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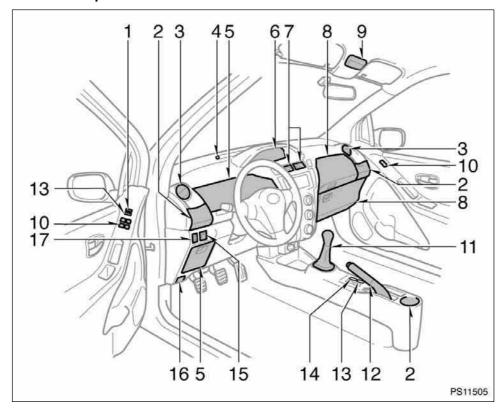
# <u>SECTION 1 - 1</u>

# OPERATION OF INSTRUMENTS AND CONTROLS

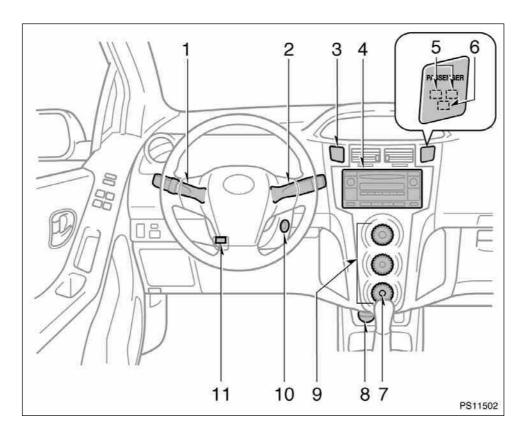
#### **Overview of instruments and controls**

Instrument panel overview	2
Instrument cluster overview	4
Indicator symbols on the instrument panel	6

#### Instrument panel overview



- 1. Window lock switch
- 2. Cup holders
- 3. Side vents
- 4. Engine immobilizer/theft deterrent system indicator light
- 5. Auxiliary boxes
- 6. Instrument cluster
- 7. Center vents
- 8. Glove boxes
- 9. Personal lights
- 10. Power window switches
- 11. Automatic transmission selector lever or manual transmission gear shift lever
- 12. Parking brake lever
- 13. Power door lock switches
- 14. AUX adapter
- 15. Power rear view mirror control switches
- 16. Hood lock release lever
- 17. Instrument panel light control knob



- 1. Headlight, turn signal and front fog light switches
- 2. Wiper and washer switches
- 3. Emergency flasher switch
- 4. Audio system
- 5. Front passenger airbag on-off indicator lights
- 6. Front passenger's seat belt reminder light
- 7. Rear window defogger switch
- 8. Power outlet
- 9. Air conditioning controls
- 10. Ignition switch
- 11. Tilt steering lock release lever

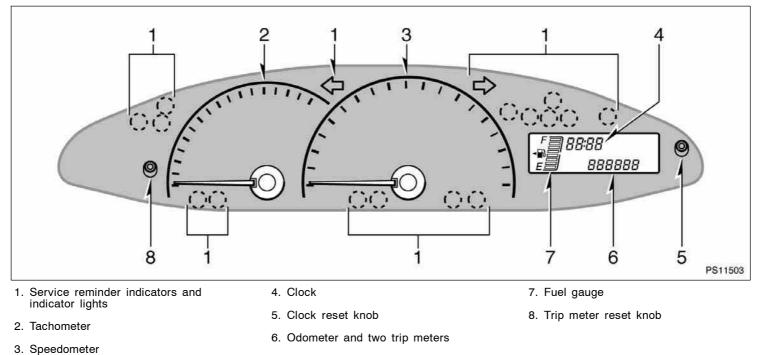
2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)

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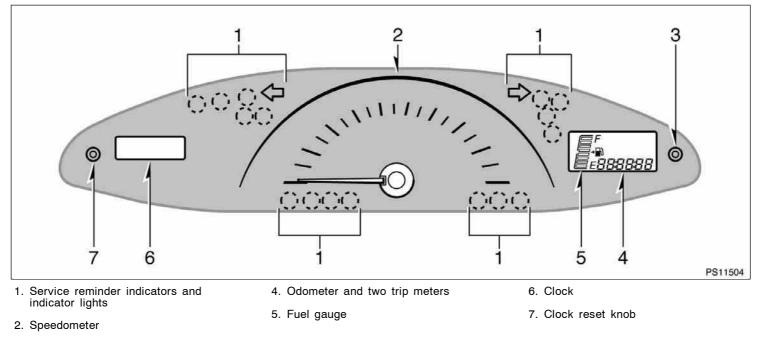
#### Instrument cluster overview

► With tachometer



05 11.10

#### ►Without tachometer



3. Trip meter reset knob

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#### Indicator symbols on the instrument panel

BRAKE or	Brake system warning light*1	ABS or (ABS)	Anti-lock brake system warning light*1
<b>Å</b>	Driver's seat belt reminder light*1	合	Open door warning light*1
PASSENGER	Front passenger's seat belt reminder light*1	×	SRS warning light*1
*		P/S	Electric power steering system warning light*1
<u>-</u>	Charging system warning light <sup>*1</sup>		
ب ک ظ ن ک ن ک	Malfunction indicator lamp*1	or F	Low fuel level indicator light*1
2 <b>7</b> %	Low engine oil pressure warning light*1	<b>A</b>	Low windshield washer fluid level warning light <sup>*1</sup>

MAINT REQD	Engine oil replacement reminder light*1	High engine coolant temperature warning light*1		
AIRBAG ON	"AIRBAG ON" indicator light	Low engine coolant temperature indicator light*2		
AIRBAG OFF	"AIRBAG OFF" indicator light	*1: For details, see "Service reminder indicators and warning		
-Ŏ-	Headlight low beam indicator light	buzzers" on page 114 in Section 1–6. *2: For details, see "Engine coolant temperature indicator and warning light" on page 111 in Section 1–6.		
<u></u> ≥00€	Taillight indicator light			
<b>\$</b> \$	Turn signal indicator lights			
≣D	Headlight high beam indicator light			
わ	Front fog light indicator light			

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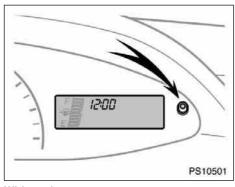
# <u>SECTION 1 - 10</u>

# OPERATION OF INSTRUMENTS AND CONTROLS

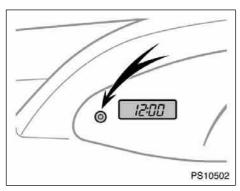
#### Other equipment

Clock 1	70
Power outlet 1	71
Glove boxes 1	71
Auxiliary boxes 1	72
Cup holders 1	73
Bottle holders 1	74
Luggage storage box 1	75
Luggage cover 1	75
Floor mat 1	76

#### Clock



With tachometer



Without tachometer

#### The digital clock indicates the time.

To adjust the clock, put the key in the "ON" position.

With tachometer-

Pushing the reset knob flashes the indicator for the hour and you can adjust the hour.

Press the reset knob until the desired hour will appear.

After 5 or more seconds pass without operating, the indicator for the minute flashes. Then you can adjust the minute.

Press the reset knob until the desired minute will appear.

After 5 or more seconds passes without operating, the indicator will return to the normal display.

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

Without tachometer-

Pushing the reset knob flashes the indicator for the minute and you can adjust the minute.

Press the reset knob until the desired minute will appear.

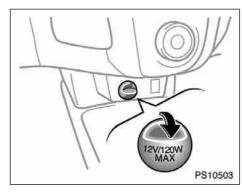
After 5 or more seconds pass without operating, the indicator for the hour flashes. Then you can adjust the hour.

Press the reset knob until the desired hour will appear.

After 5 or more seconds passes without operating, the indicator will return to the normal display.

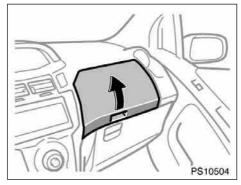
If the electrical power source has been disconnected from the clock, the time display will automatically be set to 1:00 (one o'clock)

#### Power outlet

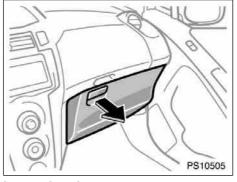


Close the power outlet lid when the power outlet is not in use. Inserting anything other than an appropriate plug that fits the outlet, or allowing any liquid to get into the outlet may cause electrical failure or short circuits.

#### **Glove boxes**



Upper glove box



Lower glove box

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The power outlet is designed for power supply for car accessories. To use the power outlet, open as shown in the illustration.

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

#### NOTICE

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

#### To open the glove boxes, pull the lever.

## 

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

#### NOTICE

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

#### Auxiliary boxes

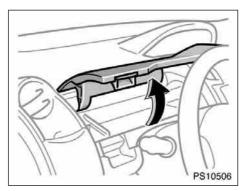
To use the auxiliary boxes, open the lids as shown in the following illustrations.

#### 

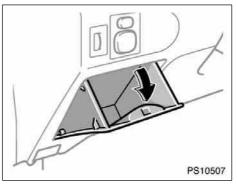
To reduce the chance of injury in case of an accident or a sudden stop, always keep the auxiliary box closed while driving.

#### NOTICE

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

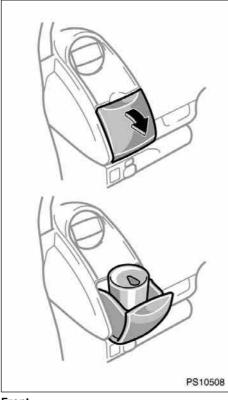


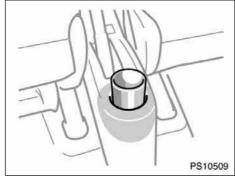




Туре В

#### Cup holders





#### Rear

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

Front cup holders—To use the cup holder, pull it out.

Keep the cup holder closed when it is not in use.

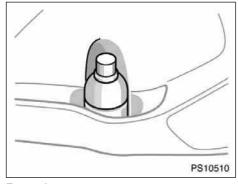
#### Front

2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)

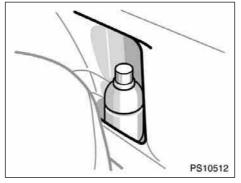
## 

Do not place anything else other than cups or drink-cans in the cup holder, as such items may be thrown about and possibly injure people in the vehicle during sudden braking or in an accident.

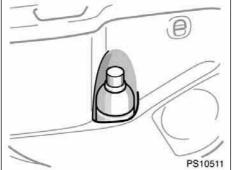
#### **Bottle holders**



Front doors

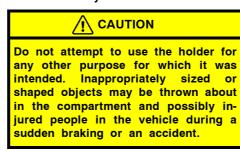


Rear side (3-door models only)



Rear doors (5–door models only)

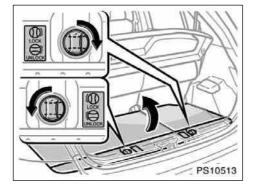
The bottle holders are designed to hold bottles securely.



#### NOTICE

Do not put a cup or open bottle in the bottle holder because the contents may spill when the door opens or closes.

#### Luggage storage box



To open the luggage storage box, turn the knobs to the "UNLOCK" position and open the lid. To close the luggage storage box, lower the lid and turn the knobs to the "LOCK" position.

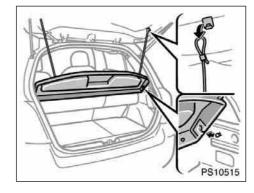
The luggage storage box is detachable.

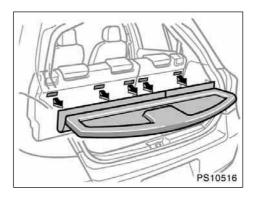
# 

To reduce the chance of injury in case of an accident or a sudden stop, always keep the luggage storage boxes closed and locked while driving. PS10514

To remove the luggage storage box, turn the knobs to the "UNLOCK" position and remove it.

#### Luggage cover

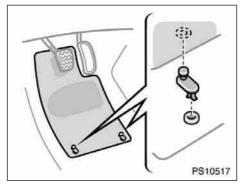


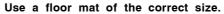


When you open the back door, the luggage cover tilts up for easy access to the luggage area.

For additional luggage space, unhook the cords, remove the luggage cover from the seatback and lift the cover out of the retainers.

#### Floor mat





If the floor carpet and floor mat have two holes, then it is designed for use with a locking clip. Fix the floor mat with locking clip into the holes 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.

# <u>SECTION 1-2</u>

# OPERATION OF INSTRUMENTS AND CONTROLS

#### **Keys and Doors**

Keys 10
Engine immobilizer system 13
Wireless remote control 14
Side doors
Power windows
Back door
Hood
Theft deterrent system
Fuel tank cap 28

# Keys (without engine immobilizer system)



With wireless remote control

#### These keys work in every lock.

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

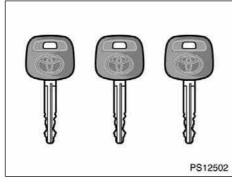


#### KEY NUMBER PLATE

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

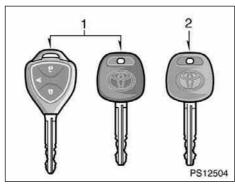
If you should lose your keys or if you need additional keys, duplicates can be made by a Toyota dealer using the key number.

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

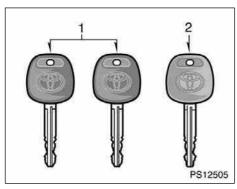


Without wireless remote control

# Keys (with engine immobilizer system)



With wireless remote control



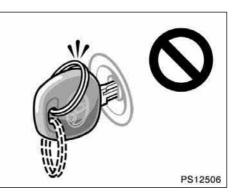
Without wireless remote control

## Your vehicle is supplied with two kinds of keys.

- Master keys (black)—These keys work in every lock. Your Toyota dealer will need one of them to make a new key with a built-in transponder chip.
- 2. Sub key (gray)—This key also works in every lock.

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

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

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



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



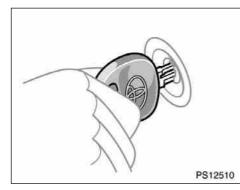
#### KEY NUMBER PLATE

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

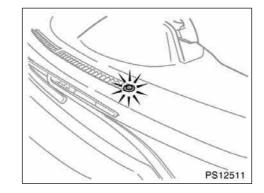
If you should lose your keys or if you need additional keys, duplicates can be made by a Toyota dealer using the key number.

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

#### Engine immobilizer system



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



The system is automatically set when the key is removed from the ignition switch. The indicator light will start flashing to show the system is set.

If any 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 inconsistently.

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 a built-in transponder chip, your dealer will need your key number and master key. However, there is a limit to the number of additional keys your Toyota dealer can make for you.

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

#### NOTICE

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

#### For vehicles sold in U.S.A.

#### FCC ID: MOZRI-20BTY

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.

#### 

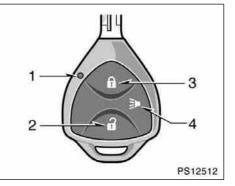
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### For vehicles sold in Canada

This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

(1) This device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

#### Wireless remote control—



- 1. Indicator light
- 2. Unlock switch
- 3. Lock switch
- 4. Panic switch

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

When you operate any switch, push it slowly and securely. At this time, the indicator light flashes once.

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The wireless remote control key is an

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

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

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

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

- Check for closeness to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the key.
- The battery may have been consumed. Check the battery in the key. To replace the battery, see "-Replacing battery" on page 17.

If you lose your wireless remote control key, contact your Toyota dealer as soon as possible to avoid the possibility of theft, or an accident. (See "If you lose your keys" on page 245.)

For vehicles sold in U.S.A.

