear the anti-lock brake system operating and feel the brake pedal pulsating and the vibrations of the vehicle body and steering wheel. You may also hear the motor sound in the front trunk room even after the vehicle is stopped.
- At the end of the anti-lock brake system activation, the brake pedal may move a little forward.

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 antilock brake system on. If tires 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 the 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 snowcovered 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 antilock brake system works properly, the light turns off after a few seconds. Thereafter, if the system malfunctions, the light comes on again.

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

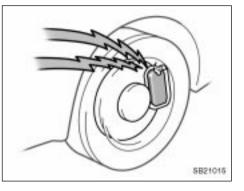
When the "ABS" warning light is on (and the brake system warning light is off), the anti-lock brake system does not operate so that the wheels could lock up during a sudden braking or braking on slippery road surfaces.

If either of the following conditions occur, this indicates a malfunction somewhere in the parts 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 fuming on briefly during operation does not indicate a problem.

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.

Luggage stowage precautions

When stowing luggage or cargo in the vehicle, observe the following:

- Put luggage or cargo in the front box or luggage space 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 balance.
- For better fuel economy, do not carry unneeded weight.



• Never allow anyone to ride in the luggage space. It is not designed for the passenger. The passenger should ride in the seat with the seat belt properly fastened. Severe injuries to an unrestrained passenger can occur during sudden braking or a collision.

• 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.

Limited-slip differential (on some models)

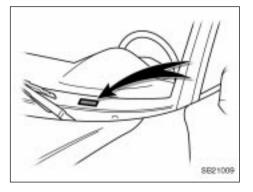
Some Toyotas are equipped with a limited-slip differential. If one of the rear wheels begins to spin, the limited-slip differential is designed to aid traction by automatically transmittiing driving force to the other rear wheel. If you are not sure whether your vehicle is equipped with one, you can ask your Toyota dealer.

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

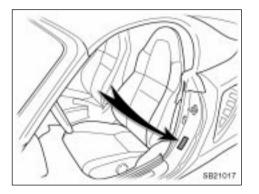
Use only a compact spare tire of the same size, construction and load capacity as the original tires on your Toyota because damage to the limited-slip differential could possibly occur with another tire type.

Your Toyota's identification— —Vehicle identification number



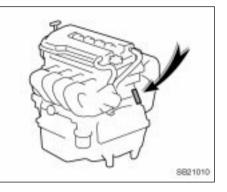
The vehicle identification number (VIN) is the legal identifier for your vehicle. This number is on the left top of the instrument panel, and can be seen through the windshield from outside.

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

Do not modify the suspension/chassis with lift kits, spacers, springs, etc. It can cause dangerous handling characteristics, resulting in loss of control.

Types of tires

Determine what kind of tires your vehicle is originally equipped with.

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.



manufacture's designated tires, and never mix tires or wheels of the sizes different from the originals.

WE REALLY CARE ABOUT YOU — PLEASE BUCKLE UP

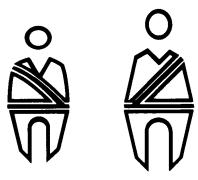
Toyota has made a special effort to encourage use of seat belts.

Toyota belts are:

- Comfortable
- Easy to use
- Convenient

U

We encourage you to use your belts every time you drive.



2002 MR2 (OM17493U)

SECTION 3

STARTING AND DRIVING

Before starting the engine14	40
How to start the engine 14	40
Tips for driving in various conditions	41
Winter driving tips 14	42
Dinghy towing 14	43
Trailer towing14	44
How to save fuel and make your vehicle last longer, too 14	44

Before starting the engine

1. Check the area around the vehicle before entering it.

Sequential manual transmission only: When the driver's door is opened, a motor sound may be heard from the engine compartment, but it is not a malfunction. The motor will stop after a certain period of time.

- 2. Adjust seat position, seatback angle, seat cushion angle and steering wheel angle.
- 3. Adjust the inside and outside rear view mirrors.
- 4. Lock both the doors.
- 5. Fasten seat belts.

How to start the engine— (a) Before cranking

- 1. Apply the parking brake firmly.
- 2. Turn off unnecessary lights and accessories.
- 3. Sequential manual transmission: Turn the ignition switch to "ON" position. Hold down the brake pedal firmly, and place the selector lever to the "N" position. Make sure that the "N" indicator in the instrument cluster comes on. A starter safety device will prevent the starter from operating if the selector lever is in a position except "N" or the brake pedal is not depressed.

Manual transmission: Press the clutch pedal to the floor and shift the transmission into neutral. Hold the clutch pedal to the floor until the engine is started. A starter safety device will prevent the starter from operating if the clutch pedal is not fully depressed.

(b) Starting the engine

Before starting the engine, be sure to follow the instructions in "(a) 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:

1. Sequential manual transmission: With your foot off the accelerator pedal, turn the ignition key to the "START" position and crank the engine while depressing the brake pedal. Release the key when the engine starts.

The engine cannot be cranked if the selector lever is in a position except "N" or the brake pedal is not depressed.

Manual transmission: With your foot off the accelerator pedal, crank the enigine by turning the key to the "START" position. Release the key when the engine starts.

2. After the engine runs for about 10 seconds, you are ready to drive.

If the weather is below freezing, let the engine warm up for a few minutes before driving.

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 148 in Section 4.

NOTICE

- Do not crank for more than 30 seconds at a time. This may overheat the starter and wiring systems.
- ◆ Do not race a cold engine.
- If the engine becomes difficult to start or stalls frequently, have the engine checked immediately.

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 resulting in tire bursts.

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 "S(1)" or "R" (sequential manual transmission) or in first or reverse (manual transmission). 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.

- Before driving off, make sure that the parking brake is fully released and 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

when the brakes are wet. If they are wet, your vehicle will require a longer stopping distance, and it may pull to one side when the brakes are applied. Also, the parking brake will not hold the vehicle securely.

Winter driving tips

Make sure you have a proper freeze protection of engine coolant.

Your coolant must contain ethylene–glycol type coolant for a proper corrosion protection of aluminum components. Use "TOYOTA Long Life Coolant" or equivalent.

See page 191 in Section 7–2 for details about coolant type selection.

NOTICE

Do not use alcohol type antifreeze or plain water alone.

When it is extremely cold, we recommend to use 60% solution for your Toyota, to provide protection down to about $-50^{\circ}C$ ($-58^{\circ}F$). Do not use more than 70% solution for better coolant performance.

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. Section 7–3 tells you how to visually inspect the battery. 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 190 in Section 7–2 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 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 "S(1)" or "R" (sequential manual transmission) or into first or reverse (manual transmission) 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.

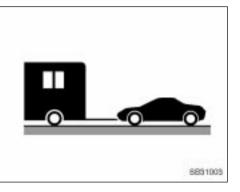
Keep ice and snow from accumulating under the fenders.

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 can be dinghy towed (with four wheels on the ground) from the front behind a motorhome.

Dinghy towing requires special equipment and accessories. Please refer to your service outlet of the motorhome manufacture for the recommended equipment.

NOTICE

Dinghy towing does not eliminate the possibility of damage to your vehicle.

DINGHY TOWING TIPS

Before dinghy towing, be sure to observe the following in order to reduce the damage to your vehicle.

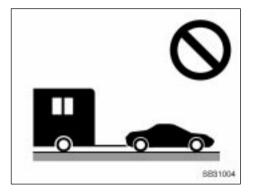
- 1. Put the shift lever in "N" (sequential manual transmission) or in neutral (manual transmission).
- 2. Turn the ignition switch to the "ACC" position. Make sure the audio is turned off.

NOTICE

To avoid the locking of the steering wheel, turn the ignition switch to the "ACC" position.

3. Release the parking brake.

After dinghy towing, let the engine idle for more than 3 minutes before driving the vehicle.



NOTICE

Do not tow your vehicle from the rear. This may cause serious damage to your vehicle. Trailer towing



Toyota does not recommend towing a trailer with your MR2. It is not designed for trailer towing.

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 194 in Section 7–2 for instructions.
- 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. Get into high gear as quickly as possible.
- 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 lugging or 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 clutch or 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

If your vehicle will not start 14	8
If your engine stalls while driving 15	1
If you cannot increase the engine speed 15	1
If your vehicle overheats 15	2
If you have a flat tire 15	3
If your vehicle needs to be towed 16	1
If you cannot shift the sequential manual transmission	
selector lever	5
If you lose your keys 16	6

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 140 in Section 3 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, the engine immobiliser system is possibly broken. Call your Toyota dealer. (See "Keys" on page 8 in Section 1–2.)

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" on page 149 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

- Sequential manual transmission only: Your vehicle cannot be pullor push-started.
- 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—

- The engine may be flooded because of repeated cranking. See "(b) Starting a flooded engine" on page 148 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.

Sequential manual transmission: If this happens, turn the key to "START" with the accelerator pedal and brake pedal held down. Keep the key, accelerator pedal and brake pedal in these positions for 15 seconds and release them. Then release the accelerator pedal, and try cranking the engine with the brake pedal depressed.

Manual transmission: If this happens, turn the key to "START" with the accelerator pedal held down. Keep the key and accelerator pedal in these positions for 15 seconds and release them. Then try starting the engine with your foot off the accelerator pedal.

If the engine does not start after 15 seconds of cranking, release the key, wait a few minutes and try again.

If the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop for assistance.

NOTICE

Do not crank for more than 30 seconds at a time. This may overheat the starter and wiring systems.

(c) Jump starting

To avoid serious personal injury and damage to your vehicle which might result from battery explosion, acid burns, electrical burns, or damaged electronic components, these instructions must be followed precisely.

If you are unsure about how to follow this procedure, we strongly recommend that you seek the help of a competent mechanic or towing service.

- 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.

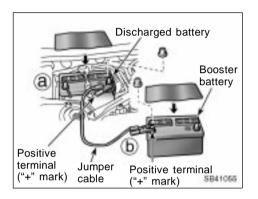
Warning: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

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

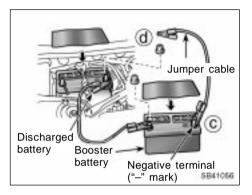
- 1. If the booster battery is installed in another vehicle, make sure the vehicles are not touching. Turn off all unnecessary lights and accessories.
- 2. If required, remove all the vent plugs from the booster and discharged batteries. Lay a cloth over the open vents on the batteries. (This helps reduce 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.

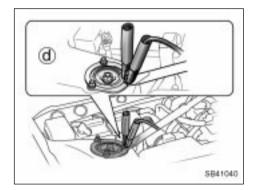
b. Connect the clamp at the other end of the positive (red) jumper cable to the positive (+) terminal on the booster battery.



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.

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. Sequential manual transmission: Turn the ignition switch to "ON" position. Hold down the brake pedal firmly, and place the selector lever to "N" position. Make sure that the "N" indicator in the instrument cluster comes on. Then start your engine in a normal way.

Manual transmission: 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.

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. Sequential manual transmission: Turn the ignition key to "ACC" or "LOCK" position. Approximately 5 seconds after, try starting the engine again.

Manual transmission: Turn the ignition key to "ACC" or "LOCK", and try starting the engine again.

If the engine will not start, see "If your vehicle will not start—" on page 148 in this section.

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 with the accelerator pedal depressed down to about the middle position, there may be a problem somewhere in your electronic throttle control system.

At this time, if you depress the accelerator pedal more firmly and slowly, you can drive you 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.

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...

- Pull safely off the road, stop the vehicle and turn on your emergency flashers. Put the transmission in "N" (sequential manual transmission) or in neutral (manual transmission) 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 and make sure the electric cooling fan is operating. If it is not, turn the ignition off.

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. 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.

When the engine is running, keep hands and clothing away from the moving fan and engine drive belts.

- 4. If the coolant is leaking, stop the engine immediately. Call a Toyota dealer for assistance.
- If there are no obvious leaks, check the coolant reservoir. If it is dry, add coolant to the reservoir while the engine is running. Fill it about half full.

Do not attempt to remove the coolant reservoir cap or air release valve when the engine and radiator are hot. Serious injury could result from scalding hot fluid and steam blown out under pressure. 6. 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—

- 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.
- Firmly engage the parking brake and put the transmission lever in "R" (sequential manual transmission) or in reverse (manual transmission).
- 4. Have everyone get out of the vehicle on the side away from traffic.
- 5. Read the following instructions thoroughly.

When jacking, be sure to observe the following to reduce the possibility of personal injury:

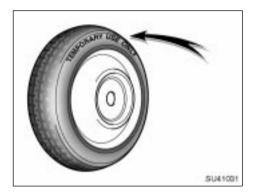
- Follow jacking instructions.
- Do not put any part of your body under the vehicle supported by the jack. Personal injury may occur.
- Do not start or run the engine while your vehicle is supported by the jack.

• Stop the vehicle on a level firm ground, firmly set the parking brake and put the transmission in "R" (sequential manual transmission) or in reverse (manual transmission). Block the wheel diagonally opposite to the one being changed if necessary.

- Make sure to set the jack properly in the jack point. Raising the vehicle with jack improperly positioned will damage the vehicle or may allow the vehicle to fall off the jack and cause personal injury.
- Never get under the vehicle when the vehicle is supported by the jack alone.
- Use the jack only for lifting your vehicle during wheel changing.
- Do not raise the vehicle with someone in the vehicle.
- When raising the vehicle, do not put an object on or under the jack.
- Raise the vehicle only high enough to remove and change the tire.

NOTICE

Do not continue driving with a deflated tire. Driving even a short distance can damage a tire and wheel beyond repair.



Compact spare tire

The compact spare tire is designed for temporary emergency use only.

The compact spare tire is identified by the distinctive wheel design and color and special wording "TEMPORARY USE ONLY" molded into the side wall of the tire.

The standard tire should be repaired and replaced as soon as possible.

The compact spare tire saves space in your trunk, and its lighter weight helps to improve fuel economy and permits easier installation in case of a flat tire. The compact spare tire can be used many times, if necessary. It has tread life of up to 4800 km (3000 miles) depending on road conditions and your driving habits. When tread wear indicators appear on the tire, replace the tire.

See also the tire section on page 195 in Section 7-2 for details on the tread wear indicators and other service information.

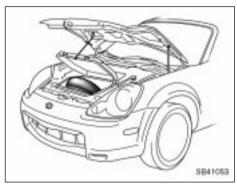
CAUTION

- The compact spare tire was designed especially for your Toyota.
 Do not use it on any other vehicle.
- Do not exceed 80 km/h (50 mph) when driving with the compact spare tire.
- Avoid sudden acceleration, sudden deceleration and sharp turns with the compact spare tire.

NOTICE

Your ground clearance is reduced when the compact spare tire is installed so avoid driving over obstacles and drive slowly on rough, unpaved roads and speed bumps. Also, do not attempt to go through an automatic car wash as the vehicle may get caught, resulting in damage.

-Required tools and compact spare tire



Compact spare tire

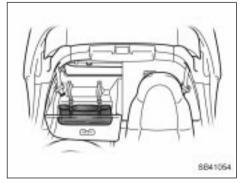
1. Get the tool bag and compact spare tire.

You will find a jack in the tool bag.

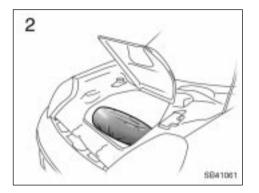
To prepare yourself for an emergency, you should familiarize yourself with the use of the jack, each of the tools and their storage locations.



To remove the compact spare tire: 1. Open the front box cover in the trunk.



Tool bag



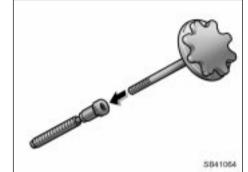
2. Remove the spare wheel cover.



3. Loosen the bolt and remove it.

Then take the compact spare tire out of the vehicle.

When storing the compact spare tire, put it in place with the outer side of the wheel facing up. Then secure the tire by repeating the above removal steps in reverse order to prevent it from flying forward during a collision or sudden braking.

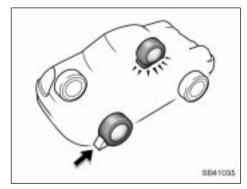


When you store the replaced flat ground tire in the place where the compact spare tire was loaded, install the spare wheel extension to the spare wheel clamp.

NOTICE

The replaced ground tire should be fixed steadily by the spare wheel clamp or it may damage the vehicle's body.

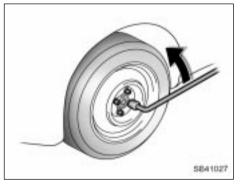
-Blocking the wheel



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 from the front for the front wheels or from the rear for the rear wheels.

-Loosening wheel nuts



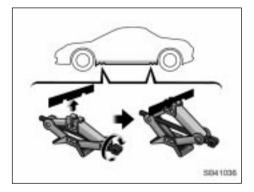
3. Loosen all the wheel nuts.

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.

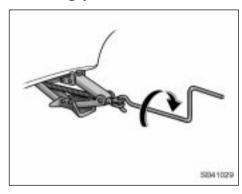
-Positioning the jack



4. Position the jack at the correct jack point as shown.

Make sure the jack is positioned on a level and solid place.

-Raising your vehicle



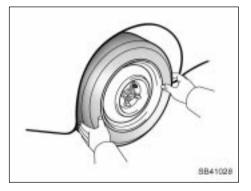
5. After making sure that no one is in the vehicle, raise it high enough so that the compact spare tire can be installed.

Remember you will need more ground clearance when putting on the compact spare tire than when removing the flat tire.

To raise the vehicle, insert the jack handle into the jack (it is a loose fit) and turn it clockwise. As the jack touches the vehicle and begins to lift, double-check that it is properly positioned.

Never get under the vehicle when the vehicle is supported by the jack alone.

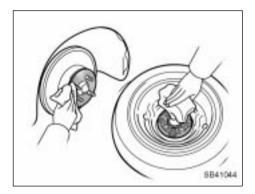
-Changing wheels



6. Remove the wheel nuts and change tires.

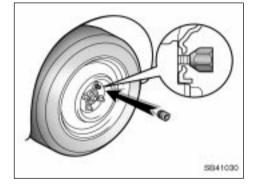
Lift the flat tire straight off and put it aside.

Roll the compact 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.



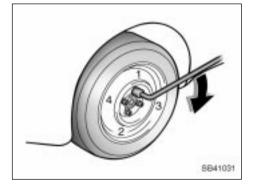
Before putting wheels on, remove any corrosion on the mounting surfaces with a wire brush or such. Installation of wheels without good metal-to-metal contact at the mounting surface can cause wheel nuts to loosen and eventually cause a wheel to come off while driving. Therefore after the first 1600 km (1000 miles), check to see that the wheel nuts are tight.

-Reinstalling wheel nuts



7. Reinstall all the wheel nuts with finger tight.

Reinstall the wheel nuts (tapered end inward) and tighten them as much as you can by finger. Press back on the tire back and see if you can tighten them more. -Lowering your vehicle



8. Lower the vehicle completely and tighten the wheel nuts.

Turn the jack handle counterclockwise to lower the vehicle.

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.

A 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.

—After changing wheels

9. Check the air pressure of the replaced tire.

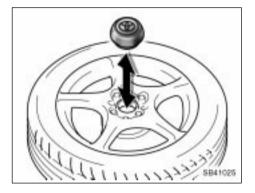
Adjust the air pressure to the specification designated on page 220 in Section 8. If the pressure is lower, drive slowly to the nearest service station and fill to the correct pressure.

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.

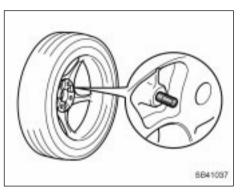
10. Restow all the tools, jack and flat tire securely.

As soon as possible after changing wheels, tighten the wheel nuts to the torque specified on page 220 in Section 8 with a torque wrench. Have a technician repair the flat tire and replace the compact spare tire with it.

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.



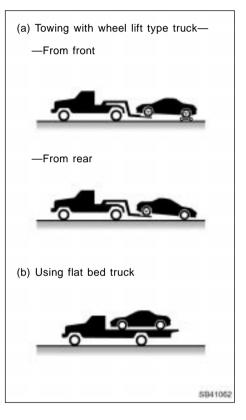
Remove the wheel ornament from the flat tire before restowing the flat tire.



NOTICE

The size of the front wheel and the rear wheel is different. In order to prevent the wrong installation, there is a pin on the assembly surface inside the rear wheel as shown above. Therefore, the rear wheels cannot be installed on the front.

If your vehicle needs to be towed—



If towing is necessary, we recommend you to 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" on page 163 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

From front—We recommend using a towing dolly under the rear wheels. If you do not use a towing dolly, release the parking brake and put the transmission in "N" (sequential manual transmission) or in neutral (manual transmission). The key must be in "ACC" (sequential manual transmission).

Sequential manual transmission only: After shifting the selector lever to the "N" position, always make sure that the gear is actually disengaged and is in neutral by pushing the vehicle by hand or other means. In case the gear can not be put in neutral, turn the ignition switch from the "OFF" to "ON" position, and operate the

selector lever once from "N" to "S" or "R", then back to "N" again. Then turn the ignition switch from the "ON" to "OFF" position. These procedures may help put the gear in neutral. If the gear still can not be put in neutral, you can not tow without a towing dolly.