#### FCC ID: MOZB41TG

#### FCC ID: MOZB21RG

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

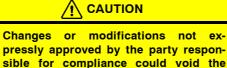
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### For vehicles sold in Canada

This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

(1) This device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

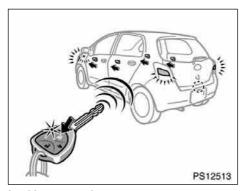
#### 2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)



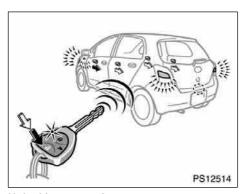
user's authority to operate the equip-

ment.

## -Locking and unlocking the doors and back door



Locking operation



Unlocking operation

To lock and unlock all the doors, push the switches of the wireless remote control key slowly and securely.

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

Check to see that the doors are securely locked.

If any of the doors is not securely closed, or if the key is in the ignition switch, locking cannot be performed by the lock switch.

To unlock: Push the unlock switch once to unlock the driver's door alone. Pushing the switch twice within 3 seconds unlocks all the doors simultaneously. Each time the unlock switch is pushed, the turn signal lights will flash twice.

When the unlock switch is pressed, the interior light will come on and remain on for about 15 seconds before fading out. (For further information, see "Interior light" on page 105.)

You have 30 seconds to open a door after using the wireless remote unlock feature. If a door is not opened by then, all the side doors and back door will be automatically locked again. If the lock or unlock switch is kept pressed in, the locking or unlocking operation is not repeated. Release the switch and then push it again.

#### —Activating panic mode



Pushing the panic switch for 1 second blows the horn intermittently and flashes the headlights, tail lights and emergency flashers and turns on the interior light.

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

The panic mode will last for one minute. To stop the panic mode midway, do the following:

- Push any switch on the key.
- Turn the ignition key from the "LOCK" to "ON" position.

The panic mode does not work when the ignition key is in the "ON" position.

#### -Replacing battery

For replacement, use a CR2016 lithium battery or equivalent and a flathead screwdriver or equivalent.

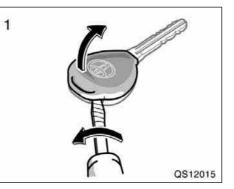
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Special care should be taken to prevent small children from swallowing the removed battery or components.

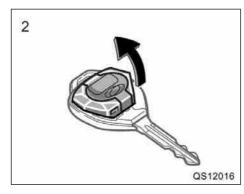
#### NOTICE

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

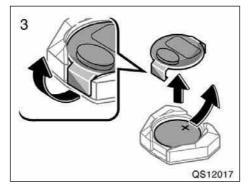
Replace the battery by following these procedures:



1. Open the cover using a flathead screwdriver wrapped with plastic tape.



2. Remove the module from the key case.



3. Remove the battery cover of the module.

#### NOTICE

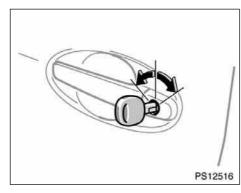
- Do not bend the terminals.
- 4. Remove the discharged battery and put in a new battery with positive (+) side up.

#### NOTICE

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

After replacing the battery, check that the key operates properly. If the key still does not operate properly, contact your Toyota dealer.

#### Side doors-

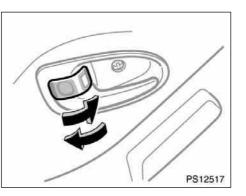


LOCKING AND UNLOCKING WITH KEY Insert the key into the keyhole and turn it.

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

Vehicles with the power door lock system—All the side doors and back door lock and unlock simultaneously with the driver's door. In the driver's door lock, turning the key once will unlock the driver's door and twice in succession will unlock all the side doors and back door simultaneously. When the interior light switch is in the "DOOR" position and any of the side doors is opened, the light will come on. After all the side doors are closed, the light remains on for about 15 seconds before fading out. (For further information, see "Interior light" on page 105 in Section 1–5.)

Vehicles with the power door lock system—When the interior light switch is in the "DOOR" position, and the driver's door is unlocked using the key, the interior light will come on and remain on for about 15 seconds before fading out. (For further information, see "Interior light" on page 105 in Section 1–5.)



## LOCKING AND UNLOCKING WITH INSIDE LOCK KNOB

#### Move the lock knob.

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

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

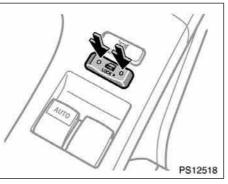
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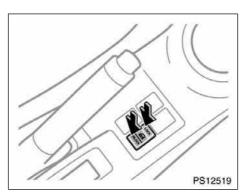
Do not pull the inside handle of the front doors while driving. The doors will open and an accident may occur. Toyota strongly recommends that all children be placed in the rear seat of the vehicle.

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.

Vehicles with the power door lock system—Doors cannot be locked when the driver's door is open and the key is in the ignition.



For driver's use



For front passenger's use

## LOCKING AND UNLOCKING WITH POWER DOOR LOCK SWITCH

#### Push the switch.

For driver's use-

To lock: Push the switch down on the right side.

To unlock: Push the switch down on the left side.

For front passenger's use-

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

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

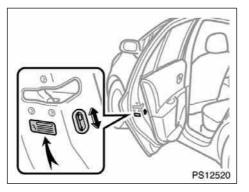
Operating the switch simultaneously locks or unlocks all the side doors and back door.

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

- Lock all the side doors and back door with the wireless remote control key.
- Set the driver's door inside lock knob in the lock position, and close the driver's door while holding up the outside door handle.
- Lock all the side doors and back door simultaneously with driver's door.

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

- Turn the ignition key to "ON".
- Unlock all the side doors and back door simultaneously with the driver's door.
- Unlock all the side doors and back door with the wireless remote control key.
- Unlock the driver's door with the inside lock knob, and then unlock all the side doors with the power door lock switch.



REAR DOOR CHILD-PROTECTORS (5-door models only)

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

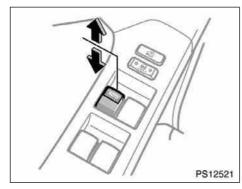
When the child-protector is locked, you cannot open the rear door by the inside door handle. We recommend using this feature whenever small children are in the vehicle.

#### 

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 in an accident. It also helps prevent the doors from being opened unintentionally.

21

#### **Power windows**



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

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

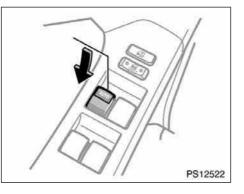
**Key off operation:** The driver's window works for about 45 seconds even after the ignition switch is turned off. They stop working when either of the front door is opened.

#### **OPERATING THE DRIVER'S WINDOW**

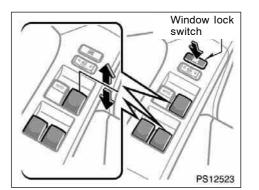
#### Use the switch on the driver's door.

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

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



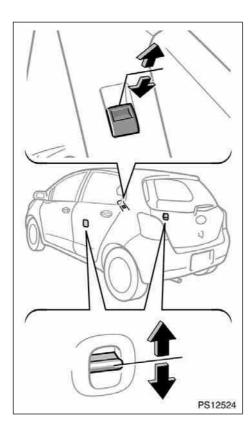
## OPERATING THE PASSENGERS' WINDOWS

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

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 driver's door, the passenger's windows cannot be operated.



#### 

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

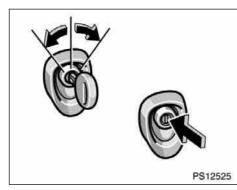
- Before you close the power windows, always make sure there is nobody around the power windows. You must also make sure the heads, hands and other parts of the bodies of all occupants are kept completely inside the vehicle. If someone's neck, head or hands get caught in a closing window, it could result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

• Be sure to remove the ignition key or turn the ignition switch to the "LOCK" position when you leave your vehicle.

• Never leave anyone (particularly a small child) alone in your vehicle, especially with the ignition key still inserted. Otherwise, he/she could use the power window switches and get trapped in a window. Unattended person (particularly a small child) can be involved in a serious accident.

23

#### Back door



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

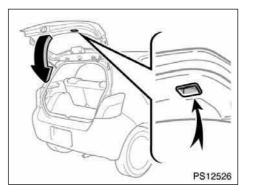
To lock: Turn the key clockwise. To unlock: Turn the key counterclockwise.

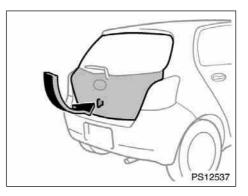
To open the back door, push the button.

Vehicles with the power door lock system—Operating the power door lock switch or wireless remote control simultaneously locks or unlocks the back door (see "Side doors" on page 19).

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

See "—Stowage precautions" on page 202 in Section 2 for precautions when loading luggage.





easier.

# When closing the back door, the inside handle can be used to make the reach

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

## 

- Keep the back door closed while driving. This not only keeps the luggage from being thrown out but also prevents exhaust gases from entering the vehicle.
- Push the back door shut from the outside. Using the inside handle to directly close the back door could cause hands, arms or head to be caught in the door, resulting in serious injuries.

# 

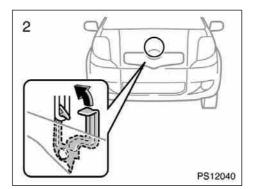
To open the hood:

Hood

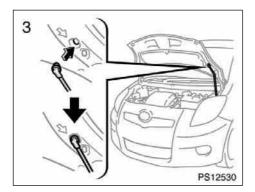
1. Pull the hood lock release lever. The hood will spring up slightly.

## 

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



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



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

To insert the support rod into the slot, move it straight up. If it is moved to the side or toward the inside of the vehicle, it may become detached.

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

#### 

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

#### NOTICE

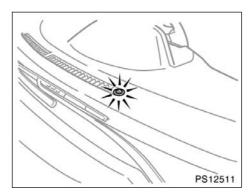
Be sure to return the support rod to its clip before closing the hood. Closing the hood with the support rod up could cause the hood to bend.

#### Theft deterrent system (vehicles sold in Puerto Rico only)



To deter vehicle theft, the system is designed to sound an alarm if any of the side doors, back door or hood is forcibly unlocked and opened.

The alarm blows the horn intermittently and flashes the headlights, tail lights and turn signal lights, and turns on the interior light.



#### SETTING THE SYSTEM

- 1. Turn the ignition key to the "LOCK" position and remove it.
- 2. Have all passengers get out of the vehicle.
- 3. Close and lock all the side doors, back door and hood.

Use the key to lock the last door. When the back door is the last, turn the key to the unlock position and then turn to the door lock position.

The indicator light will remain on when all the side doors, back door and hood are closed and locked. The system will automatically be set after 30 seconds. When the system is set, the indicator light will start flashing.

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

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

#### WHEN THE SYSTEM IS SET

#### Activating the system

The system will sound the alarm if any of the side doors is unlocked or if the back door or hood is forcibly opened without the key.

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

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

#### Reactivating the alarm

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

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

#### Stopping the alarm

The alarm will be stopped by the following two ways:

- Turn the ignition key from the "LOCK" to "ON" position.
- Unlock any of the doors with the key.

#### CANCELLING THE SYSTEM

The system will be cancelled by the above mentioned 2 ways.

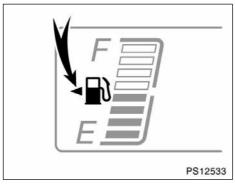
If the tail lights come on for 2 seconds, the theft deterrent system has been alarmed. Check to see if there is any abnormality with your vehicle.

#### TESTING THE SYSTEM

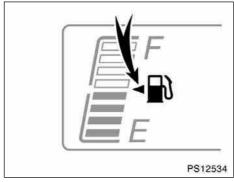
- 1. Open all the windows.
- Set the system as described above. The doors should be locked with the key. Be sure to wait until the indicator light goes off or starts flashing.
- 3. Unlock any side door from the inside. The system should activate the alarm.
- 4. Stop the alarm as described above.
- 5. Repeat this operation for the other doors, back door and hood.
- If the system does not work properly, have it checked by your Toyota dealer.

27

#### Fuel tank cap



With tachometer



Without tachometer

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

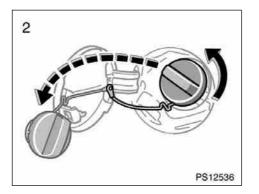


1. To open the fuel filler door, pull the lever up.

When refueling, turn off the engine.



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



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

It is not unusual to hear a slight swoosh when the cap is opened.

When installing the cap, turn it clockwise until one click is heard, in order to fully close it. The cap returns slightly when your hand is released from the cap after closure, however this does not cause any problems.

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.

#### 

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

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# <u>SECTION 1-3</u>

# OPERATION OF INSTRUMENTS AND CONTROLS

## Occupant restraint systems

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Child restraint	74

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

### Front seats— —Front seat precautions

#### Driver seat

## 

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

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

 Move your seat to the rear as far as you can while still reaching the pedals comfortably. • Slightly recline the back of the seat. Although vehicle designs vary, many drivers can achieve the 250 mm (10 in.) distance, even with the driver seat all the way forward, simply by reclining the back of the seat somewhat. If reclining the back of your seat makes it hard to see the road, raise yourself by using a firm, non-slippery cushion, or raise the seat if your vehicle has that feature.

 If your steering wheel is adjustable, tilt it downward. This points the airbag toward your chest instead of your head and neck.

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

#### Front passenger seat

# 

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

# 

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

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

#### -Seat adjustment precautions

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

 While adjusting the seat, do not put your hands under the seat or near the moving parts. Otherwise, your hands or fingers may be caught and injured.

#### —Adjusting front seats



#### **1. SEAT POSITION 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.

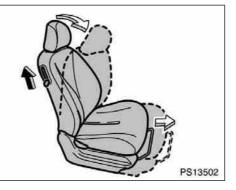
2. SEATBACK ANGLE ADJUSTING LEVER

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

#### —Moving passenger's seat for rear seat entry (3-door models only)

# 

Avoid reclining the seatback any more than needed. The seat belts provide maximum protection in a frontal or rear collision when the driver and the front passenger are sitting up straight and well back in the seats. If you are reclined, the lap belt may slide past your hips and apply restraint forces directly to the abdomen or your neck may contact the shoulder belt. In the event of a frontal collision, the more the seat is reclined, the greater the risk of death or personal injury.



#### For easy access to the rear seat:

- 1. Lift up the seatback lock release lever. The seat will slide forward.
- 2. Move the seat to the front-most position.

After rear passengers are in, lift up the seatback and return the seat until it locks.

## 

After putting back the seat, try pushing the seat forward and rearward to make sure it is secured in place.

#### Rear seats— —Rear seat precautions

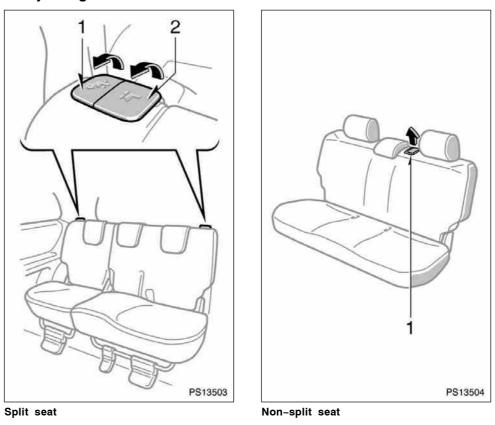
## 

- Do not adjust the seat while the vehicle is moving.
- Be careful that the seat does not hit a passenger or luggage.
- Be careful not to get your hands or feet pinched in the seat.
- Split seat—After adjusting the seat position, release the lever and try sliding the seat forward and backward to make sure it is locked in position.
- After adjusting the seatback, push your body back against the seat to make sure the seat is locked in position.
- When returning the seatback to the upright position, observe the following precautions in order to prevent personal injury in a collision or sudden stop:

Make sure the seatback is securely locked by pushing forward and rearward on the top of the seatback. Failure to do so will prevent the seat belt from operating properly. Make sure the seat belts are not twisted or caught in the seatback and are arranged in their proper position and are ready to use.