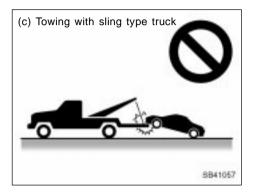
From rear—Place the ignition key in the "ACC" position.

Do not tow without a towing dolly when the ignition switch is in the "ON" position and/or when the transmission is not in the neutral gear position. Otherwise, you may be involved in an unexpected accident.

NOTICE

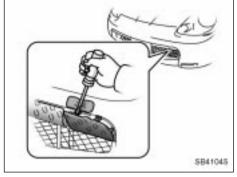
- When lifting wheels, take care to ensure adequate ground clearance for towing at the opposite end of the raised vehicle. Otherwise, the bumper and/or underbody of the towed vehicle will be damaged during towing.
- Do not tow with the key removed or in the "LOCK" position, as the steering lock mechanism is not strong enough to hold the front wheels straight while towing.

(b) Using flat bed truck

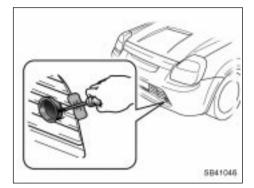


(c) Towing with sling type truck

—Emergency towing



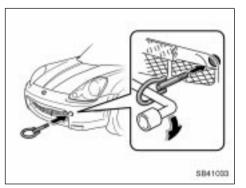
Remove the cover (front)



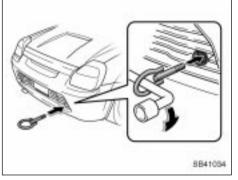
Remove the cover (rear)

NOTICE

Do not tow with sling type truck, either from the front or rear. This may cause body damage.



Install the eyelet (front)



Install the eyelet (rear)

163

If towing is necessary, we recommend you to have it done by your Toyota dealer or a commercial tow truck service.

If a towing service is not available in an emergency, your vehicle may be temporarily towed by a cable or chain secured to either the emergency towing eyelet^{*} on the front of the vehicle or the right emergency towing eyelet^{*} on the rear of the vehicle. Use extreme caution when towing vehicles.

NOTICE

Only use specified towing eyelet; otherwise your vehicle may be damaged.

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.

*: Eyelet

The eyelet is stored in the luggage space with the jack handle.

To install: Remove the cover of eyelet and firmly install it as shown in the illustration.

• Use extreme caution when towing a vehicle. Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing eyelets and towing cable or chain. The eyelets and towing cable or chain may break and cause serious injury or damage.

• When installing the eyelet on the vehicle, be sure to tighten the eyelet securely. If the tightening is loose, it may come off when being towed and result in death or serious injury.

NOTICE

- Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing eyelets provided.
- Do not use the left rear eyelet. It is not designed for towing.

Before towing, release the parking brake and put the transmission in "N" (sequential manual transmission) or in neutral (manual transmission).

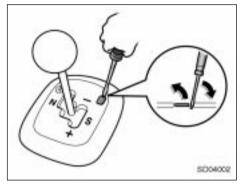
Sequential manual transmission: The key must be in "ACC".

Manual transmission: The key must be in "ACC" (engine off) or "ON" (engine running).

Sequential manual transmission only: After shifting the selector lever to the "N" position, always make sure that the gear is actually disengaged and is in neutral by pushing the vehicle by hand or other means. In case the gear can not be put in neutral, turn the ignition switch from the "OFF" to "ON" position, and operate the selector lever once from "N" to "S" or "R", then back to "N" again. Then turn the ignition switch from the "ON" to "OFF" position. These procedures may help put the gear in neutral. If the gear still can not be put in neutral, you can not tow with cables or chains.

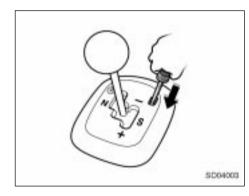
- If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.
- Do not tow with a cable or chain when the ignition switch is in the "ON" position and/or when the transmission is not in the neutral gear position. Otherwise, you may be involved in an unexpected accident.

If you cannot shift the sequential manual transmission selector lever



In case the selector lever lock is not released and the selector lever cannot be moved even though the ignition switch is turned to the "ON" position, follow the procedures below:

- 1. Turn the ignition key to the "LOCK" or "ACC" position. Make sure the parking brake is applied.
- 2. Pry up the cover with a flat-bladed screwdriver or equivalent.



- 3. To push the link, insert a key or screwdriver to the hole. The lever can be operated while the link is being pushed.
- 4. Shift into the "N" position.
- 5. Re-insert the cover.
- 6. Start the engine while depressing the brake pedal.

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 immobiliser system must be replaced.

See the suggestion given in "Keys" on page 8 in Section 1–2.

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 side window because it is the least expensive to replace. Be extremely cautious to avoid cuts from the glass.

SECTION 4

IN CASE OF AN EMERGENCY

If your vehicle will not start 168
If your engine stalls while driving
If you cannot increase the engine speed 171
If your vehicle overheats 172
If you have a flat tire 173
If your vehicle needs to be towed
If you cannot shift the sequential manual transmission
selector lever
If you lose your keys

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 140 in Section 3 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, the engine immobiliser system is possibly broken. Call your Toyota dealer. (See "Keys" on page 8 in Section 1-2.)

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" on page 169 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

- Sequential manual transmission only: Your vehicle cannot be pullor push-started.
- 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—

- The engine may be flooded because of repeated cranking. See "(b) Starting a flooded engine" on page 168 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.

Sequential manual transmission: If this happens, turn the key to "START" with the accelerator pedal and brake pedal held down. Keep the key, accelerator pedal and brake pedal in these positions for 15 seconds and release them. Then release the accelerator pedal, and try cranking the engine with the brake pedal depressed.

Manual transmission: If this happens, turn the key to "START" with the accelerator pedal held down. Keep the key and accelerator pedal in these positions for 15 seconds and release them. Then try starting the engine with your foot off the accelerator pedal.

If the engine does not start after 15 seconds of cranking, release the key, wait a few minutes and try again.

If the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop for assistance.

NOTICE

Do not crank for more than 30 seconds at a time. This may overheat the starter and wiring systems.

(c) Jump starting

To avoid serious personal injury and damage to your vehicle which might result from battery explosion, acid burns, electrical burns, or damaged electronic components, these instructions must be followed precisely.

If you are unsure about how to follow this procedure, we strongly recommend that you seek the help of a competent mechanic or towing service.

- 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.

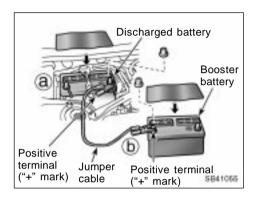
Warning: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

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

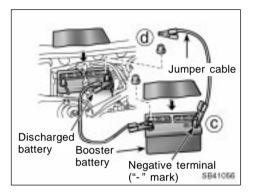
- If the booster battery is installed in another vehicle, make sure the vehicles are not touching. Turn off all unnecessary lights and accessories.
- 2. If required, remove all the vent plugs from the booster and discharged batteries. Lay a cloth over the open vents on the batteries. (This helps reduce 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.

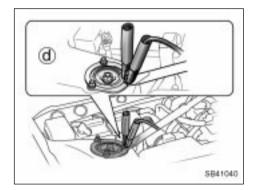
b. Connect the clamp at the other end of the positive (red) jumper cable to the positive (+) terminal on the booster battery.



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.

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. Sequential manual transmission: Turn the ignition switch to "ON" position. Hold down the brake pedal firmly, and place the selector lever to "N" position. Make sure that the "N" indicator in the instrument cluster comes on. Then start your engine in a normal way.

Manual transmission: 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.
- 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.

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. Sequential manual transmission: Turn the ignition key to "ACC" or "LOCK" position. Approximately 5 seconds after, try starting the engine again.

Manual transmission: Turn the ignition key to "ACC" or "LOCK", and try starting the engine again.

If the engine will not start, see "If your vehicle will not start—" on page 168 in this section.

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 with the accelerator pedal depressed down to about the middle position, there may be a problem somewhere in your electronic throttle control system.

At this time, if you depress the accelerator pedal more firmly and slowly, you can drive you 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.

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...

- Pull safely off the road, stop the vehicle and turn on your emergency flashers. Put the transmission in "N" (sequential manual transmission) or in neutral (manual transmission) and apply the parking brake. Turn off the air conditioning if it is being used.
- 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 and make sure the electric cooling fan is operating. If it is not, turn the ignition off.

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. 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.

When the engine is running, keep hands and clothing away from the moving fan and engine drive belts.

- 4. If the coolant is leaking, stop the engine immediately. Call a Toyota dealer for assistance.
- 5. If there are no obvious leaks, check the coolant reservoir. If it is dry, add coolant to the reservoir while the engine is running. Fill it about half full.

Do not attempt to remove the coolant reservoir cap or air release valve when the engine and radiator are hot. Serious injury could result from scalding hot fluid and steam blown out under pressure. 6. 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—

- 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 engage the parking brake and put the transmission lever in "R" (sequential manual transmission) or in reverse (manual transmission).
- 4. Have everyone get out of the vehicle on the side away from traffic.
- 5. Read the following instructions thoroughly.

When jacking, be sure to observe the following to reduce the possibility of personal injury:

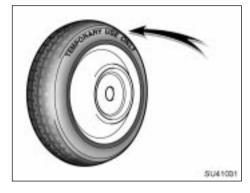
- Follow jacking instructions.
- Do not put any part of your body under the vehicle supported by the jack. Personal injury may occur.
- Do not start or run the engine while your vehicle is supported by the jack.

• Stop the vehicle on a level firm ground, firmly set the parking brake and put the transmission in "R" (sequential manual transmission) or in reverse (manual transmission). Block the wheel diagonally opposite to the one being changed if necessary.

- Make sure to set the jack properly in the jack point. Raising the vehicle with jack improperly positioned will damage the vehicle or may allow the vehicle to fall off the jack and cause personal injury.
- Never get under the vehicle when the vehicle is supported by the jack alone.
- Use the jack only for lifting your vehicle during wheel changing.
- Do not raise the vehicle with someone in the vehicle.
- When raising the vehicle, do not put an object on or under the jack.
- Raise the vehicle only high enough to remove and change the tire.

NOTICE

Do not continue driving with a deflated tire. Driving even a short distance can damage a tire and wheel beyond repair.



Compact spare tire

The compact spare tire is designed for temporary emergency use only.

The compact spare tire is identified by the distinctive wheel design and color and special wording "TEMPORARY USE ONLY" molded into the side wall of the tire.

The standard tire should be repaired and replaced as soon as possible.