Folding down the rear seatbacks will enlarge the luggage compartment. See "—Stowage precautions" on page 202 in Section 2 for precautions when loading luggage.

## —Adjusting rear seats



#### 1. SEATBACK ANGLE ADJUSTING LEVER

Pull the lever up. Then lean back to the desired angle and release the lever.

# 

• Do not adjust the seat while the vehicle is moving.

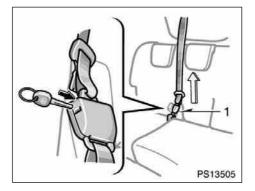
• Avoid reclining the seatback any more than needed. The seat belts provide maximum protection in a frontal or rear collision when the passengers are sitting up straight and well back in the seats. If you are reclined, the lap belt may slide past your hips and apply restraint forces directly to the abdomen or your neck may contact the shoulder belt. In the event of a frontal collision, the more the seat is reclined, the greater the risk of death or personal injury.

 Split seat—After adjusting the seat position, release the lever and try sliding the seat forward and backward to make sure it is locked in position.  After adjusting the seatback, push your body back against the seat to make sure the seat is locked in position.

#### 2. SEAT POSITION ADJUSTING LEVER

Pull the lever up. Then slide the seat to the desired position with slight body pressure and release the lever.

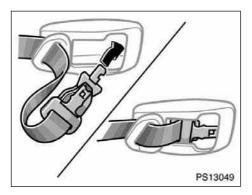
#### Fold-down rear seat



#### BEFORE FOLDING DOWN REAR SEATS

1. Before folding down the seatback, disconnect the center seat belt to prevent damage.

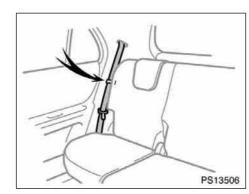
Insert the key into the hole on the buckle to release tab 1 (with hook end), and allow the belt to retract.



2. Insert the tabs of the center seat belt into the cover. Make sure the tabs are securely locked in the cover.

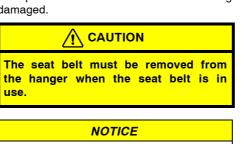
#### NOTICE

The seat belt tabs must be stowed before you fold the seatback.

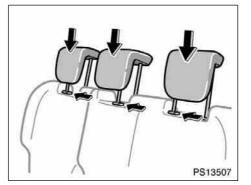


3. Make sure the outer seat belt passes through the hanger when folding the seatback down.

This prevents the shoulder belt from being damaged.

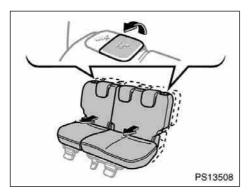


The seat belt must be stowed before you fold the seatback.

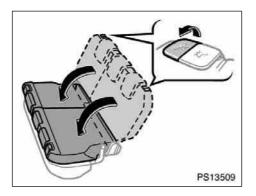


FOLDING REAR SEATS (split seat)

1. Lower the head restraint to the lowest position.



2. Pull the seat position adjusting liver up. Then slide the rear seat fully forward.



3. Pull the seatback angle adjusting lever up and fold the seatback down.

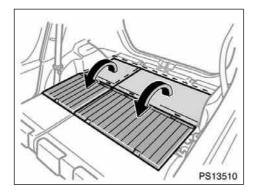
Each seatback may be folded separately.

# 

- When returning the seatback to the upright position, observe the following precautions in order to prevent personal injury in a collision or sudden stop:
- Make sure the seatback is securely locked by pushing forward and rearward on the top of the seatback. Failure to do so will prevent the seat belt from operating properly.
- Make sure the seat belts are not twisted or caught in the seatback and are arranged in the proper position and are ready to use.

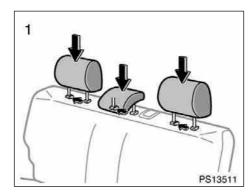
#### NOTICE

Do not pull the pocket that stores the seat belt comfort guide when returning the seatback to the upright position.

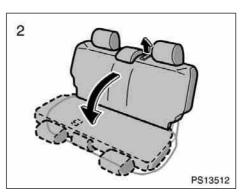


4. Flip over the deck board.

This will enlarge the luggage compartment as far as the seatbacks. See "Cargo and luggage" on page 202 for precautions to observe for loading luggage.



FOLDING REAR SEAT (non-split seat) 1. Lower the head restraint to the lowest position.



Pull the seatback angle adjusting lever up and fold the seatback down.
 Each seatback may be folded separately.

# 

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

• Make sure the seatback is securely locked by pushing forward and rearward on the top of the seatback. Failure to do so will prevent the seat belt from operating properly.

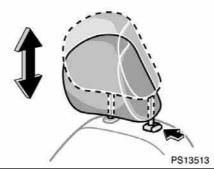
 Make sure the seat belts are not twisted or caught in the seatback and are arranged in the proper position and are ready to use.

#### NOTICE

Do not pull the pocket that stores the seat belt comfort guide when returning the seatback to the upright position.

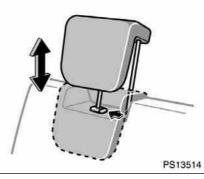
#### **Head restraints**

Front seat



9513 PS13515

Rear seat (non-split seat)



Rear seat (split seat)

2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)

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

To raise: Pull it up.

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

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

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

#### 

 Adjust the center of the head restraint so that it is closest to the top of your ears.

 After adjusting the head restraint, make sure it is locked in position.
 Do not drive with the head restraints removed.

#### Seat belts— —Seat belt precautions

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

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

**Child.** Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belts. See "Child restraint" on page 74 for details.

If a child is too large for a child restraint system, the child should sit in the rear seat and must be restrained using the vehicle's seat belt. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.

If a child must sit in the front seat, the seat belts should be worn properly. If an accident occurs and the seat belts are not worn properly, the force of the rapid inflation of the airbag may cause death or serious injury to the child. Do not allow any children to stand up or kneel on either rear or front seats. An unrestrained child could suffer serious injury or death during emergency braking or a collision. Also, do not let the child sit on your lap. Holding a child in your arms does not provide sufficient restraint.

**Pregnant woman.** 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.

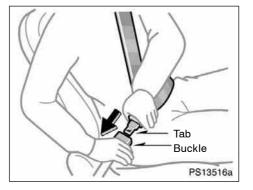
When using the seat belts, observe the following:

- 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 seatback any more than needed. The seat belts provide maximum protection in a frontal or rear collision when the driver and the front passenger are sitting up straight and well back in the seats. If you are reclined, the lap belt may slide past your hips and apply restraint forces directly to the abdomen or your neck may contact the shoulder belt. In the event of a frontal collision, the more the seat is reclined, the greater the risk of death or personal injury.

 Be careful not to damage the belt webbing or hardware. Take care that they do not get caught or pinched in the seat or doors.

- Inspect the belt system periodically. Check for cuts, fraying, and loose parts. Damaged parts should be replaced. Do not disassemble or modify the system.
- Keep the belts clean and dry. If they need cleaning, use a mild soap solution or lukewarm water. Never use bleach, dye, or abrasive cleaners, or allow them to come into contact with the belts—they may severely weaken the belts. (See "Cleaning the interior" on page 251 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.

# —Fastening front and rear seat belts



Adjust the seat as needed and sit up straight and well back in the seat. To fasten your belt, pull it out of the retractor and insert the tab into the buckle.

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

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

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

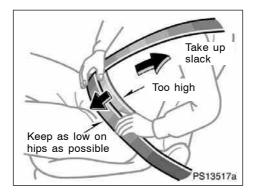
2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)

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 74 in this Section.) To free the belt again, fully retract the belt and then pull the belt out once more.

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

• 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, because it cannot protect an adult occupant or your child from death or serious injury.

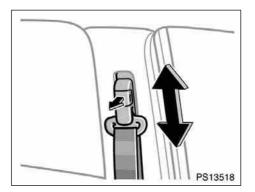


# Adjust the position of the lap and shoulder belts.

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 event. Keep the lap belt positioned as low on hips as possible.
- Do not place the shoulder belt under your arm.



# Seat belts with an adjustable shoulder anchor (5-door models)—

# Adjust the shoulder anchor position to your size.

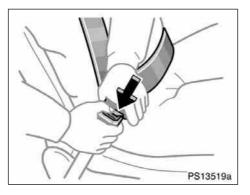
To raise: Slide the anchor up.

To lower: Pull the lock release knob and slide the anchor down.

After adjustment make sure the anchor is locked in position.

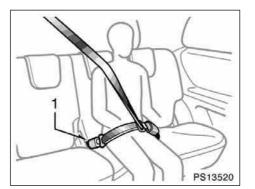
# 

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



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

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

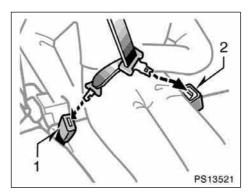


#### REAR CENTER SEAT BELT

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

Make sure buckle 1 is securely latched for ready use of the center seat belt.

45



# Two buckles and tabs for rear center seat belt

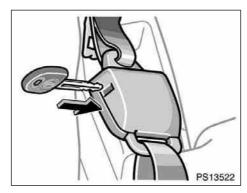
The two tabs have different shapes to prevent the belt from being buckled in the wrong place.

Buckle 1—Matches the tab with the hooked end

Buckle 2—Matches the tab with the concave end

# 

Make sure the both buckles are correctly located and securely latched. Failure to properly match the buckle and tab may cause serious injury in case of an accident or a collision.



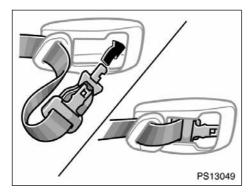
To release the hooked end tab, insert the key into the hole on buckle 1 and allow the belt to retract.



# 

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

# —Stowing the rear center seat belt



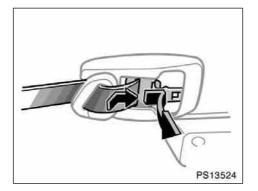
# STOWING THE REAR CENTER SEAT BELT TABS

Insert the tabs of the center seat belt into the cover. Make sure the tabs are securely locked in the cover.

Seat belt must be stowed before you fold the seatback.

#### NOTICE

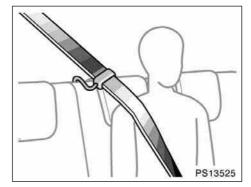
Stow the rear center seat belt tabs when not in use.



PULLING OUT THE REAR CENTER SEAT BELT TABS

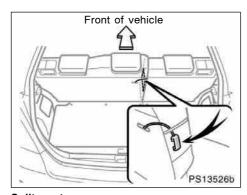
Push the tab and then pull the tabs out from the cover.

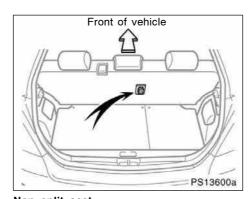
-Seat belt comfort guide

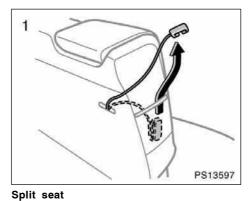


The center shoulder belt comfort guide for the rear seat center position will provide added seat belt comfort for children who have outgrown child restraints and for small adults. When the center shoulder belt is inserted through the guide, the comfort guide pulls the belt away from the neck and head of an occupant.

To use the comfort guide, do as follows.



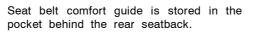


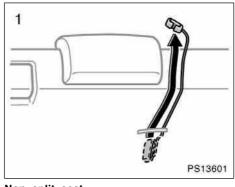


Split seat

Seat belt comfort guide is stored in the pocket on the right side of the left rear seatback.

Non-split seat

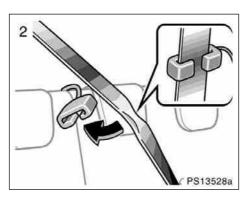




Non-split seat

#### INSTALLING THE COMFORT GUIDE

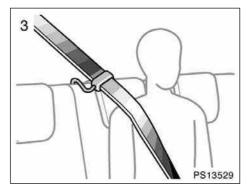
1. Pull the comfort guide from the pocket.



2. Pinch the two edges of the shoulder belt for the rear seat center position with your fingers and slide the belt past the slot of the guide as shown above. At this time, the elastic cord must be behind the seat belt.

## 

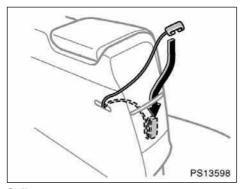
Make sure the belt is not twisted and that it lies flat. The elastic cord must be behind the belt and the guide must be on the front.



 Buckle, position and release the seat belt. (For wearing the seat belt, see "—Fastening front and rear seat belts" on page 43 in this Section.)

# 

Always make sure the shoulder belt is positioned across the center of the shoulder. The belt should be kept away from the neck, and should not fall off the shoulder. Failure to observe these precautions could reduce the effectiveness of the seat belt in an accident, causing death or serious injury.



Split seat

REMOVING AND STORING THE COMFORT GUIDE

Pinch the two edges of the seat belt together so that you can slide them out of the guide. Store the guide with the elastic cord into the pocket.

## 

To reduce the chance of injury in case of an accident or a sudden stop while driving, remove and store the comfort guide in its pocket when it is not in use.

#### -Seat belt extender

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

Please contact your local Toyota dealer so that the dealer can order the proper required length for the extender. Bring the heaviest coat you expect to wear for proper measurement and selection of length. Additional ordering information is available at your Toyota dealer.

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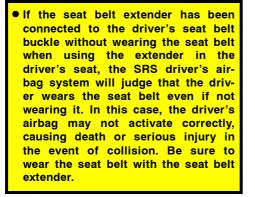
When using the seat belt extender, observe the following precautions. Failure to follow these instructions could reduce the effectiveness of the seat belt restraint system in case of an accident, increasing the chance of personal injury.

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

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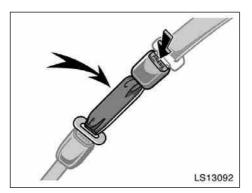
Non-split seat





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

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



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

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

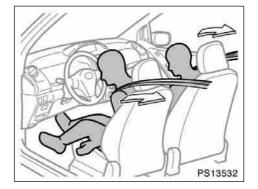
When releasing the seat belt, press on the buckle release button on the extender, not on the seat belt. This helps prevent damage to the vehicle interior and extender itself. As far as the seat belt extender on the front passenger side is concerned, do not fail to disconnect the extender from the seat belt after the above operation in order to activate the front passenger airbag correctly when getting into the vehicle next time.

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

## 

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

#### -Seat belt pretensioners

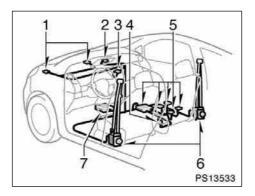


The driver and front passenger seat belt pretensioners are designed to be activated in response to a severe frontal impact.

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

The front passenger's seat belt pretensioner will not activate if no passenger is detected in the front passenger seat by the front passenger occupant classification system. However, the front passenger's seat belt pretensioner may activate if luggage is put on the seat, or the seat belt is buckled up regardless of the presence of an occupant in the seat. (As for the front passenger occupant classification system, see "Front passenger occupant classification system" on page 69 in this Section.)

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



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

- 1. Front airbag sensors
- 2. SRS warning light
- 3. "AIRBAG ON" and "AIRBAG OFF" indicator lights
- 4. Front passenger's seat belt buckle switch
- 5. Front passenger occupant classification system (ECU and sensors)
- 6. Seat belt pretensioner assemblies
- 7. Airbag sensor assembly

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

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

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

# 

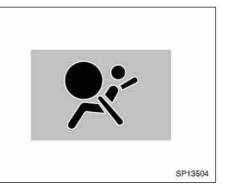
Do not modify, remove, strike or open the seat belt pretensioner assemblies, airbag sensor or surrounding area or wiring. Failure to follow these instruction may prevent the seat belt pretensioners from activating correctly, cause sudden operation of the system or disable the system, which could result in death or serious injury. Consult your Toyota dealer about any repair and modification.

2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)

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



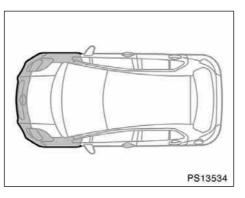
This indicator comes on when the ignition key is turned to the "ON" position. It goes off after about 6 seconds. This means the seat belt pretensioners are operating properly.

This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensors, curtain shield airbag sensors, driver's seat position sensor, driver's seat belt buckle switch, front passenger occupant classification system, "AIRBAG ON" indicator light, "AIRBAG OFF" indicator light, front passenger's seat belt buckle switch, seat belt pretensioner inflators, interconnecting assemblies. wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" on page 114 in Section 1–6.)

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

- The light does not come on when the ignition key is turned to the "ON" position or remains on for more than 6 seconds or flashes.
- The light comes on or starts flashing while driving.
- If any seat belt does not retract or can not be pulled out due to a malfunction or activation of the relevant seat belt pretensioner.

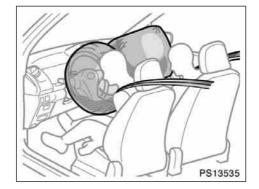
• The seat belt pretensioner assembly or surrounding area has been damaged.



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

- The front part 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 front passenger airbags



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

Your vehicle is equipped with "ADVANCED AIRBAGS" designed based on US motor vehicle safety standards (FMVSS208). The airbag system controls airbag deployment power for the driver and front passenger. The driver airbag system consists of the driver seat's position sensor etc. The front passenger's airbag system consists of the front passenger occupant classification sensor etc. In response to a severe frontal impact, the SRS airbags work with the seat belts to help reduce injury by inflating. The SRS airbags help reduce injuries mainly to the driver's or front passenger's head or chest caused by hitting the vehicle interior.

The SRS front passenger airbag will not activate if there is no passenger sitting in the front passenger seat. However, the front passenger airbag may deploy if luggage is put in the seat, or the seat belt is buckled up, regardless of the presence of an occupant in the seat. (As for the front passenger occupant classification system, see "Front passenger occupant classification system" on page 69 in this Section.)

Always wear your seat belt properly.

## 

• The SRS front airbag system is designed only as a supplement to the primary protection of the driver and front passenger seat belt systems. The driver and front passenger can be killed or seriously injured by the inflating airbags if they do not wear the available seat belts properly. During sudden braking just before a collision, an unrestrained driver or front passenger can move forward into direct contact with or close proximity to the airbag which may then deploy during the collision. To ensure maximum protection in an accident, the driver and all passengers in the vehicle must wear their seat belts properly. Wearing a seat belt properly during an accident reduces the chances of death or serious injury or being thrown out of the vehicle. For instructions and precautions concerning the seat belt system, see "Seat belts" on page 42 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. Toyota strongly recommends that all infants and children be placed in the rear seat of the vehicle and properly restrained. The rear seat is the safest for infants and children. For instructions concerning the installation of a child restraint system, see "Child restraint" on page 74 in this Section.

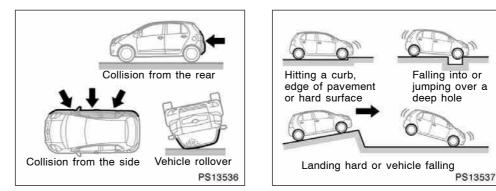
The SRS airbags are designed to deploy in severe (usually frontal) collisions where the magnitude and duration of the forward deceleration of the vehicle exceeds the designed threshold level.

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

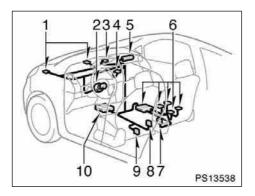
However, this threshold velocity will be considerably higher if the vehicle strikes an object, such as a parked vehicle or sign pole, which can move or deform on impact, or if the vehicle is involved in an underride collision (e.g. a collision in which the front of the vehicle "underrides", or goes under,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

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

Always wear your seat belts properly.



The SRS airbags are not generally designed to inflate if the vehicle is involved in a side or rear collision, if it rolls over, or if it is involved in a lowspeed frontal collision. But, whenever a collision of any type causes sufficient forward deceleration of the vehicle, deployment of the SRS airbags may occur. The SRS airbags may also 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 sensors
- 2. Airbag module for driver (airbag and inflator)
- 3. SRS warning light
- 4. "AIRBAG ON" and "AIRBAG OFF" indicator lights
- 5. Airbag module for front passenger (airbag and inflator)
- 6. Front passenger occupant classification system (ECU and sensors)
- 7. Front passenger's seat belt buckle switch

- 8. Driver's seat belt buckle switch
- 9. Driver's seat position sensor
- 10. Airbag sensor assembly

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

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

When the airbags inflate, they produce a loud noise and release some smoke and residue along with non-toxic gas. This does not indicate a fire. This smoke may remain inside the vehicle for some time, and may cause some minor irritation to the eyes, skin or breathing. Be sure to wash off any residue as soon as possible to prevent any potential skin irritation with soap and water. If you can safely exit from the vehicle, you should do so immediately. Deployment of the airbags happens in a fraction of a second, so the airbags must inflate with considerable force. While the system is designed to reduce serious injuries, primarily to the head and chest, it may also cause other, less severe injuries to the face, chest, arms and hands. These are usually in the nature of minor burns or abrasions and swelling, but the force of a deploying airbag can cause more serious injuries, especially if an occupant's hands, arms, chest or head is in close proximity to the airbag module at the time of deployment. This is why it is important for the occupant to: avoid placing any object or part of the body between the occupant and the airbag module; sit straight and well back into the seat: wear the available seat belt properly; and sit as far as possible from the airbag module, while still maintaining control of the vehicle.

Parts of the airbag module (steering wheel hub, airbag cover and inflator) may be hot for several minutes after deployment, so do not touch! The airbags inflate only once. The windshield may be damaged by absorbing some of the force of the inflating airbag.

# 

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

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

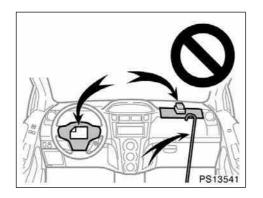
For instructions and precautions concerning the seating position, see "—Front seat precautions" on page 32 in this Section.



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



- Toyota strongly recommends that all infants and children be placed in the rear seat of the vehicle and be properly restrained.
- Do not hold a child on your lap or in your arms. Use a child restraint system in the rear seat. For instructions concerning the installation of a child restraint system, see "Child restraint" on page 74 in this Section.



• Do not put anything or any part of your body on or in front of the dashboard or steering wheel pad that houses the front airbag system. They might restrict inflation or cause death or serious injury as they are projected rearward by the force of deploying airbags. Likewise, the driver and front passenger should not hold objects in their arms or on their knees. • Do not modify or remove any wiring. Do not modify, remove, strike or open any components such as the steering wheel pad, steering wheel, column cover, dashboard near the front passenger airbag, front passenger airbag cover, front passenger airbag or airbag sensor assembly. Doing so may prevent the front airbag system from activating correctly, cause sudden activation of the system or disable the system, which could result in death or serious injury.

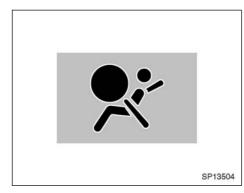
Failure to follow these instructions can result in death or serious injury. Consult your Toyota dealer about any repair and modification.

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

#### 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 front passenger airbag



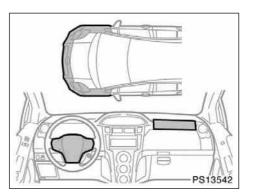
This indicator comes on when the ignition key is turned to the "ON" position. It goes off after about 6 seconds. This means the SRS airbags are operating properly.

This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensors, curtain shield airbag sensors, driver's seat position sensor, driver's seat belt buckle switch, front passenger occupant classification system, "AIRBAG ON" indicator light, "AIRBAG OFF" indicator light, front passenger's seat belt buckle switch, seat belt pretensioner interconnecting assemblies. inflators, wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" on page 114 in Section 1–6.)

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

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

The SRS warning light and "AIRBAG OFF" indicator light will come on if there is a malfunction in the front passenger occupant classification system.



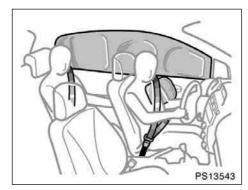
In the following cases, contact your Toyota dealer as soon as possible:

- The SRS airbags have been inflated.
- The front part 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 part of the steering wheel or front passenger airbag cover (shaded in the illustration) is scratched, cracked, or otherwise damaged.

#### NOTICE

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

# SRS side airbags and curtain shield airbags



The SRS (Supplemental Restraint System) side airbags and curtain shield airbags are designed to provide further protection for the driver, front passenger and rear outside passengers in addition to the primary safety protection provided by the seat belts. In response to a severe side impact, the SRS side airbags and curtain shield airbags work with the seat belts to help reduce injury by inflating. The SRS side airbags help reduce injuries mainly to the driver's or front passenger's chest and the SRS curtain shield airbags help reduce injuries mainly to the driver's front passenger's or rear outside passenger's head.

The SRS side airbag on the passenger seat will not activate if there is no passenger sitting in the front passenger seat. However, the side airbag on the passenger seat may deploy if luggage is put in the seat, or the seat belt is buckled up regardless of the presence of the occupant in the seat. (As for the front passenger occupant classification system, see "Front passenger occupant classification system" on page 69 in this Section.)

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

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

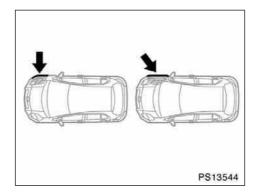
Always wear your seat belt properly.

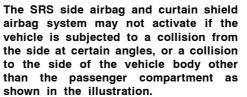
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• The SRS side airbag and curtain shield airbag system is designed only as a supplement to the primary protection of the driver, front passenger and rear outside passenger seat belt systems. To ensure maximum protection in an accident, the driver and all passengers in the vehicle must wear their seat belts properly. Wearing a seat belt properly during an accident reduces the chances of death or serious injury or being thrown out of the vehicle. For instructions and precautions concerning the seat belt system, see "Seat belts" on page 42 in this Section.

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

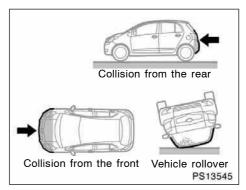
Improperly seated and/or restrained infants and children can be killed or seriously injured by the deploying airbags. An infant or child who is too small to use a seat belt should be properly secured using a child restraint system. Toyota strongly recommends that all infants and children be placed in the rear seats of the vehicle and properly restrained. The rear seats are the safest for infants and children. For instructions concerning the installation of a child restraint system, see "Child restraint" on page 74 in this Section.



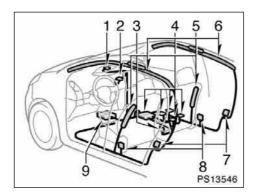


The SRS side airbags and curtain shield airbags are designed to inflate when the passenger compartment area suffers a severe impact from the side.

Always wear your seat belt properly.



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



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

- 1. SRS warning light
- 2. "AIRBAG ON" and "AIRBAG OFF" indicator lights
- 3. Front passenger's seat belt buckle switch
- 4. Front passenger occupant classification system (ECU and sensors)
- 5. Side airbag modules (airbag and inflator)
- 6. Curtain shield airbag modules (airbag and inflator)

- 7. Curtain shield airbag sensors
- 8. Side and curtain shield airbag sensors
- 9. Airbag sensor assembly

The SRS side airbag and curtain shield airbag system is controlled by the airbag sensor assembly. The airbag sensor assembly consists of a safing sensor and airbag sensor.

In a severe side impact, the side and curtain shield airbag sensor and/or the curtain shield airbag sensor trigger(s) the side airbag inflators and/or the curtain shield airbag inflators. At this time a chemical reaction in the inflators quickly fills the airbags with non-toxic gas to help restrain the lateral motion of the occupants.

When the airbags inflate, they produce a fairly loud noise and release some smoke and residue along with non-toxic gas. This does not indicate a fire. This smoke may remain inside the vehicle for some time, and may cause some minor irritation to the eyes, skin or breathing. Be sure to wash off any residue as soon as possible to prevent any potential skin irritation with soap and water. If you can safely exit from the vehicle, you should do so immediately.

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

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

# 

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

Wear their seat belts properly.

 Remain properly seated with their backs upright and against the seats at all times.

2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)



- Do not allow anyone to lean against the door when the vehicle is in use, since the side airbag and curtain shield airbag could inflate with considerable speed and force. Otherwise, he/she may be killed or seriously injured. Special care should be taken especially when you have a small child in the vehicle.
- Sit up straight and well back in the seat, distributing your weight evenly in the seat. Do not apply excessive weight to the outer side of the seats with a side airbag, and to the front pillar, rear pillar and roof side rail with a curtain shield airbag.

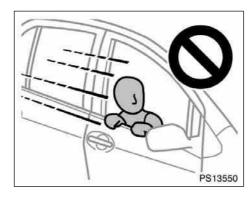


• Do not allow anyone to get his/her head closer to the area where the side airbag and curtain shield airbag inflate, since these airbags could inflate with considerable speed and force. Otherwise, he/she may be killed or seriously injured. Special care should be taken especially when you have a small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

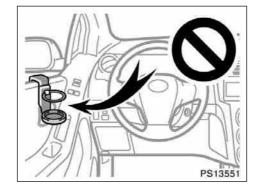


• Do not allow anyone to kneel on the passenger seat, facing the passenger's side door, since the side airbag and curtain shield airbag could inflate with considerable speed and force. Otherwise, he/she may be killed or seriously injured. Special care should be taken especially when you have a small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

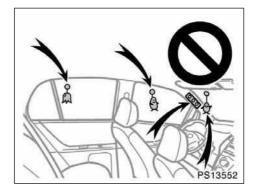
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• Do not allow anyone to get his/her head or hands out of windows since the curtain shield airbags could inflate with considerable speed and force. Otherwise, he/she may be killed or seriously injured. Special care should be taken especially when you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



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



• Do not attach a microphone or any other device or object around the area where the curtain shield airbag activates such as on the windshield glass, side door glass, front and rear pillars, roof side rail and assist grips. When the curtain shield airbag inflates, the microphone or other device or object will be thrown away with great force or the curtain shield airbag may not activate correctly, resulting in death or serious injury. • Do not hook a hanger, heavy or sharp pointed objects on the coat hook. If the curtain shield airbag inflates, those items will be thrown away with great force or the curtain shield airbag may not activate correctly, resulting in death or serious injury. When you hang clothes, hang them on the coat hook directly.

- Do not use seat accessories which cover the parts where the side airbags inflate. Such accessories may prevent the side airbags from activating correctly, causing death or serious injury.
- Do not modify or replace the seats or upholstery or the seats with side airbags. Such changes may prevent the side airbag system from activating correctly, disable the system or cause the side airbags to inflate accidentally, resulting in death or serious injury.

Do not disassemble or repair the front and rear pillars and roof side rail containing the curtain shield airbags. Such changes may disable the system or cause the curtain shield airbags to inflate accidentally, resulting in death or serious injury.