The compact spare tire saves space in your trunk, and its lighter weight helps to improve fuel economy and permits easier installation in case of a flat tire. The compact spare tire can be used many times, if necessary. It has tread life of up to 4800 km (3000 miles) depending on road conditions and your driving habits. When tread wear indicators appear on the tire, replace the tire.

See also the tire section on page 215 in Section 7-2 for details on the tread wear indicators and other service information.

- The compact spare tire was designed especially for your Toyota. Do not use it on any other vehicle.
- Do not exceed 80 km/h (50 mph) when driving with the compact spare tire.
- Avoid sudden acceleration, sudden deceleration and sharp turns with the compact spare tire.

NOTICE

Your ground clearance is reduced when the compact spare tire is installed so avoid driving over obstacles and drive slowly on rough, unpaved roads and speed bumps. Also, do not attempt to go through an automatic car wash as the vehicle may get caught, resulting in damage.

SB41053

-Required tools and compact

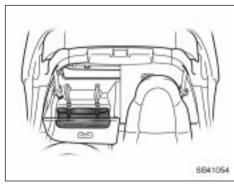
Compact spare tire

spare tire

1. Get the tool bag and compact spare tire.

You will find a jack in the tool bag.

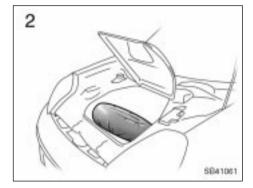
To prepare yourself for an emergency, you should familiarize yourself with the use of the jack, each of the tools and their storage locations.



Tool bag



To remove the compact spare tire: 1. Open the front box cover in the trunk.



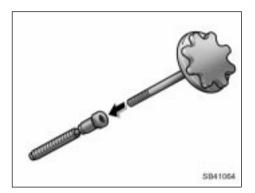
2. Remove the spare wheel cover.



3. Loosen the bolt and remove it.

Then take the compact spare tire out of the vehicle.

When storing the compact spare tire, put it in place with the outer side of the wheel facing up. Then secure the tire by repeating the above removal steps in reverse order to prevent it from flying forward during a collision or sudden braking.

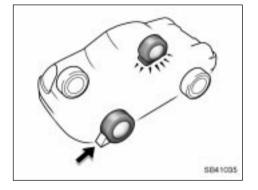


When you store the replaced flat ground tire in the place where the compact spare tire was loaded, install the spare wheel extension to the spare wheel clamp.

NOTICE

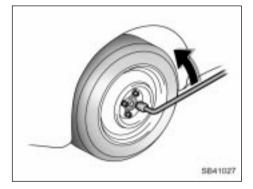
The replaced ground tire should be fixed steadily by the spare wheel clamp or it may damage the vehicle's body.

-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 from the front for the front wheels or from the rear for the rear wheels. -Loosening wheel nuts



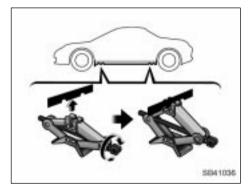
3. Loosen all the wheel nuts.

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.

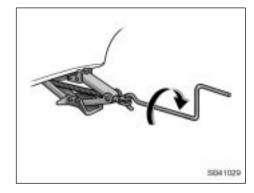
—Positioning the jack



4. Position the jack at the correct jack point as shown.

Make sure the jack is positioned on a level and solid place.

-Raising your vehicle



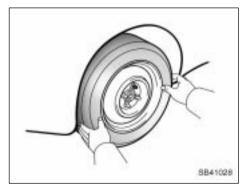
5. After making sure that no one is in the vehicle, raise it high enough so that the compact spare tire can be installed.

Remember you will need more ground clearance when putting on the compact spare tire than when removing the flat tire.

To raise the vehicle, insert the jack handle into the jack (it is a loose fit) and turn it clockwise. As the jack touches the vehicle and begins to lift, double-check that it is properly positioned.

Never get under the vehicle when the vehicle is supported by the jack alone.

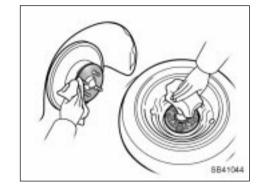
-Changing wheels



6. Remove the wheel nuts and change tires.

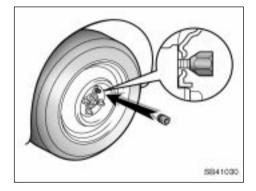
Lift the flat tire straight off and put it aside.

Roll the compact 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 wheels on, 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. Therefore after the first 1600 km (1000 miles), check to see that the wheel nuts are tight.

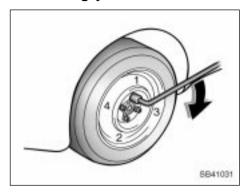
-Reinstalling wheel nuts



7. Reinstall all the wheel nuts with finger tight.

Reinstall the wheel nuts (tapered end inward) and tighten them as much as you can by finger. Press back on the tire back and see if you can tighten them more.

-Lowering your vehicle



8. Lower the vehicle completely and tighten the wheel nuts.

Turn the jack handle counterclockwise to lower the vehicle.

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.

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.

—After changing wheels

9. Check the air pressure of the replaced tire.

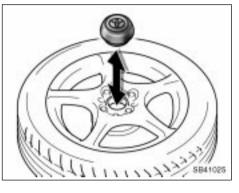
Adjust the air pressure to the specification designated on page 240 in Section 8. If the pressure is lower, drive slowly to the nearest service station and fill to the correct pressure.

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.

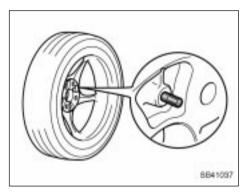
10. Restow all the tools, jack and flat tire securely.

As soon as possible after changing wheels, tighten the wheel nuts to the torque specified on page 240 in Section 8 with a torque wrench. Have a technician repair the flat tire and replace the compact spare tire with it.

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.



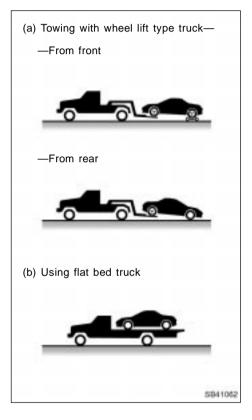
Remove the wheel ornament from the flat tire before restowing the flat tire.



NOTICE

The size of the front wheel and the rear wheel is different. In order to prevent the wrong installation, there is a pin on the assembly surface inside the rear wheel as shown above. Therefore, the rear wheels cannot be installed on the front.

If your vehicle needs to be towed—



If towing is necessary, we recommend you to 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" on page 183 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

From front—We recommend using a towing dolly under the rear wheels. If you do not use a towing dolly, release the parking brake and put the transmission in "N" (sequential manual transmission) or in neutral (manual transmission). The key must be in "ACC" (sequential manual transmission).

Sequential manual transmission only:

After shifting the selector lever to the "N" position, always make sure that the gear is actually disengaged and is in neutral by pushing the vehicle by hand or other means. In case the gear can not be put in neutral, turn the ignition switch from the "OFF" to "ON" position, and operate the selector lever once from "N" to "S" or "R", then back to "N" again. Then turn the ignition switch from the "ON" to "OFF" position. These procedures may help put the gear in neutral. If the gear still can not be put in neutral, you can not tow without a towing dolly.

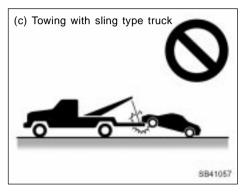
From rear—Place the ignition key in the "ACC" position.

Do not tow without a towing dolly when the ignition switch is in the "ON" position and/or when the transmission is not in the neutral gear position. Otherwise, you may be involved in an unexpected accident.

NOTICE

- When lifting wheels, take care to ensure adequate ground clearance for towing at the opposite end of the raised vehicle. Otherwise, the bumper and/or underbody of the towed vehicle will be damaged during towing.
- Do not tow with the key removed or in the "LOCK" position, as the steering lock mechanism is not strong enough to hold the front wheels straight while towing.

(b) Using flat bed truck

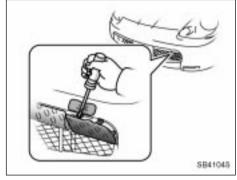


(c) Towing with sling type truck

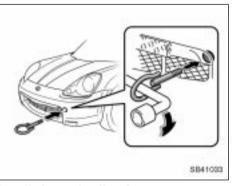
NOTICE

Do not tow with sling type truck, either from the front or rear. This may cause body damage.

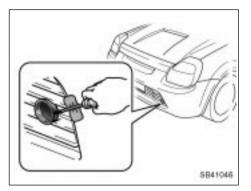
-Emergency towing



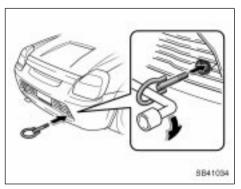
Remove the cover (front)



Install the eyelet (front)



Remove the cover (rear)



Install the eyelet (rear)

184

If towing is necessary, we recommend you to have it done by your Toyota dealer or a commercial tow truck service.

If a towing service is not available in an emergency, your vehicle may be temporarily towed by a cable or chain secured to either the emergency towing eyelet^{*} on the front of the vehicle or the right emergency towing eyelet^{*} on the rear of the vehicle. Use extreme caution when towing vehicles.

NOTICE

Only use specified towing eyelet; otherwise your vehicle may be damaged.

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.

*: Eyelet

The eyelet is stored in the luggage space with the jack handle.

To install: Remove the cover of eyelet and firmly install it as shown in the illustration.

- Use extreme caution when towing a vehicle. Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing eyelets and towing cable or chain. The eyelets and towing cable or chain may break and cause serious injury or damage.
- When installing the eyelet on the vehicle, be sure to tighten the eyelet securely. If the tightening is loose, it may come off when being towed and result in death or serious injury.

NOTICE

- Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing eyelets provided.
- Do not use the left rear eyelet. It is not designed for towing.

Before towing, release the parking brake and put the transmission in "N" (sequential manual transmission) or in neutral (manual transmission).

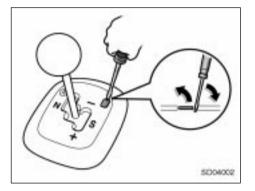
Sequential manual transmission: The key must be in "ACC".

Manual transmission: The key must be in "ACC" (engine off) or "ON" (engine running).

Sequential manual transmission only: After shifting the selector lever to the "N" position, always make sure that the gear is actually disengaged and is in neutral by pushing the vehicle by hand or other means. In case the gear can not be put in neutral, turn the ignition switch from the "OFF" to "ON" position, and operate the selector lever once from "N" to "S" or "R", then back to "N" again. Then turn the ignition switch from the "ON" to "OFF" position. These procedures may help put the gear in neutral. If the gear still can not be put in neutral, you can not tow with cables or chains.