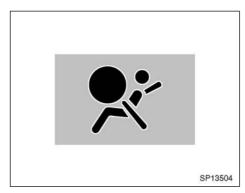
Failure to follow these instructions can result in death or serious injury. Consult your Toyota dealer about any repair and modification.

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

#### NOTICE

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

- Installation of electronic devices such as a mobile two-way radio, cassette tape player or compact disc player
- Modification of the suspension system
- Modification of the side structure of the passenger compartment
- Repairs made on or near the console or front seat



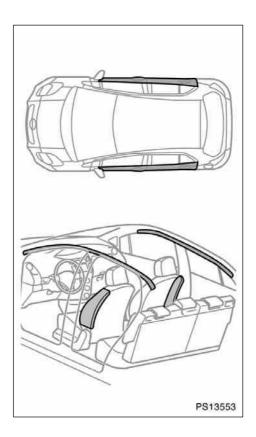
This indicator comes on when the ignition key is turned to the "ON" position. It goes off after about 6 seconds. This means the SRS side airbags and curtain shield airbags are operating properly.

This warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensors, curtain shield airbag sensors, driver's seat position sensor, driver's seat belt buckle switch, front passenger occupant classification system, "AIRBAG ON" indicator light, "AIRBAG OFF" indicator light, front passenger's seat belt buckle switch, seat belt pretensioner assemblies, inflators, interconnecting wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" on page 114 in Section 1–6.)

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

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

The SRS warning light and "AIRBAG OFF" indicator light will come on if there is a malfunction in the front passenger occupant classification system.



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

- Any of the SRS side airbags and curtain shield airbags have been inflated.
- The portion of the doors (shaded in the illustration) was involved in an accident that was not severe enough to cause the SRS side airbags and curtain shield airbags to inflate.
- The surface of the seats with the side airbag (shaded in the illustration) is scratched, cracked, or otherwise damaged.
- The portion of the front pillars, rear pillars or roof side rail garnishes (padding) containing the curtain shield airbags inside (shaded in the illustration) is scratched, cracked, or otherwise damaged.

#### NOTICE

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

## Front passenger occupant classification system

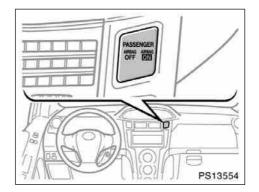
Your vehicle is equipped with a front passenger occupant classification system. This system detects the conditions 1—4 (Shown in the table on page 72). Based on these conditions, the systems below are activated or deactivated:

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

The system monitors the weight and load on the front passenger seat, and the seat belt buckle switch to determine conditions 1—4.

In order to ensure the system detects the conditions correctly:

- Do not place a heavy load on the front passenger seat.
- Do not attach a commercial seatback table or other heavy item to the back of the front passenger seat.
- Do not apply pressure to the front passenger seat by resting hands or legs on the seatback.



The "AIRBAG ON" and "AIRBAG OFF" indicator lights indicate the actuation of the front passenger airbag, side airbag on the front passenger seat and front passenger's seat belt pretensioner.

The "AIRBAG ON" and "AIRBAG OFF" indicator lights will be illuminated initially when the ignition key is turned to the "ON" position. After about 4 seconds, they will go off. After that, the front passenger occupant classification system operates and judges which indicator light be illuminated.

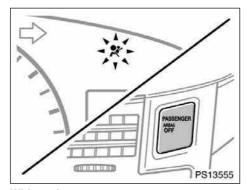
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The "AIRBAG OFF" indicator light will be illuminated when the ignition switch is in the "ON" position with the condition 2 in the table shown below.

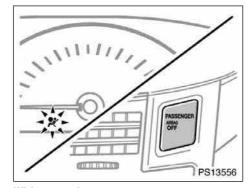
If the front passenger occupant classification system determines that person of adult size sits in the front passenger seat but the "AIRBAG OFF" indicator light is illuminated, one of the following is likely to have occurred:

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

To ensure the system correctly detects the presence or absence of a person of adult size sitting in the front passenger seat, make sure that none of the above occur. Make sure that the "AIRBAG ON" indicator light is illuminated when a person of adult size is seated in the front passenger seat. If the "AIRBAG OFF" indicator light is illuminated, ask the passenger to sit up straight, well back in the seat, and with the seat belt worn correctly. If the "AIRBAG OFF" indicator light remains illuminated, either ask the passenger to move to the rear seat, or if that is not possible, move the front passenger seat fully rearward.



With tachometer



Without tachometer

05 11.10

The SRS warning light and "AIRBAG OFF" indicator light will come on if there is a malfunction in the front passenger occupant classification system. Contact your Toyota dealer as soon as possible.

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

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

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

- \*2: When a larger child who has outgrown a child restraint system sits in the front passenger seat, the system may recognize him/her as an adult depending on his/her physique or posture.
- \*3: Never install a rear-facing child restraint system on the front passenger seat. A forward-facing child restraint system should only be installed on the front passenger seat when it is unavoidable. (See "Child restraint" on page 74 in this Section as for installing the child restraint system.)

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

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

• Do not recline the front passenger seat seatback so that it interferes with a rear seat as it may cause the "AIRBAG OFF" indicator light be illuminated. If the seatback interferes with the rear seat, return the seatback to a position where it does not interfere with the rear seat.

Keep the front passenger seatback as upright as possible when the vehicle is moving. Reclining the seatback excessively may lessen the effectiveness of the seat belt system. • Make sure the "AIRBAG ON" indicator light is illuminated when using the seat belt extender for the front passenger seat. If the "AIRBAG OFF" indicator light is illuminated, disconnect the extender tongue from the seat belt buckle, then reconnect the seat belt. **Reconnect the seat belt extender** after making sure the "AIRBAG ON" indicator light is illuminated. If you use the seat belt extender while the "AIRBAG OFF" indicator light is illuminated, the front passenger airbag and side airbag on the front passenger side may not activate correctly, which could cause death or serious injury in the event of collision.

If an adult sits in the front passenger seat, the "AIRBAG ON" indicator light should be illuminated. If the "AIRBAG OFF" indicator light is illuminated, ask the passenger to sit up straight, well back in the seat, feet on the floor, and with the seat belt worn correctly. If the "AIRBAG OFF" indicator light still remains illuminated, either ask the passenger to move to the rear seat, or if that is not possible, move the front passenger seat fully rearward.

• Wear the seat belt properly.

- Make sure the front passenger's seat belt tab has not been left inserted into the buckle before someone sits in the front passenger seat.
- Do not place a heavy load on the front passenger seat.
- Do not apply pressure to the front passenger seat by resting hands or legs on the seatback.

• Do not let a rear passenger lift the front passenger seat with their feet or press on the seatback with their legs.

- Do not put objects under the front passenger seat.
- Do not attach a commercial seatback table or other heavy item to the back of the front passenger seat.
- Child restraint systems installed on the rear seat should not contact the front seatbacks.
- When it is unavoidable to install the forward-facing child restraint system on the front passenger seat, install the child restraint system on the front passenger seat in the proper order. (As for the installation order, see "—Installation with seat belt" on page 77 in this Section.)
- Do not modify or remove the front seats.

• Do not kick the front passenger seat or subject it to severe impact. Otherwise, the SRS warning light may come on to indicate a malfunction of the detection system. In this case, contact your Toyota dealer immediately.

The "AIRBAG ON" indicator light may be illuminated (the front passenger airbag and side airbag on the front passenger seat may deploy) even if observing the above cautions, when a child sits in, or a forward-facing child restraint system is installed on the front passenger seat. Refer to all the cautions in this Section and "Child restraint" on page 74 in this Section.

#### Child restraint— —Child restraint precautions

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

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

Your vehicle conforms to SAE J1819.

If a child is too large for a child restraint system, the child should sit in the rear seat and must be restrained using the vehicle's seat belt. See "Seat belts" on page 42 in this Section for details.

• For effective protection in automobile accidents and sudden stops, a child must be properly restrained, using a seat belt or child restraint system depending on the age and size of the child. Holding a child in your arms is not a substitute for a child restraint system. In an accident, the child can be crushed against the windshield, or between you and the vehicle's interior. • Toyota strongly urges use of a proper child restraint system which conforms to the size of the child, installed on the rear seat. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.

• Never install a rear-facing child restraint system on the front passenger seat even if the "AIRBAG OFF" indicator light is illuminated. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear-facing child restraint system is installed on the front passenger seat. • A forward-facing child restraint system should be allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible even if the "AIRBAG OFF" indicator light is illuminated, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.

• On vehicles with side airbags and curtain shield airbags, do not allow the child to lean his/her head or any part of his/her body against the door or the area of the seat, front or rear pillar or roof side rail from which the side airbags or curtain shield airbags deploy even if the child is seated in the child restraint system. It is dangerous if the side airbag and curtain shield airbag inflate, and the impact could cause death or serious injury to the child. • Do not use the seat belt extender when installing a child restraint system on the front or rear passenger seat. If installing a child restraint system with the seat belt extender connected to the seat belt, the seat belt will not securely hold the child restraint system, which could cause death or serious injury to the child or other passengers in the event of collision.

• Make sure you have complied with all installation instructions provided by the child restraint manufacturer and that the system is properly secured. If it is not secured properly, it may cause death or serious injury to the child in the event of a sudden stop or accident.

#### -Child restraint system

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

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

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

The child restraint system should be installed on the rear seat. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.

When not using the child restraint system, keep it secured with the seat belt or place it somewhere other than the passenger compartment. This will prevent it from injuring passengers in the event of a sudden stop or accident.

# —Types of child restraint system

Child restraint systems are classified into the following 3 types depending on the child's age and size.

(A) Infant seat

(B) Convertible seat

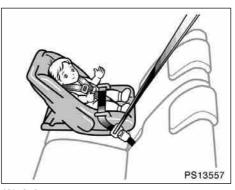
(C) Booster seat

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

Your vehicle has anchor brackets for securing the top strap of a child restraint system.

For instructions about how to use the anchor bracket, see "—Using a top strap" on page 89 in this Section.

The child restraint lower anchorages approved for your vehicle may also be used. See "—Installation with child restraint lower anchorages" on page 92 in this Section.



(A) Infant seat

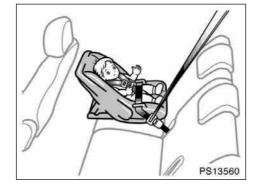


(B) Convertible seat

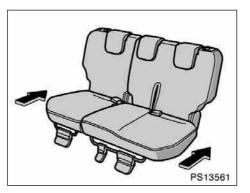


(C) Booster seat

#### -Installation with seat belt



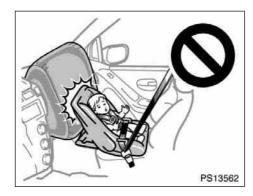
(A) INFANT SEAT INSTALLATION An infant seat must be used in rearfacing position only.



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• Split seat: When installing a rearfacing child restraint system in the rear seat, move the rear seat to the rear-most lock position to prevent the child restraint system from interfering with the front seat. Otherwise, the child restraint system may not be properly secured. In the event of an accident, this may cause death or serious injury.

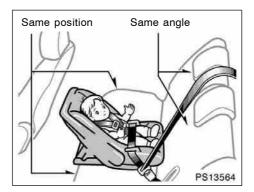
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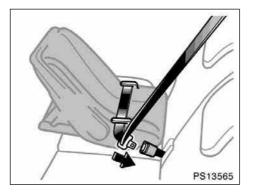
• Never install a rear-facing child restraint system on the front passenger seat even if the "AIRBAG OFF" indicator light is illuminated. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear-facing child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



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



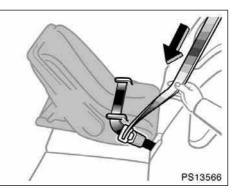
• Split seat: When installing a child restraint system in the rear seat center position, adjust both seat cushions to the same position and align both seatbacks at the same angle. Otherwise, the child restraint system cannot be securely restrained and this may cause death or serious injuries in a collision.



1. 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.

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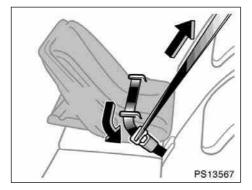
- After inserting the tab, make sure the tab and buckle are locked and that the lap and shoulder portions of the belt are not twisted.
- Do not insert coins, clips, etc. in the buckle as this may prevent your child from properly latching the tab and buckle.
- If the seat belt does not function normally,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



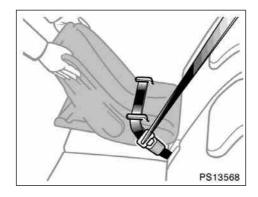
2. Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted even slightly, it cannot be extended.

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

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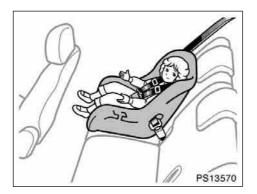
3. While pressing the infant seat firmly against the seat cushion and seatback, let the shoulder belt retract as far as it will go to hold the infant seat securely.



## 

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. P\$13569

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



#### (B) CONVERTIBLE SEAT INSTALLATION

A convertible seat must be used in forward-facing or rear-facing position depending on the age and size of the child. When installing, follow the manufacturer's instructions about the applicable age and size of the child as well as directions for installing the child restraint system. Install the child restraint system on the front passenger seat only when it is unavoidable. Your vehicle is equipped with a front passenger occupant classification system. In order to activate the occupant classification system correctly, install the forward-facing child restraint system on the front passenger seat in the following order:

- 1. Turn the ignition key to the "ON" position.
- 2. Move the front passenger seat to the rearward position.
- 3. If you must install the child restraint system on the front passenger seat, put the child restraint system putting your weight on the front passenger seat.
- 4. Insert the seat belt tab into the seat belt buckle.
- 5. Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted even slightly, it cannot be extended. To hold the seat securely, make sure the belt is in the lock mode before letting the belt retract.

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

## 

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

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

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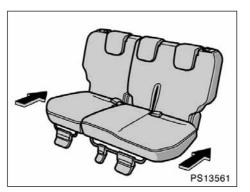
The "AIRBAG OFF" indicator light should be illuminated when the ignition key is in the "ON" position and the child is in the child restraint system after following these procedures. The "AIRBAG OFF" indicator light indicates the SRS front passenger airbag and side airbag on the passenger side will not deploy. If the "AIRBAG ON" indicator light is illuminated, do the following procedure:

- 1. Turn the ignition off.
- 2. Remove the child restraint system.
- 3. When reinstalling a child restraint system, make sure the seatback does not press the child restraint system into the seat cushion. If this occurs, adjust the seatback angle slightly.
- 4. Then make sure the head restraint is not pressing the child restraint system into the seat cushion. If this occurs, raise the head restraint.
- 5. Turn the ignition on again.

The "AIRBAG OFF" indicator light should be illuminated. If the "AIRBAG ON" indicator light is illuminated when the ignition key is turned to the "ON" position, then the SRS front passenger airbag and side airbag on the passenger side may deploy in an accident. Do not drive the vehicle in this condition. Remove the child restraint system and contact your Toyota dealer.

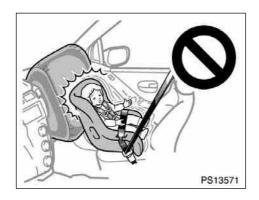
#### 

Never install a rear-facing child restraint system on the front passenger seat. A forward-facing child restraint system should only be installed on the front passenger seat when unavoidable. If you must install the child restraint system on the front passenger seat, put the seat in its most rearward position, and install the forward-facing child restraint system in the proper Otherwise. order. the front passenger occupant classification system cannot detect the presence of the child restraint system and the front passenger airbag and side airbag on the front passenger seat could deploy.