- 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.
- Do not tow with a cable or chain when the ignition switch is in the "ON" position and/or when the transmission is not in the neutral gear position. Otherwise, you may be involved in an unexpected accident.

If you cannot shift the sequential manual transmission selector lever



In case the selector lever lock is not released and the selector lever cannot be moved even though the ignition switch is turned to the "ON" position, follow the procedures below:

- 1. Turn the ignition key to the "LOCK" or "ACC" position. Make sure the parking brake is applied.
- 2. Pry up the cover with a flat-bladed screwdriver or equivalent.



- 3. To push the link, insert a key or screwdriver to the hole. The lever can be operated while the link is being pushed.
- 4. Shift into the "N" position.
- 5. Re-insert the cover.
- 6. Start the engine while depressing the brake pedal.

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 immobiliser system must be replaced.

See the suggestion given in "Keys" on page 8 in Section 1-2.

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 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

Protecting your Toyota from corrosion	168
Washing and waxing your Toyota	169
Cleaning the interior	172

Protecting your Toyota from corrosion

Toyota, through its diligent research, design and use of the most advanced technology available, has done its part to help prevent corrosion and has provided you with the finest quality vehicle construction. Now, it is up to you. Proper care of your Toyota can help ensure longterm 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 seacoast 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 are prevented from quick-drying 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 them. The lower edge of doors, rocker panels and frame members have drain holes which should not be allowed to clog with dirt as trapped water in these areas can cause corrosion.
- Wash the underside of the vehicle thoroughly when winter is over.

See "Washing and waxing your Toyota" on page 169 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 in covered with water or snow, your garage may be so damp 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 substance
- When the vehicle becomes remarkably dirty with dust and mud

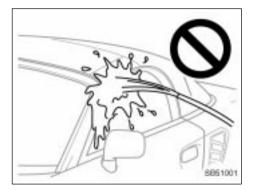
Hand-washing your Toyota

Work in the shade and wait until the vehicle body is not hot to the touch.



For washing instructions for soft top, see "Soft top" on page 171.

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.



Spray water on the side windows or top seals from above, at a 45° angle to the ground.

NOTICE

Do not spray water at side windows and top seals in a way which may cause water to enter the vehicle. 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.

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.

- Rinse thoroughly—dried soap can cause streaking. In hot weather you may need to rinse each section right after you wash it.
- 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

NOTICE

Do not run your Toyota through automatic car washes or possible damage to the soft top may result.

Waxing your Toyota

Polishing and waxing is recommended to maintain the original beauty of your Toyota's finish.

Once a month or if the vehicle surface does not repel water well, apply wax.

- 1. Always wash and dry the vehicle before you begin waxing, even if you are using a combined cleaner and wax.
- 2. Use a good quality polish and wax. If the finish has become extremely weathered, use a car-cleaning polish, followed by a separate wax. Carefully follow the manufacturer's instructions and precautions. Be sure to polish and wax the chrome trim as well as the paint.
- 3. Wax the vehicle again when water does not bead but remains on the surface in large patches.

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.
- Do not apply wax on the soft top. It may damage the soft top.

Touch-up paint

Touch-up paint may be used to cover small chips or scratches.

Apply the paint soon after the damage occurs or corrosion may set in. To do a good job, use a small artist's brush and stir the paint well. Make sure the area is clean and dry. To apply the touch-up paint so it is hardly noticeable, the trick is to apply it only to the bare spots. Apply only the smallest amount possible and do not paint the surface around the scratch or chip.

Soft top

General cleaning-

Follow the procedure shown below.

- 1. Brush off any loose dirt and rinse off with a hose.
- Using a sponge, wash with a mild solution of soap (hand soap) in luke warm water (below 38°C or 100°F).
- 3. Rinse thoroughly to remove soap.

NOTICE

- Do not use harsh or abrasive cleaners as they may damage the top material.
- Do not use water-repellents, wax or other preservative finishes as they may stain the top material.

Additional cleaning (for more difficult stains)—

Follow the procedure shown below using a mild cleaning solution composed of the following ingredient.

- 110 g (4 oz.) of chlorine bleach
- 60 g (2 oz.) of soap (hand soap)
- 3.8L (1.0 gal., 0.8 lmp. gal.) of luke warm water (below 38°C or 100°F).
- Rinse the top, then spread the mild cleaning solution on the entire top. Do not put excessive amounts of liquid on the fabric.

- 2. Scrub with a small, soft bristle handbrush. Add water as needed until the cleaner becomes soapy. Allow solution to settle for two to five minutes. Use a cloth or sponge to remove dirt so it will not be ground into the top. Be careful not to allow any cleaner to dry on the body paint as it may cause streaks.
- 3. Rinse thoroughly.

If any dirt is left, repeat the procedure.

After the top has been cleaned, rinse the vehicle with clean water to remove all the cleaner.

After cleaning, always make sure the top is completely dry before you lower it. Lowering the top while wet or damp may cause interior water damage, water stains or mildew of the top material.

Cleaning the interior

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 foamingtype 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 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 any dirt.

NOTICE

- Do not use organic substances (solvents, kerosene, alcohol, gasoline, etc.) or alkaline or acidic solutions. These chemicals can cause discoloring, staining or peeling of the surface.
- If you use cleaners or polishing agents, make sure their ingredients do not include the substances mentioned above.
- If you use a liquid car freshener, do not spill the liquid onto the vehicle's interior surfaces. It may contain the ingredients mentioned above. Immediately clean any spill using the method mentioned above.

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

Maintenance requirements	176
General maintenance	177
Does your vehicle need repairing?	179
Emissions Inspection and Maintenance (I/M) programs	180

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 drivings.

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 dayto-day care practices that are important to your vehicle for proper operation. It is the owner's responsibility to insure 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 recommend 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. And 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 where adequate ventilation can be obtained if you run the engine.

OUTSIDE THE VEHICLE

Items listed below should be performed from time to time, unless otherwise specified.

Tire pressure

Check the pressure with a gauge every two weeks, or at least once a month. See page 194 in Section 7-2 for additional information.

Tire surface and wheel nuts

Check the tires carefully for cuts, damage or excessive wear. See page 195 in Section 7–2 for additional information. When checking the tires, make sure no nuts are missing, and check the nuts for looseness. Tighten them if necessary.

Fluid leaks

Check underneath for leaking fuel, oil, water or other fluid after the vehicle has been parked for a while. If you smell fuel fumes or notice any leak, have the cause found and corrected immediately.

Doors and trunk lid

Check that both the doors operate smoothly and all latches lock securely. Make sure the trunk lid secondary latch secures the lid from opening when the primary latch is released.

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 seat controls such as seat adjusters, seatback recliner, etc. operate smoothly and that all latches lock securely in any position. Check that the latches lock securely.

Seat belts

Check that the seat belt system such as buckles and retractors 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.

Clutch pedal

Check the pedal for smooth operation.

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.

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 205 in Section 7–3 for additional information.

Engine coolant level

Make sure the coolant level is between the "FULL" and "LOW" lines on the seethrough reservoir when the engine is cold. See page 191 in Section 7–2 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 192 in Section 7-2 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 pgae 202 in Section 7–3 for additional information.

Brake fluid level

Make sure the brake fluid level is correct. See page 193 in Section 7–2 for additional information.

Engine oil level

Check the level by the dipstick with the engine turned off and the vehicle parked on a level spot. See page 190 in Section 7-2 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 193 in Section 7–2 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 128 in Section 2.)

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 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 or clutch pedal; pedal almost touches floor; vehicle pulls to one side when braking
- Engine coolant temperature continually higher than normal

If you notice any of these clues, take your vehicle to your Toyota dealer as soon as possible. It probably needs adjustment or repair.

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.

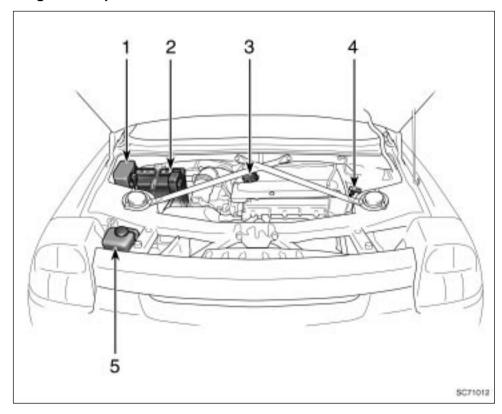
If your vehicle does not pass the I/M test even the malfunction indicator lamp does not come on, contact your Toyota dealer to prepare the vehicle for re-testing.

<u>SECTION 7-1</u>

DO-IT-YOURSELF MAINTENANCE

Introduction

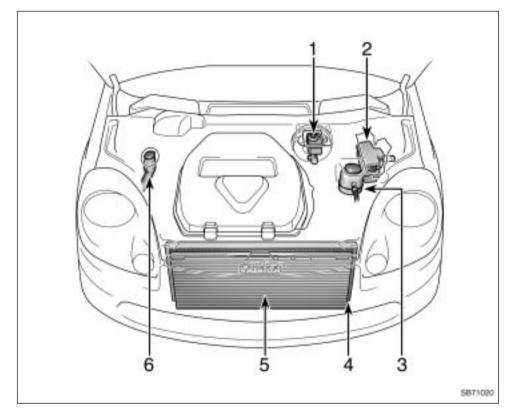
Engine compartment overview	2
Trunk room overview	3
Fuse locations	4
Do-it-yourself service precautions	5
Parts and tools	6
Positioning the jack	8



Engine compartment overview

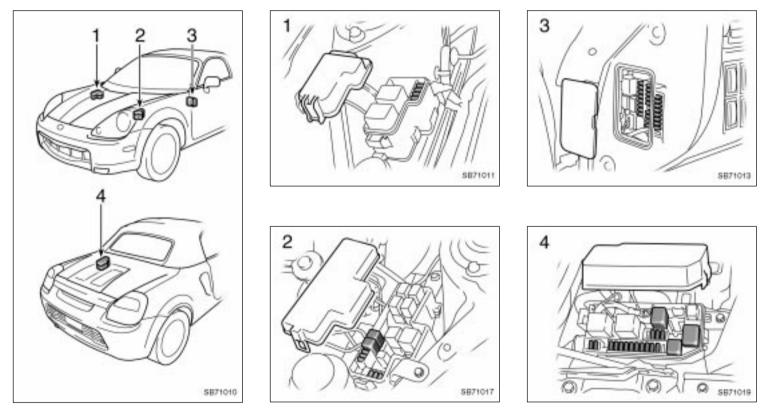
- 1. Fuse block
- 2. Battery
- 3. Engine oil filler cap
- 4. Engine oil level dipstick
- 5. Engine coolant reservoir

Trunk room overview



- 1. Brake fluid reservoir
- 2. Fuse block
- 3. Power steering fluid reservoir
- 4. Radiator
- 5. Condenser
- 6. Windshield washer fluid tank

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 section 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 doit-yourself maintenance, see "Parts and tools" on page 186.