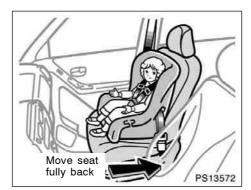


## 

• Split seat: When installing a rearfacing child restraint system in the rear seat, move the rear seat to the rear-most lock position to prevent the child restraint system from interfering with the front seat. Otherwise, the child restraint system may not be properly secured. In the event of an accident, this may cause death or serious injury.



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

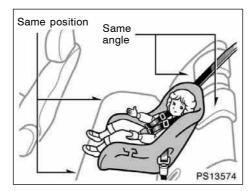


• A forward-facing child restraint system should be allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible even if the "AIRBAG OFF" indicator light is illuminated, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured. • On vehicles with side airbags and curtain shield airbags, do not allow the child to lean his/her head or any part of his/her body against the door or the area of the seat, front or rear pillar or roof side rail from which the side airbags or curtain shield airbags deploy even if the child is seated in the child restraint system. If is dangerous if the side airbag and curtain shield airbag inflate, and the impact could cause death or serious injury to the child.

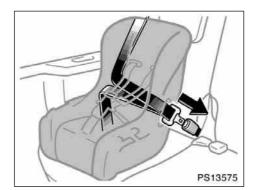
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- Do not install a child restraint system on the rear seat if it interferes with the lock mechanism of the front seats. Otherwise, the child or front seat occupant(s) may be killed or seriously injured in case of sudden braking or a collision.
- If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

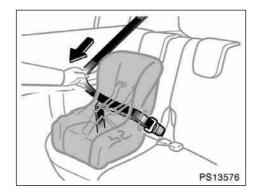


• Split seat: When installing a child restraint system in the rear seat center position, adjust both seat cushions to the same position and align both seatbacks at the same angle. Otherwise, the child restraint system cannot be securely restrained and this may cause death or serious injuries in a collision.

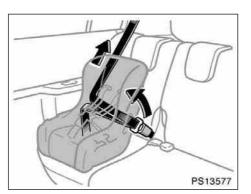


1. Run the lap and shoulder belt through or around the convertible seat following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt. Keep the lap portion of the belt tight.

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

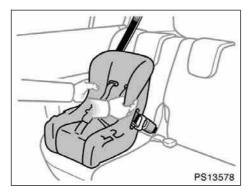


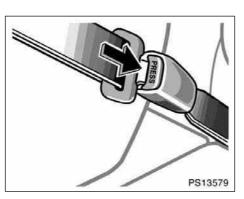
- 2. Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted even slightly, it cannot be extended.
- To hold the convertible seat securely, make sure the belt is in the lock mode before letting the belt retract.



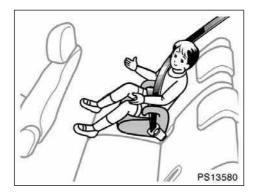
3. While pressing the convertible seat firmly against the seat cushion and seatback, let the shoulder belt retract as far as it will go to hold the convertible seat securely.

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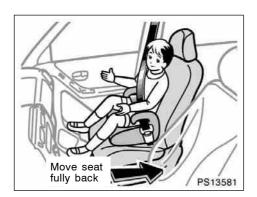




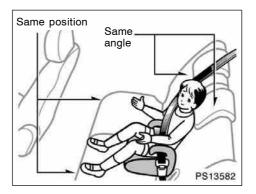
Push and pull the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer. 4. To remove the convertible seat, press the buckle release button and allow the belt to retract completely. The belt will move freely again and be ready to work for an adult or older child passenger.



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



• A forward-facing child restraint system should be allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible even if the "AIRBAG OFF" indicator light is illuminated, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured. • On vehicles with side airbags and curtain shield airbags, do not allow the child to lean his/her head or any part of his/her body against the door or the area of the seat, front or rear pillar or roof side rail from which the side airbags or curtain shield airbags deploy even if the child is seated in the child restraint system. It is dangerous if the side airbag and curtain shield airbag inflate, and the impact could cause death or serious injury to the child.



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

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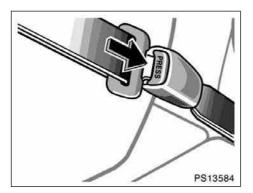
 Sit the child on a booster seat. Run the lap and shoulder belt through or around the booster seat and across the child following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt.

Make sure the shoulder belt is correctly across the child's shoulder and that the lap belt is positioned as low as possible on the child's hips. See "Seat belts" on page 42 in this Section for details.

## 

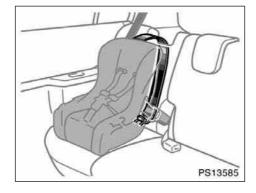
- Always make sure the shoulder belt is positioned across the center of child's shoulder. The belt should be kept away from child's neck, but not falling off child's shoulder. Otherwise, the child may be killed or seriously injured in case of sudden braking or a collision.
- Both high-positioned lap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

If the seat belt does not function normally, it cannot protect your child from death or serious injury. Contact your Toyota dealer immediately. Do not install the child restraint system on the seat until the seat belt is fixed.

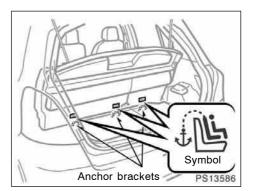


2. To remove the booster seat, press the buckle release button and allow the belt to retract.

—Using a top strap



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



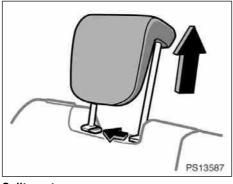
Use the anchor brackets behind the rear seatbacks to attach the top strap.

Anchor brackets are installed for each rear seating position.

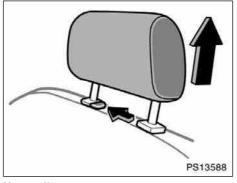
This symbol indicates the locations of user ready anchor brackets.

#### TO USE THE ANCHOR BRACKET:

- Remove the deck board and luggage storage box. (See "Luggage storage box" on page 175 in Section 1–10.)
- 2. Remove the luggage cover. (See "Luggage cover" on page 175 in Section 1–10.)

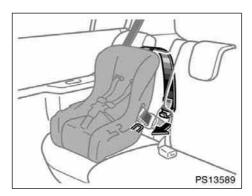


Split seat



Non-split seat

3. Remove the head restraint.



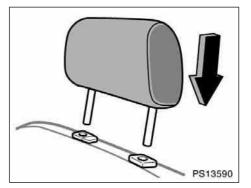
4. Securely fasten the child restraint system with the seat belt.

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

For instructions to install the child restraint system, see "Child restraint" on page 74 in this Section.

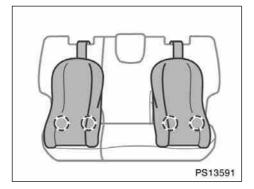
#### 

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



5. Non-split seat only—Replace the head restraint.

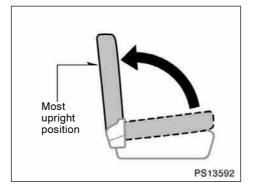
# —Installation with child restraint lower anchorages



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

The anchorages are installed in the gap between the seat cushion and seatback of both outside rear seats.

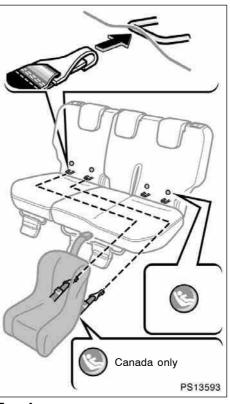
Child restraint system interfaced with the FMVSS213 or CMVSS213 specification can be fixed with these anchorages. In this case, it is not necessary to fix the child restraint system with a seat belt on the vehicle.



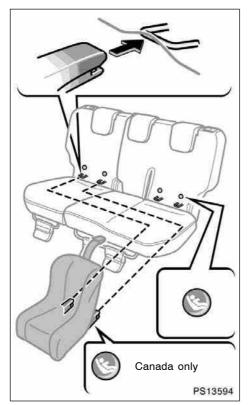
CHILD RESTRAINT SYSTEM INSTALLATION

1. Fold down the seatback and back it to the most upright position until it locks into place.

Make sure the seatback is locked securely.



Type A



Type B

- 1. Widen the gap between the seat cushion and seatback slightly and confirm the position of the lower anchorages below the button on the seatback.
- 2. Type A—Latch the hooks of lower straps onto the anchorages and tighten the lower straps.

Type B—Latch the buckles onto the anchorages.

#### For owners in Canada

The symbol on a child restraint system indicates the presence of a lower connector system.

If your child restraint system has a top strap, it should be anchored. (For the installation of the top strap, see "—Using a top strap" on page 89 in this Section.)

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

#### 

- When using the lower anchorages for the child restraint system, be sure that there are no irregular objects around the anchorages or that the seat belt is not caught.
- Push and pull the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer.
- Split seat—When using the lower anchorages for the child restraint system, ensure that the seat is moved to the rear-most position, with the seatback close to the child restraint system.
- After securing the child restraint system, never slide or recline the seat.
- Do not install a child restraint system on the rear seat if it interferes with the lock mechanism of the front seats. Otherwise, the child or front seat occupant(s) may be killed or seriously injured in case of sudden braking or a collision.

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# <u>SECTION 1-4</u>

# OPERATION OF INSTRUMENTS AND CONTROLS

## **Steering wheel and Mirrors**

Tilt steering wheel	96
Outside rear view mirrors	96
Anti-glare inside rear view mirror	98
Sun visors	99
Vanity mirrors	100

#### Tilt steering wheel

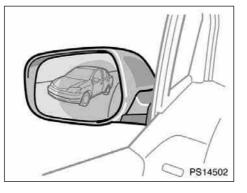


To change the steering wheel angle, hold the steering wheel, push down the lock release lever, tilt the steering wheel to the desired angle and return the lever to its original position.

#### 

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

#### Outside rear view mirrors—



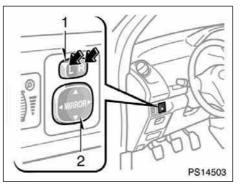
# Adjust the mirror so that you can just see the side of your vehicle in the mirror.

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

## —Power rear view mirror control

## 

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.



#### NOTICE

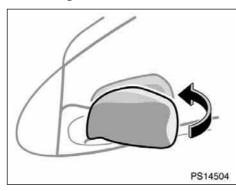
If ice should jam the mirror, do not operate the control or scrape the mirror face. Use a spray de-icer to free the mirror.

#### To adjust a mirror, use the switches.

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

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

#### -Folding rear view mirrors



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

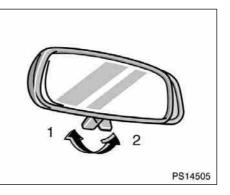
To fold the rear view mirror, push backward until you hear the click.

#### CAUTION Do not drive with the mirrors folded backward. Both the driver and passenger side rear view mirrors must be extended and properly adjusted before driving.

#### NOTICE

Do not push backward more than the click. It may damage the mirror or vehicle.

## Anti-glare inside rear view mirror



Adjust the mirror so 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

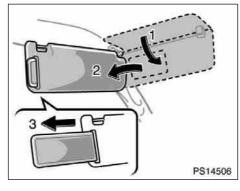
The reflection in the mirror has greater clarity at this position.

Night driving—Lever at position 2

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

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 serious injuries.

#### Sun visors



## 

Do not extend the plate at the end of the sun visor when the visor is in the position 1. It can cover the anti-glare inside rear view mirror and obstruct the rear view.

To block out glare, move the sun visor.

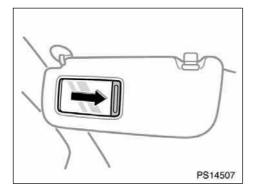
To block out glare from the front—Swing down the sun visor (position 1).

To block out glare from the side—Swing down the sun visor, remove it from the hook and swing it to the lateral side (position 2).

If glare comes from obliquely behind you, extend the plate at the end of the visor (position 3).

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## Vanity mirrors



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

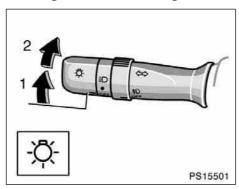
# <u>SECTION 1-5</u>

# OPERATION OF INSTRUMENTS AND CONTROLS

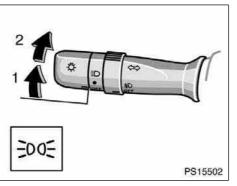
## Lights, Wipers and Defogger

Headlights and turn signals 102
Emergency flashers 103
Instrument panel light control 104
Front fog lights 104
Interior light
Personal lights 106
Windshield wipers and washer 106
Rear window wiper and washer 107
Rear window defogger 107

#### Headlights and turn signals



Except for Canada



For Canada

#### 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

For Canada—The tail light indicator (green light) on the instrument panel will tell you that the tail lights are on.

Position 2—Headlights and all of the above

Except for Canada—The headlight low beam indicator light (green light) on the instrument panel will tell you that the low beams are on.

#### 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 headlight switch 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 (on some models)

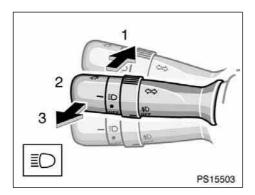
The daytime running light system can make it easier for others to see the front of your vehicle during the day. This system can be helpful in many different driving conditions, but they can be especially helpful in the short periods after dawn and before sunset.

This system will make your headlights come on at a reduced brightness when:

- The engine is running.
- The parking brake is released.
- The headlight/turn signal lever knob is in the "OFF" position.

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

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

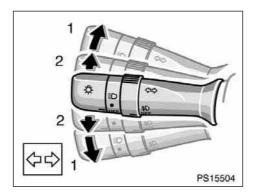


**High-Low beams**—For high beams, turn the headlights on and push the lever away from you (position 1). Pull the lever toward you (position 2) for low beams.

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.

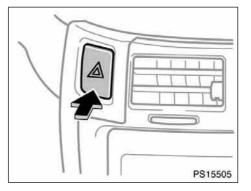
The key must be in the "ON" position.

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 288 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.

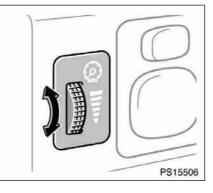
The turn signal light switch will not work when the emergency flashers are operating.

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#### NOTICE

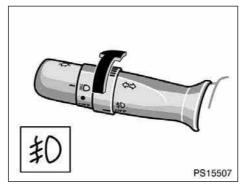
To prevent the battery from being discharged, do not leave the switch on longer than necessary when the engine is not running.

## Instrument panel light control



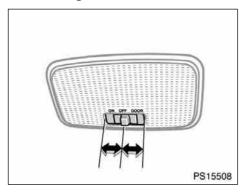
To adjust the brightness of the instrument panel lights, turn the dial.

With the dial turned fully up, the intensity of the instrument panel lights will not be reduced even when the tail lights/headlights are turned on. Front fog lights



To turn on the front fog lights, twist the band of the headlight and turn signal switch lever. They will come on when the head lights are on low beam.

#### Interior light



To turn on the interior light, slide the switch.

The interior light switch has the following positions:

"ON"-Keeps the light on all the time.

"OFF"-Turns the light off.

"DOOR"—Turns the light on when any side doors are opened. The light goes off when all the side doors are closed.

#### ILLUMINATED ENTRY SYSTEM

Door linked operation—When the switch is in the "DOOR" position and any of the side doors is opened, the light will come on. After all the side doors are closed, the light remains on for about 15 seconds before fading out.

Ignition switch linked operation—When the switch is in the "DOOR" position, and the ignition switch is turned to "LOCK", the light will come on. The light remains on for about 15 seconds before fading out.

However, in the following cases, the light goes off immediately.

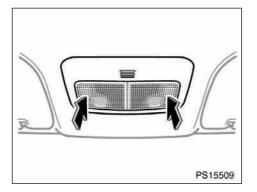
- All the side doors are closed when the ignition key is in the "ACC" or "ON" position.
- Vehicles with the power door lock system—All the side doors and back door are closed and locked.