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:

- 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 and trunk room—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 coolant reservoir cap or air release valve 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.
- Do not get under your vehicle with just the body jack supporting it. Always use automotive jack stands or other solid supports.

• Be sure that the ignition is off if you work near the electric cooling fans or radiator grille. With the ignition on, the electric cooling fans will automatically start to run if the engine coolant temperature is high and/or the air conditioning is on.

- Use eye protection whenever you work on or under your vehicle where you may be exposed to flying or falling material, fluid spray, etc.
- Be extremely cautious when working on the battery. It contains poisonous and corrosive sulfuric acid.
- Warning: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling
- 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.
- Take care when filling the brake and clutch fluid reservoirs because brake fluid can harm your eyes and damage painted surfaces. If fluid gets in your eyes, flush your eyes with clean water.
- When racing the engine, make sure that the gear position is in the "N" position. In case the accelerator is operated with the gear in any other positions, the vehicle may move, resulting in an unexpected accident.

NOTICE

 Remember that battery and ignition cables carry high currents or voltages. Be careful of accidentally causing a short circuit.

- ◆ Add only demineralized or distilled water 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 spark 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 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 or trunk, 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 on performing 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):

 Engine oil API grade SJ "Energy-Conserving", SL
 "Energy-Conserving" or ILSAC multigrade having viscosity proper for your climate

Tools:

- Rag or paper towel
- Funnel (only for adding oil)

CHECKING THE ENGINE COOLANT LEVEL

Parts (if level is low):

- "TOYOTA Long Life Coolant" or equivalent
 - See page 191 in Section 7–2 for details about coolant type selection.
- Demineralized or distilled 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):

• Toyota P.S fluid EH or equivalent

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):

• Genuine Toyota fuse or equivalent with same amperage rating as original

ADDING WASHER FLUID

Parts:

- Water
- Washer fluid containing antifreeze (for winter use)

Tools:

Funnel

REPLACING LIGHT BULBS

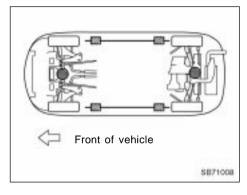
Parts:

• Bulb with same number and wattage rating as original (See charts in "Replacing light bulbs—" on page 206 in Section 7–3.)

Tools:

Screwdriver

Positioning the jack



When jacking up your vehicle with the jack, position the jack correctly as shown in the illustration.

Front- Front crossmember Rear- Rear engine mounting bracket

Support position and Pantograph jack position

Jack position

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 a jack. Personal injury may occur.
- Do not start or run the engine while your vehicle is supported by the jack.
- Stop the vehicle on a level firm ground, firmly set the parking brake and put the transmission in 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 vehicle support stands.

- Do not raise the vehicle with someone in the vehicle.
- When raising the vehicle, do not put an object on or under the jack.

NOTICE

Make sure to place the jack correctly, or your vehicle may be damaged.

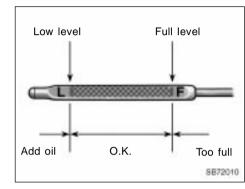
<u>SECTION 7-2</u>

DO-IT-YOURSELF MAINTENANCE

Engine and Chassis

Checking the engine oil level 190
Checking the engine coolant level
Checking the radiator and condenser 192
Checking brake fluid
Checking power steering fluid 193
Checking tire pressure 194
Checking and replacing tires 195
Rotating tires 196
Installing snow tires and chains
Replacing wheels 198
Aluminum wheel precautions

Checking the engine oil level



With the engine at operating temperature and turned off, check the oil level on the dipstick.

- To get a true reading, the vehicle should be on a level spot. After turning off the engine, wait a few minutes for the oil to drain back into the bottom of the engine.
- 2. Pull out the dipstick, and wipe it clean with a rag.
- 3. Reinsert the dipstick—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 on the end.

Be careful not to touch the hot exhaust manifold.

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.

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.):

1.3 (1.4, 1.1)

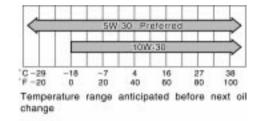
NOTICE

- Avoid overfilling, or the engine could be damaged.
- Check the oil level on the dipstick once again after adding the oil.

ENGINE OIL SELECTION

Use API grade SJ "Energy–Conserving", SL "Energy–Conserving" or ILSAC multigrade engine oil.

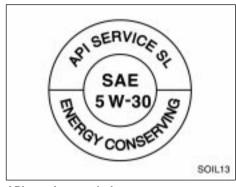
Recommended viscosity (SAE):



OIL05U

SAE 5W-30 is the best choice for your vehicle, for good fuel economy, and good starting in cold weather.

If you use SAE 10W-30 engine oil in extremely low temperatures, the engine may become difficult to start, so SAE 5W-30 engine oil is recommended.



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.

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 ethylene-glycol type coolant for a proper corrosion protection of aluminum components.

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.

Always use ethylene–glycol type coolant for a proper corrosion protection of aluminum components. See information in the next column.

If the coolant level drops within a short time after replenishing, there may be a leak in the system. Visually check the radiator, hoses, 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 coolant reservoir cap or air release valve when the engine is hot.

Coolant type selection

Use of improper coolants may damage your engine cooling system. Your coolant must contain ethylene–glycol type coolant for a proper corrosion protection of your engine that contains aluminum components. Use "TOYOTA Long Life Coolant" or equivalent.

In addition to preventing freezing and subsequent damage to the engine, this type of coolant will also prevent corrosion. Further supplemental inhibitors or additives are neither needed nor recommended.

Read the coolant container for information on freeze protection. Follow the manufacturer's directions for how much to mix with plain water (preferably demineralized water or distilled water). The total capacity of the cooling system is given on page 217 in Section 8. We recommend to use 50% solution for your Toyota, to provide protection down to about $-35^{\circ}C$ ($-31^{\circ}F$). When it is extremely cold, to provide protection down to about $-50^{\circ}C$ ($-58^{\circ}F$), 60% solution is recommended. Do not use more than 70% solution for better coolant performance.

NOTICE

Do not use alcohol type antifreeze or plain water alone.

Checking the radiator and condenser

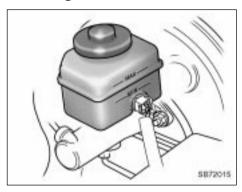
If any of the above parts are extremely dirty or you are not sure of their condition, take your vehicle to Toyota dealer.

To prevent yourself from burning, 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. So be sure to keep the reservoir filled.

If the reservoir needs frequent refilling, it may indicate a serious mechanical problem. If the level is low, add SAE J1703 or FMVSS No.116 DOT 3 brake fluid to the brake reservoir.

Remove and replace the reservoir cap by hand. Fill the brake fluid to the dotted line. This brings the fluid to the correct level when you put the cap back on.

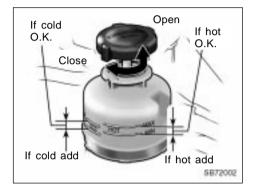
Use only newly opened brake fluid. Once opened, brake fluid absorbs moisture from the air, and excess moisture can cause a dangerous loss of braking.

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 wash it off with water to prevent it from damaging the parts or paint.

Checking power steering fluid



Check the fluid level through the reservoir. If necessary, add Toyota P.S fluid EH or equivalent.

Before checking the power steering fluid, remove the cover inside the trunk. (See "Replacing light bulbs" on page 206 in Section 7–3.)

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 ($60^{\circ}C-80^{\circ}C$ or $140^{\circ}F-175^{\circ}F$). You may also check the level when the fluid is cold (about room temperature, $10^{\circ}C-30^{\circ}C$ or $50^{\circ}F-85^{\circ}F$) 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 Toyota P.S fluid EH or equivalent to bring the level within the range.

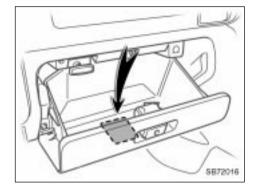
To remove the reservoir cap, turn it counterclockwise and lift up. To reinstall it, turn it clockwise. After replacing the reservoir cap, visually check the steering box case, vane pump and hose connections for leaks or damage.

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 pressure



Keep your tire pressures at the proper level.

The recommended cold tire pressures, tire size and the vehicle capacity weight are given on page 220 in Section 8. They are also on the tire pressure label as shown.

You should check the tire pressures every two weeks, or at least once a month. And do not forget the spare! Incorrect tire pressure can reduce tire life and make your vehicle less safe to drive.

Low tire pressure results in excessive wear, poor handling, reduced fuel economy, and the possibility of blowouts from overheated tires. Also, low tire pressure can cause poor sealing of the tire bead. If the tire pressure is excessively low, there is the possibility of wheel deformation and/or tire separation.

High tire pressure produces a harsh ride, handling problems, excessive wear at the center of the tire tread, and a greater possibility of tire damage from road hazards.

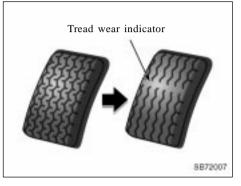
If a tire frequently needs refilling, have it checked by your Toyota dealer.

The following instructions for checking tire 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 pressure reading.

- Always use a tire pressure gauge. The appearance of a tire can be misleading. Besides, tire pressures that are even just a few pounds off can degrade ride and handling.
- Take special care when adding air to the compact spare tire. The smaller tire size can gain pressure very quickly. Add compressed air in small quantities and check the pressure often until it reaches the specified pressure.
- Do not bleed or reduce tire pressure after driving. It is normal for the tire 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.
- Be sure to reinstall the tire inflation 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.

Checking and replacing tires



CHECKING YOUR TIRES

Check the tire tread for the tread wear indicators. If the indicators show, replace the tires.

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.).

Check the tires regularly for damage such as cuts, splits and cracks. If any damage is found, consult with a technician and have the tire repaired or replaced.

Even if the damage does not appear serious, a qualified technician should examine the damage. Objects which have penetrated the tire may have caused internal damage.

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 only the same size and construction as originally installed and with the same or greater load capacity.

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.

- Do not mix radial, bias belted, or bias-ply tires on your vehicle. It can cause dangerous handling characteristics, resulting in loss of control.
- Do not use tires or wheels other than the manufacturer's recommended size.

Toyota recommends all four tires, or at least both front or rear tires be replaced as a set.

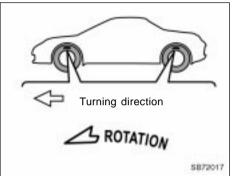
See "If you have a flat tire—" on page 153 in Section 4 for tire change procedure.

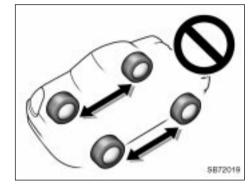
When a tire is replaced, the wheel should always be balanced.

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.

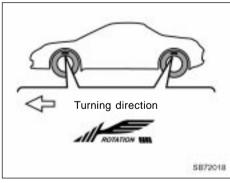
When replacing a tubeless tire, the air valve should also be replaced with a new one.

Rotating tires





Turning direction indicators (type A)



Turning direction indicators (type B)

Do not rotate the tires as the tire sizes are different such as with front to rear, left to right or using the compact spare tire. Performing such tire rotation may result in the tires interfering with the body or in uneven wear of the tires, so that steerability of the vehicle is impaired.

Tires with turning direction indicator-

The tire is a uni-directional type and cannot be used for tire rotation. Using the tire on the opposite side to the designated side will impair the tire performance.

The compact spare tire-

The tire is designed for temporary use only and cannot be used for tire rotation.

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 the 185/55R15 snow tires for front and the 205/50R15 snow tires for rear, construction and load capacity as the original tires on your Toyota.

Do not use tires other than those mentioned above. Do not install studded tires without first checking local regulations for possible restrictions.

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 place.

Mark the direction of rotation and be sure to install them in the same direction when replacing.

- Do not drive with the snow tires incorrectly inflated.
- Never drive over 120 km/h (75 mph) with any type of snow tires.

TIRE CHAIN SELECTION

Use the tire chains which are the correct size for your rear tires.

For 205/50R15 tires, use genuine Toyota tire chains or equivalent for use on the MR2.

Regulations regarding the use of tire chains vary according to location or type of road, so always check them before installing chains.

NOTICE

If the wrong combination of tire and chain is used, the chains could damage the vehicle body.

 MR2 genuine tire chains (Part No.08325–11010)

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.

- 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 the curves to avoid losing control of the vehicle. Otherwise an accident may occur.

NOTICE

Do not attempt to use a tire chain on the compact spare tire, as it may result in damage to the vehicle as well as the tire.

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 damaged wheels, 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.

This must be observed on compact spare tires, too.

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.

Aluminum wheel precautions

- When installing aluminum wheels, check that the wheel nuts are tight after driving your vehicle the first 1600km (1000 miles).
- If you have 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.

<u>SECTION 7-3</u>

DO-IT-YOURSELF MAINTENANCE

Electrical components

Checking battery condition	202
Battery recharging precautions	203
Checking and replacing fuses	204
Adding washer fluid	205
Replacing light bulbs	206

Checking battery condition—

-Precautions

AUTION

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.

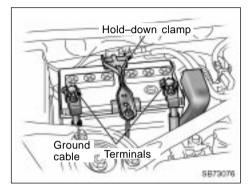
EMERGENCY MEASURES

 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.

Warning: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

-Checking battery exterior



Check the battery for corroded or loose terminal connections, cracks, or loose hold-down clamp.

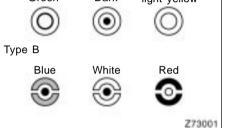
- a. If the battery is corroded, wash it off with a solution of warm water and baking soda. Coat the outside of the terminals with grease to prevent further corrosion.
- b. If the terminal connections are loose, tighten their clamp nuts—but do not overtighten.
- c. Tighten the hold-down clamp only enough 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.

Type A Clear or Green Dark light yellow

-Checking battery condition



CHECKING BY INDICATOR

Check the battery condition by the indicator color.

Indicator color		Condition	
Type A	Type B	Condition	
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

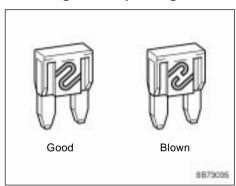
- Always charge the battery in an unconfined area. Do not charge the battery in a garage or closed room where there is not sufficient ventilation.
- Only do a slow charge (5 A or less). Charging at a quicker rate is dangerous. The battery may explode causing personal injuries.

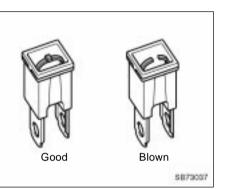
NOTICE

Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.

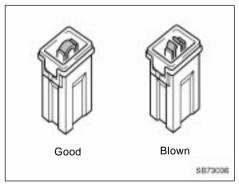
203

Checking and replacing fuses





Туре С





Type A

SET2000

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 184 in Section 7–1 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 221 in Section 8 of this manual 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 "D P/W", "P P/W" or "CIG" fuse, which may be dispensable for normal driving, and use it if its amperage rating is the same.

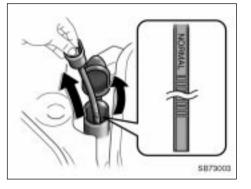
If you cannot use one of the same amperage, use one that is lower, but as close as possible to the rating. If the amperage is lower than that specified, the fuse might blow out again but this does not indicate anything wrong. Be sure to get the correct fuse as soon as possible and return the substitute 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.

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. Check the washer fluid level on the level gauge. If the washer fluid level is below "LOW", 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.

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.

- To prevent yourself from burning, 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 large drop of water on the inside of the lens, or if there is water pooled inside the light, contact your Toyota dealer.

Bulb No.	w	Туре
	60/55	А
	5	В
_	21	В
	3.8	В
	21	С
	21/5	В
	21	В
	21	В
	5	В
	8	D
	5	В
		No. W — 60/55 — 5 — 21 — 3.8 — 21/5 — 21/5 — 21/5 — 21 — 21/5 — 21 — 21 — 21 — 8

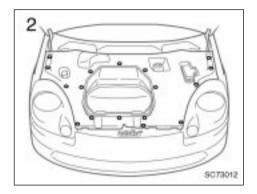
A: HB2 halogen bulbsB: Wedge base bulbs

C: Single end bulbs D: Double end bulbs

BEFORE REPLACING LIGHT BULBS Replacing headlights, parking lights and front turn signal lights.

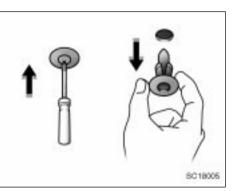


1. Remove the front box cover.

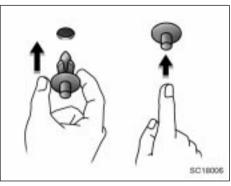


2. Remove the cover in the trunk.

Remove and install the cover clips as shown in the following illustrations.

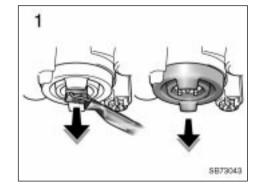


Removing clips

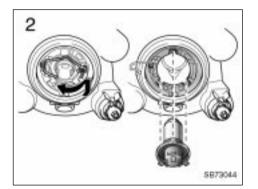


Installing clips

—Headlights

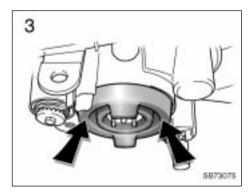


- 1. Unplug the connector. Remove the rubber cover.
- If the connector is tight, wiggle it.



2. Release the bulb retaining spring and remove the bulb. Install a new bulb and the bulb retaining spring.

To install a bulb, align the tabs of the bulb with the cutouts of the mounting hole.

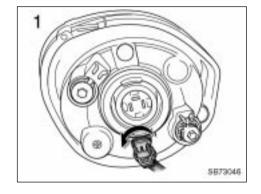


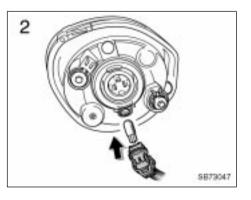
3. Install the rubber cover as shown and snuggle on the boss. Plug in the connector.

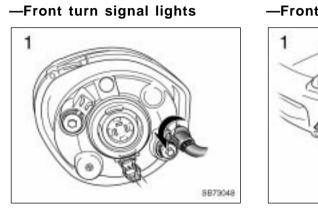
Make sure the rubber cover fits snugly on the connector and the headlight body.

Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, contact your Toyota dealer.

-Parking lights



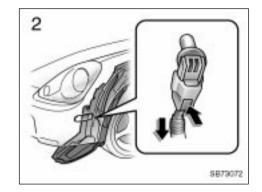


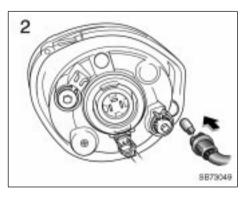


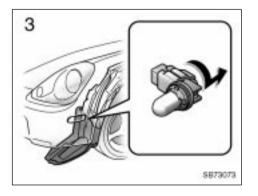
—Front side marker lights

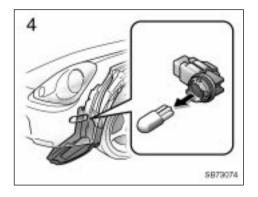


Phillips-head screw: Use a phillips-head screwdriver.

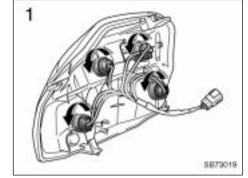


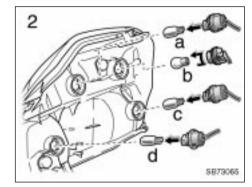






—Rear turn signal, stop/tail, stop and back-up lights

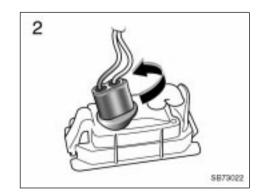


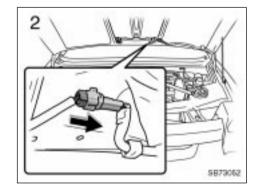


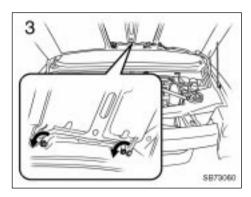
- a: Back-up light
- b: Rear turn signal light
- c: Stop/tail light
- d: Stop light

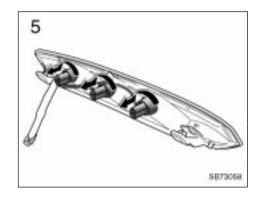
Be careful when you work in the area around the engine after driving in order to prevent burning yourself. The engine hood, the support rod, or surrounding area could be hot after driving.