Vehicles with the power door lock system—When the driver's door is unlocked using either the key or the wireless remote control, the interior light will come on and remain on for about 15 seconds before fading out. Vehicles with the power door lock system and vehicles sold in Puerto Rico—The following adjustments can be made in this system. For details, contact your Toyota dealer.

- Vehicles with the power door lock system—Cancelling the door key or the wireless remote control linked operation
- Cancelling the ignition switch linked operation
- Changing the duration of lighting

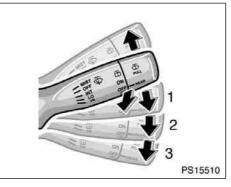
To prevent the battery being discharged, the light will automatically turn off when the key is removed and the side door is left opened with the switch at the "DOOR" position for 20 minutes or more.

#### **Personal lights**



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

#### 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.

# 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 288 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 your windshield, which can block your vision.

#### NOTICE

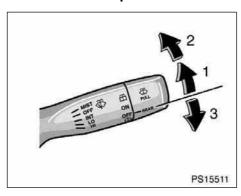
Do not operate the wipers if the windshield is dry. It may scratch the glass.

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

#### NOTICE

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

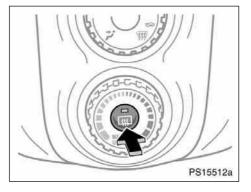
#### Rear window wiper and washer



#### NOTICE

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

#### Rear window defogger



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

The key must be in the "ON" position.

The thin heater wires on the inside of the rear window will quickly clear the surface. An indicator light will illuminate to indicate the defogger is operating.

Push the switch once again to turn the defogger off.

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.

2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)

To turn on the rear window wiper, twist the lever knob upward. (Position 1)

The key must be in the "ON" position.

To squirt washer fluid on the rear window, twist the knob upward or downward as far as it will go (position 2 or 3). The knob automatically returns from these positions after you release it. The rear window wiper operates while the washer squirts.

For instructions on adding washer fluid, see "Adding washer fluid" on page 288 in Section 7–3.

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## NOTICE

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

♦ When cleaning the inside of the rear window, be careful not to scratch or damage the heater wires or connectors.

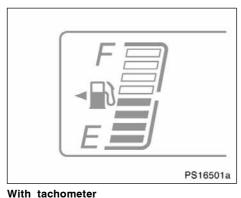
# <u>SECTION 1-6</u>

# OPERATION OF INSTRUMENTS AND CONTROLS

## Gauges, Meters and Service reminder indicators

Fuel gauge	110
Engine coolant temperature indicator and warning light	111
Tachometer	112
Odometer and two trip meters	112
Service reminder indicators and warning buzzers	114

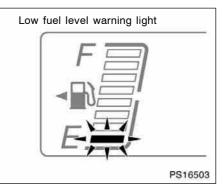
## Fuel gauge



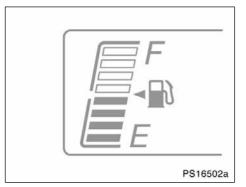
The gauge works when the ignition switch is on and indicates the approximate quantity of fuel remaining in the tank.

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

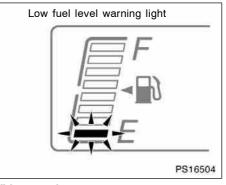
It is a good idea to keep the tank over 1/4 full.



With tachometer



Without tachometer



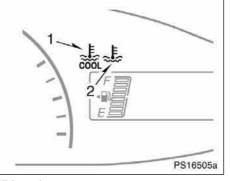
Without tachometer

If the low fuel level warning light flashes, fill the fuel tank as soon as possible. Further fuel reduction makes the light blink quicker.

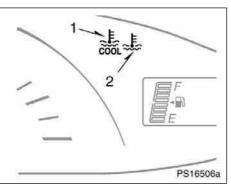
If the fuel tank is completely empty, the malfunction indicator lamp comes on. Fill the fuel tank immediately.

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 indicator and warning light



With tachometer



Without tachometer

- 1. Low engine coolant temperature indicator light
- 2. High engine coolant temperature warning light

The indicator and warning lights indicate the engine coolant temperature when the ignition switch is on. The engine operating temperature will vary with changes in weather and engine load.

The high engine coolant temperature warning light will come on when the ignition key is turned to the "ON" position. After a few seconds, the light will go off.

If your engine coolant temperature is cool with the ignition switch on, the low engine coolant temperature indicator light comes on. If it keeps lighting on with the engine fully warmed, contact your Toyota dealer as soon as possible to service the vehicle.

If the high engine coolant temperature warning light flashes, your engine is too hot. If your vehicle overheats, stop your vehicle and allow the engine to cool.

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

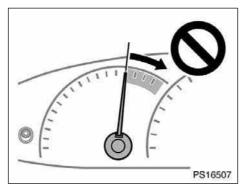
- Driving up a long hill on a hot day.
- Reducing speed or stopping after high speed driving.
- Idling for a long period with the air conditioning on in stop-and-go traffic.
- Towing a trailer.

#### NOTICE

Do not remove the thermostat in the engine cooling system as this may cause the engine to overheat. The thermostat is designed to control the flow of coolant to keep the temperature of the engine within the specified operating range.

Do not continue driving with an overheated engine. See "If your vehicle overheats" on page 227 in Section 4.

#### Tachometer



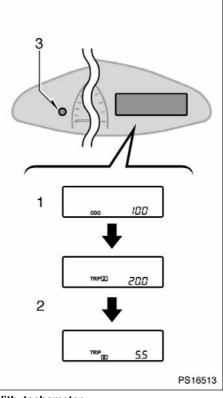
The tachometer indicates engine speed in thousands of rpm (revolutions per minute). Use it while driving to select correct shift points and to prevent engine lugging and over-revving.

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.

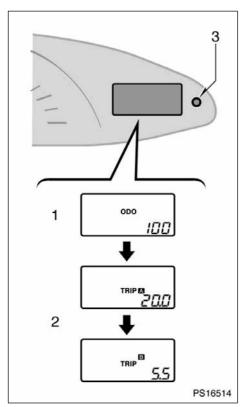
#### NOTICE

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

#### Odometer and two trip meters



With tachometer



Without tachometer

# This meter displays the odometer and two trip meters.

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

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

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

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

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

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## Service reminder indicators and warning buzzers

lf t	he indicator or buzzer comes on	Do this.
(a)	BRAKE or (())	If parking brake is off, stop immediately and contact Toyota dealer.
(b)	(Indicator and buzzer)	Fasten driver's seat belt.
(c)	PASSENGER k (Indicator and buzzer)	Fasten front passenger's seat belt.
(d)	<del></del> +	Stop immediately and contact Toyota dealer.
(e)	Снеск ог <b>К</b>	Take vehicle to Toyota dealer.
(f)	F or F E	Fill up tank.

05 11.10

lf ti	ne indicator or buzzer comes on	Do this.
(g)	27	Stop and check.
(h)	ABS or (ABS)	Take vehicle to Toyota dealer. If brake system warning light is also on, stop immedi- ately and contact Toyota dealer.
(i)		Close all side doors and back door.
(j)	P/S	Take vehicle to Toyota dealer.
(k)	×	Take vehicle to Toyota dealer immediately.
(I)		Add washer fluid.
(m)	MAINT REQD	Replace engine oil.

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If the indicator or buzzer comes on		Do this.	
(n)	<b>₹</b>	Stop and check.	
(o)	Key reminder buzzer	Remove key.	
(p)	Light reminder buzzer	Turn off lights.	

#### (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...

Vehicles with anti-lock brake system-

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

#### • When the brake fluid level is low ...

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 cases:

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

Vehicles with anti-lock brake system-

• The light does not come on even if the ignition key is turned on with the parking brake released.

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

## 

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

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

Vehicles with anti-lock brake system—

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

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

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

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

Once the ignition key is turned to "ON" or "START", the reminder light 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 6 seconds.

If the vehicle speed rises above 20 km/h (12 mph) with the seat belt unfastened, the buzzer will sound for 10 seconds. Then, if the seat belt is still unfastened, the buzzer will sound in a different tone for 20 seconds. Even if the vehicle speed drops below 20 km/h (12 mph), the buzzer will continue to sound. To stop the buzzer, fasten the seat belt. If the buzzer still sounds, make sure the front passenger's seat belt is fastened.

The buzzer can be disabled. For details, contact your Toyota dealer.

#### (c) Front Passenger's Seat Belt Reminder Light and Buzzer

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

Once the ignition key is turned to "ON" or "START", the reminder light flashes if a passenger sits in the front passenger seat and does not fasten the seat belt.

If the vehicle speed rises above 20 km/h (12 mph) with the seat belt unfastened, the buzzer will sound for 10 seconds. Then, if the seat belt is still unfastened, the buzzer will sound in a different tone for 20 seconds. Even if the vehicle speed drops below 20 km/h (12 mph), the buzzer will continue to sound. To stop the buzzer, fasten the seat belt. If the buzzer still sounds, make sure the driver's seat belt is fastened.

If luggage or other load is placed on the front passenger seat, depending on its weight, the reminder light may flash and buzzer to sound.

The buzzer can be disabled. For details, contact your Toyota dealer.

#### (d) Charging System Warning Light

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

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

#### NOTICE

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

#### (e) Malfunction Indicator Lamp

This lamp comes on when the ignition key is turned to the "ON" position and goes off after the engine starts. This means that the warning light system is operating properly.

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

Empty fuel tank

If the fuel tank is empty, refuel immediately.

• Loose fuel tank cap

If the fuel tank cap is loose, securely tighten it.

These cases are temporary malfunctions. The malfunction indicator lamp will go off after taking several driving trips. If the lamp does not go off even after several trips, contact your 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 engine speed does not increase when the accelerator pedal is depressed, there may be a problem somewhere in the electronic throttle control system.

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

## 

Be especially careful to prevent erroneous pedal operation.

## Emissions Inspection and Maintenance (I/M) programs

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

For details, see "Emissions Inspection and Maintenance (I/M) programs" on page 260 in Section 6.

#### (f) Low Fuel Level Warning Light

This light flashes 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 flash earlier than usual.

#### (g) 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.

#### (h) "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 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 for more than 6 seconds or flashes.
- The light comes on while you are driving.

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

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## 

If the "ABS" warning light remains on together with the brake system warning light, immediately stop your vehicle at a safe place and contact your Toyota dealer.

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

#### (i) Open Door Warning Light

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

#### (j) Electric Power Steering System Warning Light

The light comes on when the ignition key is turned to the "ON" position. If the electric power steering system warning light works properly, the light turns off after a few seconds. If the system has malfunctions, the light comes on again. If the following conditions occur, this indicates a malfunction somewhere in the 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 stays on while you are driving.

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

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

#### (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 system of the airbags and front seat belt pretensioners are operating properly.

The warning light system monitors the airbag sensor assembly, front airbag sensors, side and curtain shield airbag sensors, curtain shield airbag sensors, driver's seat position sensor, driver's seat belt buckle switch, front passenger occupant classification system, "AIRBAG ON" indicator light, "AIRBAG OFF" indicator light, front passenger's seat belt buckle switch, seat belt pretensioner assemblies, inflators, 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 remains on for more than 6 seconds or flashes.
- The light comes on or starts flashing while driving.

#### (I) Low Windshield Washer Fluid Level Warning Light

The light warns that the windshield washer fluid level is too low. Add washer fluid at your earliest opportunity. (For instructions, see "Adding washer fluid" on page 288 in Section 7-3.)

The light operates to warn that the engine is almost overheating.

#### (m) Engine Oil Replacement Reminder Light (Except for Canada)

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

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

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

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

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

- 1. Turn the ignition key to the "OFF" position with the trip A reading shown. (For details, see "Odometer and two trip meters" on page 112 in this Section.)
- 2. Turn the ignition key to the "ON" position while holding down the trip meter reset knob.

Hold down the knob for at least 5 seconds. The indicator light flashes and the bars displayed in the odometer disappear gradually. The odometer indicates "000000" and the light goes off.

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

#### (n) High Engine Coolant Temperature Warning Light

The light operates to warn that the engine is almost overheating.

The high engine coolant temperature warning light will come on when the ignition key is turned to the "ON" position. After a few seconds, the light will go off.

If your engine coolant temperature is cool with the ignition switch on, the low engine coolant temperature indicator light comes on. If it keeps lighting on with the engine fully warmed, contact your Toyota dealer as soon as possible to service the vehicle.

If the high engine coolant temperature warning light flashes, 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.

#### 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 227 in Section 4.

#### (o) Key Reminder Buzzer

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

#### (p) Light Reminder Buzzer

This 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. CHECKING SERVICE REMINDER INDICATORS (except the low fuel level warning light and low windshield washer fluid level warning light)

- 1. Apply the parking brake.
- 2. Open one of the side doors or back door.

The open door warning light should come on.

- 3. Close all the side doors and back 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" warning light, engine oil replacement reminder light, high engine coolant temperature warning light and electric power steering system warning light goes 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.

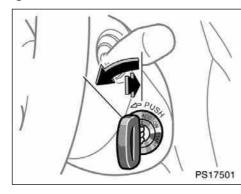
# <u>SECTION 1-7</u>

# OPERATION OF INSTRUMENTS AND CONTROLS

Ignition switch, Transmission and Parking brake

Ignition switch	124
Automatic transmission	125
Manual transmission	128
Parking brake	129

#### Ignition switch



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

For starting tips, see 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 the key from "ACC" to the "LOCK" position. On vehicles with an automatic transmission, the selector lever must be put in the "P" position before pushing the key.

Vehicles with engine immobilizer system— Once you remove the key, the engine immobilizer system is automatically set. (See "Engine immobilizer system" on page 13 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.

Approximately five hours after the engine is turned off, you may hear sound coming from underneath the luggage compartment for several minutes. This is normal operation and does not indicate a malfunction. (See "Leak detection pump" on page viii.)

It is not a malfunction if the needles on all meters move slightly when the key is turned to the "ACC", "ON" or "START" position.

## 

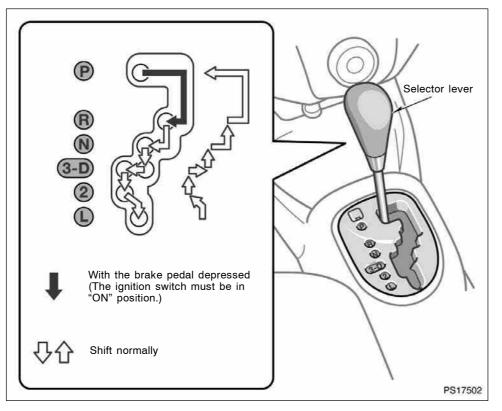
For manual transmission:

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.

### Automatic transmission



Your automatic transmission has a shift lock system to minimize the possibility of incorrect operation. This means you can only shift out of "P" position when the brake pedal is depressed (with the ignition switch in "ON" position).

#### (a) Selector lever

- P: Parking, engine starting and key removal
- R: Reverse
- N: Neutral
- **D:** Normal driving (shifting into overdrive possible)
- **3:** Engine braking (shifting into overdrive not possible)
- 2: Stronger engine braking
- L: Maximum engine braking

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#### (b) Normal driving

- 1. Start the engine as instructed in "How to start the engine" in Section 3. The transmission must be in "P" or "N".
- With your foot holding down the brake pedal, shift the selector lever to "D".

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

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

## 

Never put your foot on the accelerator pedal while shifting.

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

#### (c) Using engine braking

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

- Shift into the "3" position. The transmission will downshift to third gear and engine braking will be enabled.
- Shift into the "2" position. The transmission will downshift to second gear when the vehicle speed drops down to or lower than 86 km/h (53 mph), and stronger engine braking will be enabled.
- Shift into the "L" position. The transmission will downshift to first gear when the vehicle speed drops down to or lower than 43 km/h (26 mph), and maximum engine braking will be enabled.