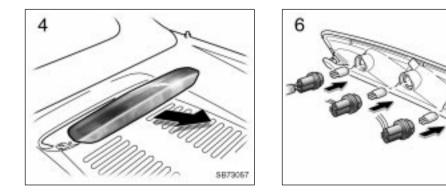








Be careful when you work in the area around the engine after driving in order to prevent burning yourself. The engine hood, the support rod, or surrounding area could be hot after driving.



213

\$873069

SECTION 8

SPECIFICATIONS

Dimensions and weight 2	16
Engine	16
Fuel	16
Service specifications 2	17
Tires	20
Fuses	21

Dimensions and weight				
Overall length	mm (in.)	3885	(153.0)	
Overall width	mm (in.)	1695	(66.7)	
Overall height	mm (in.)	1240	$(48.8)^{*}$	
Wheelbase	mm (in.)	2450	(96.5)	
Front tread	mm (in.)	1475	(58.1)	
Rear tread	mm (in.)	1460	(57.5)	
Vehicle capacity weight				
(occupants + I	uggage) kg (lb.)	193	(425)	

Engine Model: 1ZZ-FE Type: 4 cylinder in line, 4 cycle, gasoline Bore and stroke, mm (in.): 79.0 \times 91.5 (3.11 \times 3.60) Displacement, cm³ (cu. in.): 1794 (109.5)

Fuel

Fuel type: Unleaded gasoline, Octane Rating 87 (Research Octane Number 91) or higher Fuel tank capacity, L (gal., Imp. gal.): 48 (12.7, 10.6)

*: Unladen vehicle

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 SK16R11 NGK IFR5A11

Spark plug gap, mm (in.): 1.1 (0.043)

ENGINE LUBRICATION

Oil capacity (drain L (qt., Imp. qt.):	and refill),
With filter	3.7 (3.9, 3.3)
Without filter	3.5 (3.7, 3.1)

Oil grade:

API grade SJ "Energy–Conserving", SL "Energy–Conserving" or ILSAC multigrade engine oil is recommended.

Recommended oil viscosity (SAE):

\leftarrow		5W	30 Pr	eferred		
			1010	-30		\Rightarrow
0-29	-18	-7	4	16	27	38

Temperature range anticipated before next oil change

OIL05U

COOLING SYSTEM

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

10.4 (11.0, 9.2)

Coolant type:

"TOYOTA Long Life Coolant" or equivalent

With ethylene–glycol type coolant for a proper corrosion protection of aluminum components

Do not use alcohol type antifreeze or plain water alone.

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.

CLUTCH (manual transmission only)

Pedal free play, mm (in.): 5—15 (0.2—0.6)

Fluid type: SAE J1703 or FMVSS No.116 DOT 3

MANUAL TRANSAXLE

Oil capacity, L (qt., Imp. qt.): Vehicle with limited-slip differential 1.8 (1.9, 1.6) Vehicle without limited-slip differential 1.9 (2.0, 1.7)

Oil type:

Gear oil API GL-4 or GL-5

Recommended oil viscosity: SAE 75W-90

SEQUENTIAL MANUAL TRANSMISSION SYSTEM

Fluid type:

Sequential M/T Fluid

NOTICE: Using Fluid other than Toyota Genuine Sequential M/T Fluid may cause deterioration in shift performance and durability, and ultimately damage the sequential manual transmission of your vehicle.

BRAKES

Minimum pedal clearance when depressed with the force of 490 N (50 kgf, 110 lbf) with the engine running, mm (in.): 85 (3.4)

Pedal free play, mm (in.): 1-6 (0.04-0.24)

Pad wear limit, mm (in.): 1.0 (0.04)

Parking brake adjustment when pulled with the force of 196 N (20 kgf, 44 lbf): 5-8 clicks

Fluid type: SAE J1703 or FMVSS No.116 DOT 3

STEERING

Wheel free play: Less than 30 mm (1.2 in.)

Power steering fluid type: Toyota P.S fluid EH or equivalent

Tires

Tire size and pressure:

Except compact spare tire

	Tire size	Tire pressure kPa (kgf/cm ² or bar, psi)	Wheel size
Front	185/55R15 81V	180 (1.8, 26)	15 × 6JJ
Rear	205/50R15 85V	220 (2.2, 32)	15 × 6 1/2JJ

Compact spare tire

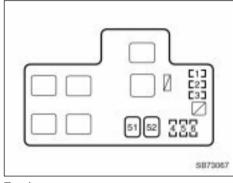
Tire size	Tire pressure kPa (kgf/cm ² or bar, psi)	Wheel size
T125/70D16	420 (4.2, 60)	$16 \times 4T$

Wheel nut torque, N·m (kgf·m, ft·lbf):

103 (10.5, 76)

NOTE: For a complete information on tires (e.g. replacing tires or replacing wheels), see "Checking tire pressure" through "Aluminum wheel precautions", page 194 through 199 in Section 7–2.

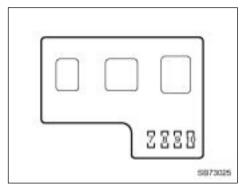
Fuses



Trunk room

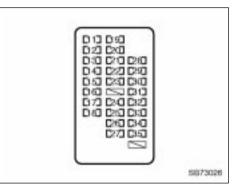
Fuses (type A)

- 1. 30 A: Spare fuse
- 2. 15 A: Spare fuse
- 3. 20 A: Spare fuse
- 4. RDI FAN 30 A: Electric cooling fans
- 5. ABS1 20 A: Anti-lock brake system
- 6. CDS FAN 30 A: Electric cooling fans



Trunk room

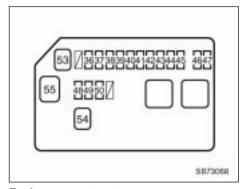
- 7. HEAD LH UPR 10 A: Left-hand headlight (high beam)
- 8. HEAD RH UPR 10 A: Right-hand headlight (high beam)
- 9. HEAD LH LWR 10 A: Left-hand headlight (low beam)
- **10. HEAD RH LWR 10 A:** Right-hand headlight (low beam)
- 11. WASHER 10 A: Windshield wiper and washer
- 12. HTR 10 A: Air conditioning system



Instrument panel

- 13. WIPER 20 A: Windshield wiper and washer
- 14. ECU-IG 7.5 A: Power Steering system, anti-lock brake system
- 15. FAN-IG 7.5 A: Electric cooling fans
- 16. TURN 7.5 A: Turn signal lights, emergency flashers
- **17. GAUGE 7.5 A:** Power window system, gauges and meters, back-up lights, charging system, rear window defogger system
- 18. SRS 7.5 A: SRS airbag system
- 19. DEF 25 A: Rear window defogger system

221



Engine compartment

- 20. OBD 7.5 A: On-board diagnosis system
- 21. AM1 7.5 A: "GAUGE" "ACC" "TURN" "ECU-IG" "WIPER" "WASHER" "SRS" "HTR 10A" "FAN-IG" fuses
- 22. ACC 25 A: "RADIO2" "CIG" fuses
- 23. DOOR 15 A: Power door lock system
- 24. STOP 15 A: Stop lights, high mounted stop light, sequential manual transmission system
- 25. TAIL1 20 A: "TAIL2" "PANEL" fuses
- 26. D P/W 20 A: Power window system
- 27. P P/W 20 A: Power window system

- 28. RADIO1 15 A: Power antenna, radio
- 29. DOME 10 A: Clock
- **30. ECU–B 10 A:** Daytime running light system, gauges and meters
- **31. TAIL2 10 A:** Taillights, parking lights, license plate lights, gauges and meters
- 32. PANEL 7.5 A: Clock, illuminations
- **33. RADIO2 7.5 A:** Gauges and meters, outside rear view mirror system, clock
- 34. CIG 15 A: Cigarette lighter
- 35. I/UP 7.5 A: Engine idle up system
- 36. ALT-S 7.5 A: Charging system
- 37. ECU-B1 25 A: "ECU-B" "DOME" fuses
- **38. SMT–B 10A:** Sequential manual transmission system
- 39. HORN 10 A: Horn
- **40. HAZ 15 A:** Turn signal lights, emergency flashers
- **41. AM2 15 A:** Starter system, multiport fuel injection system/sequential multiport fuel injection system, SRS airbag system
- **42. IG2 15 A:** Ignition system, multiport fuel injection system/sequential multiport fuel injection system

- **43. EFI1 15 A:** Multiport fuel injection system/sequential multiport fuel injection system, engine immobiliser system
- **44. ETCS 15A:** Multiport fuel injection system/sequential multiport fuel injection system
- **45. HPU 30A:** Sequential manual transmission system
- DRL NO.1 7.5 A: Daytime running light system
- 47. DRL NO.2 20 A: "HEAD LH LWR" "HEAD RH LWR" "HEAD LH UPR" "HEAD RH UPR" fuses
- EFI2 7.5 A: Multiport fuel injection system/sequential multiport fuel injection system
- 49. ST 7.5 A: Starter system
- **50. SMT-IG 10A:** Sequential manual transmission system
- Fuses (type B)
- 51. ABS2 40 A: Anti-lock brake system
- 52. EHPS 50 A: Power steering system
- 53. MAIN 40 A: Starter system, "DRL" "DRL NO.2" fuses
- 54. HTR 40 A: Air conditioning system

222

Fuses (type C) 55. ALT 100 A: "AM1" "D P/W" "P P/W" "DOOR" "STOP" "EHPS" "DEF" "TAIL1" "OBD" "HTR 40A" fuses

SECTION 9

REPORTING SAFETY DEFECTS FOR U.S. OWNERS AND UNIFORM TIRE QUALITY GRADING

Reporting safety defects for U.S. owners	226
Uniform tire quality grading	

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.

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 car tires must conform to Federal Safety Requirements in addition to these grades. Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example: Treadwear 200 Traction AA Temperature A

Treadwear—The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and a half (1 1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction AA, A, B, C—The traction grades, from highest to lowest, are AA, A, B, and C, and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

Warning: The traction grade assigned to this tire is based on braking (straightahead) 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.

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.

2002 MR2 (OM17493U)

Maintenance procedures for the engine, chassis, body, electrical system, and more, are clearly explained and illustrated.

Periodic maintenance and tune-up

Periodic maintenance and tune-up helps to prevent small problems from growing into larger ones later on. The repair manual outlines exactly what maintenance is required and clearly explains how to do the work yourself step-by-step.

Areas covered include such things as spark plug replacement, valve clearance adjustment and engine oil and filter replacement.

Where to obtain the Repair Manual

The repair manual for MR2, written in English, may be purchased as applicable from any Toyota dealer.

Pub. Name: 2002 MR2 Repair Manual Pub. No.: RM900U1 (Maintenance,

Preparation, Service specifications and Diagnostics) RM900U2 (Engine, Chassis and Body)

2002 MR2 (OM17493U)