### 

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

#### (d) Using "2" and "L" positions

The "2" and "L" positions are used for strong engine braking as described previously.

With the selector lever in "2" or "L", you can start the vehicle in motion as with the lever in "D".

With the selector lever in "2", the vehicle will start in first gear and automatically shift to second gear.

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

#### NOTICE

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

"2" ..... 103 km/h (64 mph) "L" ..... 56 km/h (34 mph)

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

#### (e) Backing up

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

#### NOTICE

Never shift into reverse while the vehicle is moving.

#### (f) Parking

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

### 

Never attempt to move the selector lever into "P" position under any circumstances while the vehicle is moving. Serious mechanical damage and loss of vehicle control may result.

#### (g) Good driving practice

- If the transmission repeatedly shifts up and down between third gear and overdrive gears when climbing a gentle slope, shift the selector lever to the "3" position. Be sure to shift the selector lever to the "D" position immediately afterward.
- When towing a trailer, in order to maintain engine braking efficiency, do not use "D" position. The selector lever must be in the "3" position.

## 

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

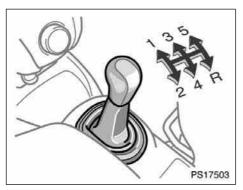
#### NOTICE

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

#### (h) If you cannot move the selector lever out of "P" position

If you cannot shift the selector lever from the "P" position even though the brake pedal is depressed, use the shift lock override button. For instructions, see "If you cannot shift automatic transmission selector lever" on page 244 in Section 4.

#### **Manual transmission**



## The shift pattern is conventional 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. 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:

Low altitude —1219 m (4000 ft.) gear 1 to 2 or 2 to 1 2 to 3 or 3 to 2 3 to 4 or 4 to 3 4 to 5 / 5 to 4	km/h 24 40 64	(mph) (15) (25) (40) (45/40)
High altitude —Higher than 1219 r Upshifting gear 1 to 2 2 to 3 3 to 4	km/h 24 64	(mph) (15) (40) (47)
4 to 5 Downshifting gear 2 to 1 3 to 2 4 to 3 5 to 4	87 km/h 24 40 64	(mph) (15) (25) (40) (40)

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	51 (31)
2	95 (59)
3	139 (86)

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

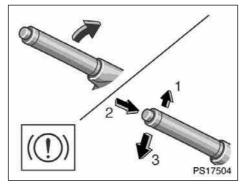
#### Good driving practice

- If it is difficult to shift into reverse, put the transmission in neutral, release the clutch pedal momentarily, and then try again.
- When towing a trailer, in order to maintain engine braking efficiency, do not use fifth gear.

#### 

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

#### Parking brake



Type A

# 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 thumb button (2), and lower (3).

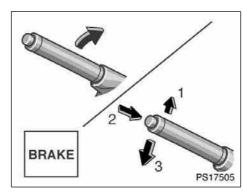
To remind you that the parking brake is set, the parking brake reminder light in the instrument panel remains on until you release the parking brake.

## 

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

#### NOTICE

Make sure the vehicle is completely stopped before shifting into reverse.



Туре В

2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)

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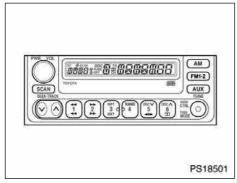
# <u>SECTION 1-8</u>

# OPERATION OF INSTRUMENTS AND CONTROLS

## Audio system

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#### Reference



Type 1: AM·FM radio (with cassette and compact disc changer controller)

PS18502 Type 2: AM·FM radio/compact disc player/

UNE FIL

Type 2: AM·FM radio/compact disc player/ MP3/WMA player (with compact disc 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" or "PWR·VOL" to turn the audio system on and off.

Push "AM", "FM1·2", "FM1", "FM2", "DISC·AUX" or "AUX" to turn on that function without pushing "PWR VOL" or "PWR·VOL". To turn on the compact disc player, a compact disc must be loaded in the player.

You can turn on the player by inserting a compact disc.

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

#### SWITCHING BETWEEN FUNCTIONS

Push "AM", "FM1·2", "FM1", "FM2", "DISC·AUX" or "AUX" 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 and bass levels. In fact, different kinds of music and vocal programs usually sound better with different mixes of treble 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.

#### NOTICE

To prevent damage to the antenna, make sure it is retracted before driving your Toyota through an automatic car wash.

#### YOUR CASSETTE PLAYER

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

#### NOTICE

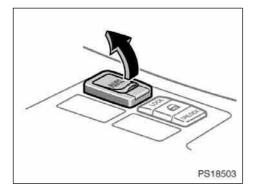
Never try to disassemble or oil any part of the cassette player do not insert anything other than cassette tapes into the slot.

#### YOUR COMPACT DISC PLAYER

When you insert a disc, gently push it in with the label side up. The player will play from track 1 through to the end of the disc. Then it will play from track 1 again.

#### NOTICE

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

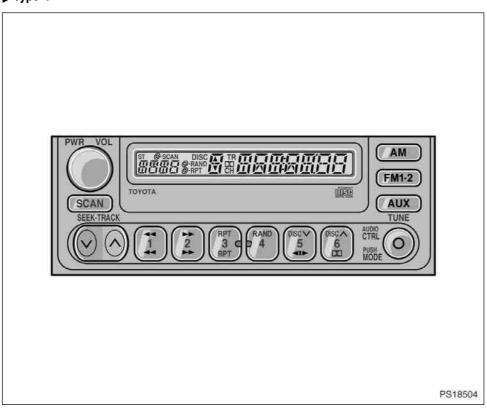


AUX adapter (type 2 only)

The AUX adapter is installed on the center console. To use the AUX adapter, open the lid as shown in the illustration.

By inserting a mini jack into the AUX adapter, you can listen to music from a portable audio device through the vehicle's speaker system.

#### —Controls and features ▶Type 1



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

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#### 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" or "FM1.2").

#### (Program)

Push "◀I▶" 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)

#### **Cassette Player**

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

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

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

#### **Compact Disc Player**

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

#### AM

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.

CTRL / 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 "CTRL / 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 "CTRL / 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 "CTRL / 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".

For left/right adjustment, push "CTRL / 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".

#### AUX (Auxiliary button)

This button is used to operate each player when a cassette tape player, compact disc player or compact disc changer is equipped with this radio player.

#### With cassette tape player

Push "AUX" to switch from radio to cassette operation. If the audio system is off, you can turn on the cassette player by pushing "AUX". In both cases, a cassette must already be loaded in the player.

## With compact disc player or compact disc changer

Push "AUX" to switch from radio to compact disc operation. If the audio system is off, you can turn on the compact disc player by pushing "AUX". 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 "AUX", the system changes to the changer.

If the player malfunctions, your audio system will display following error messages.

If "WAIT" appears on the display, it indicates that the inside of the player unit may be too hot due to the very high ambient temperature. Remove the 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 changer lid is open. Close the compact disc changer lid.

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

#### DISC $\lor \land$

Compact disc 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<sup>®</sup> D B NR<sup>\*</sup>

If you are listening to a tape that was recorded with Dolby<sup>®</sup> B Noise Reduction, push the "DD" button. The "DD B" will appear on the display. Push the button again to turn off Dolby<sup>®</sup> 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 D are trademarks of Dolby Laboratories Licensing Corporation.

#### FM1·2

Push "FM1 $\cdot$ 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/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. Random playing for the tracks on a disc: Quickly push and release "RAND". "RAND" will appear on the display. The disc you are listening to will play in random order. If you hear a beep, you held the button too long, and the player will play all the tracks in the magazine in random order. To turn off the random feature, push "RAND" again.

Compact disc changer only-

Random playing for all the tracks in the magazine:

Push and hold "RAND" until you hear a

beep. " SAND" will appear on the dis-

play 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 "RAND" again.

#### RPT (Repeat)

#### **Cassette Player**

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

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

#### **Compact Disc Player**

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

#### Repeating a track:

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

Compact disc changer only-

Repeating a disc:

Push and hold "RPT" until you hear a beep. " S · RPT" will appear on the dis-

play. The player will repeat all the tracks on the disc you are listening to. When the disc ends, the player will automatically go back to the first track on 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 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.

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• 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.

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

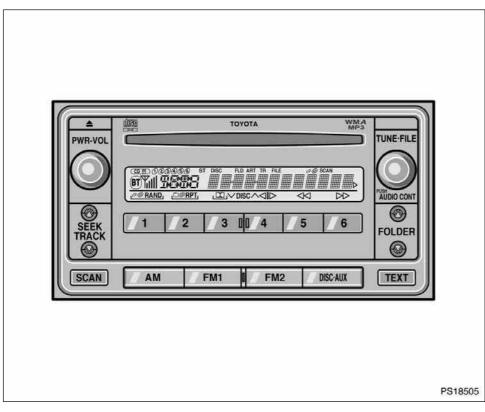
By using this button, you can skip up or down to a different track.

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)

Turn the knob clockwise to step up the frequency. Turn the knob counterclockwise to step down the frequency.

►Type 2



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

2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)

#### 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" or "SEEK/TRACK".) Push and hold down the button until you hear a beep—this will set the station to the button. The preset button number will appear on the display.

To recall 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" or "FM2" button.)

#### **(Eject button)**

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

**◀◀/▶▶** (Reverse/Fast-forward button)

Push and hold "▶▶" (preset button 6) or "◀◀" (preset button 5) to fast forward or reverse within a compact disc. When you release the button, the compact disc player will resume playing.

#### AM

Push the "AM" button to turn on the radio and select the AM band. "AM" will appear on the display.

# AUDIO CONT (Tone and sound balance adjustment function)

Each time you push the "AUDIO CONT" knob, the mode changes. To adjust the tone and balance, turn the knob.

BAS: Adjusts low-pitched tones. The display ranges from -5 to 5.

TRE: Adjusts high-pitched tones. The display ranges from -5 to 5.

FAD: Adjusts the sound balance between the front and rear speakers. The display ranges from F7 to R7.

BAL: Adjusts the sound balance between the right and left speakers. The display ranges from L7 to R7.

ASL: Automatically adjusts the volume and tone quality according to vehicle speed. The display ranges from "LOW", "MID" and "HIGH".

# LIVE-ACS (LIVE Acoustic/Psychological acoustic technology)

The acoustic enhancement techonologies called FOCUS (Trademark) and TruBass (Trademark) are adopted under license with SRS corporation for all mode except for AM radio mode. By utilizing these technologies, low range can be enhanced without distorting the mid range. In addition, it can bring the sound stage upward so that the sound is audible from upper space even if the speakers are positioned around lower section.

FOCUS and TruBass technology is always contained in the sound quality of this player. FOCUS and TruBass technology is incorporated under license from SRS Labs, Inc.

#### DISC·AUX

#### **DISC (Compact disc)**

Push the "DISC·AUX" button to play a compact disc. Each time you push this button, the system changes between the compact disc player and the changer of separate unit if it is equipped.

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

#### Error messages

If the player malfunctions, your audio system will display following error messages.

"WAIT": The compact disc player unit may be too hot. Allow the player to cool down.

**"ERROR 1":** The disc may be dirty, damaged or inserted incorrectly (up-side down). Clean the disc and re-insert it.

"**NO DISC**": The compact disc changer of separate unit is empty. Insert a disc.

"ERROR 3": There is a problem inside the system. Eject the disc or magazine. Set the disc or magazine again.

"ERROR 4": Over-current. Ask your Toyota dealer to inspect.

"CD OPEN": The compact disc changer lid of separate unit is open. Close the compact disc changer lid.

"**NO MUSIC**": The disc with no mp3/wma data has been inserted. Remove the disc from the player and insert a mp3/wma data disc.

If the malfunction still exists, take your vehicle to your Toyota dealer.

#### AUX

In order to listen to a portable music player, such as a compact disc or MD player, through the car stereo speakers, push the "DISC·AUX" button after it has been connected to the AUX jack on the center console.

 $\vee$  DISC  $\wedge$ 

With compact disc changer only-

Use these buttons to select a disc you want to listen to.

Push " $\lor$ " (preset button 3) or " $\land$ " (preset button 4) until the number of the disc you want to listen appears on the display.

#### FOLDER (Folder up/down)

To skip up or down to a different folder: Push either side of the "FOLDER" several times until the number of the folder you want to listen to appears on the display.

To jump to the first file in the current folder:

Push and hold " $\lor$ " side of the button until you hear a beep.

#### FM1 FM2

Push the "FM1" or "FM2" button 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 of the preset button.

#### **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)

#### **Compact Disc Player**

There are two random features—you can either listen to the tracks on one compact disc in random order, or listen to the tracks on all the compact discs in the magazine in random order.

To play the tracks on one disc in random order:

Quickly push and release "RAND" (preset button 1). "<u>RAND</u>" will appear on the display and the player will perform the tracks on the disc you are listening to in random order. To turn off the random feature, push this button again.

With compact disc changer only-

To play all the tracks in the magazine in random order:

Push and hold "RAND" (preset button 1) until you hear a beep. "I **G** RANDI" 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.

#### MP3/WMA Player

There are two random features—you can either listen to all the files on the compact disc in random order, or only listen to the files in a folder in random order.

To randomly play the files on a folder: Quickly push and release "RAND" (preset button 1). "<u>RAND</u>" will appear on the display.

To randomly play all the files on the compact disc:

Push and hold "RAND" (preset button 1) until you hear a beep. "<u>PRAND</u>," will appear on the display and the player will play all the files on the disc in random order. To turn off the random feature, push this button again.

#### **RPT** (Repeat)

#### **Compact Disc Player**

Push "RPT" (preset button 2) to repeat a track. "<u>RPT</u>" will appear on the display. When the track ends, it will automatically be replayed. This process will be continued until you push the button again to turn off the repeat feature.

#### **MP3/WMA** Player

Push and hold "RPT" (preset button 2) until you hear a beep. "<u>BPT</u>" will appear on the display. The player will repeat all the files in the folder you are listening to. When the final file in the folder ends, the player will automatically go back to the first file in the folder and replay. To turn off the repeat feature, push this button again.

#### 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 the "SCAN" button 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 stop scanning, push this button again.

To scan all the frequencies:

Quickly push and release the "SCAN" button. The radio will find the next station up the station band, stay there for 5 seconds, and then scan again to the next station. To stop scanning, push this button 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 the "SCAN" button. "SCAN" will appear on the display and the player will scan all the tracks on the disc you are listening to. To stop scanning, push this button again. If the player scanned all the tracks on the disc, it will stop scanning.

With compact disc changer only-

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

Push the "SCAN" button until you hear a beep. "SCAN" will appear on the display and the player will scan the first track of the next disc. To stop scanning, push this button again. If the player has scanned all the discs, it will stop scanning.

#### MP3/WMA Player

There are two scan features—you can either scan the files in a folder or scan the first file of all the folders.

Scanning the files in a folder:

Quickly push and release "SCAN". "SCAN" will appear on the display and the player will scan all the files in the folder you are listening to. To select a file, push "SCAN" again. If the player scanned all the files in the folder, it will stop scanning.

Scanning the first file of all the folders: Push "SCAN" until you hear a beep. "• SCAN" will appear on the display and the player will scan the first file of the next folder. To select a folder, push the "SCAN" again. If the player has scanned all the folders, it will stop scanning.

#### SEEK/TRACK (Seeking/Track up/down) Radio

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

To seek the next station, quickly push and release " $\land$ " or " $\lor$ " side of the "SEEK/TRACK" button. Do this again to find the station after that.

#### Compact disc player

Use this button to skip up or down to a different track.

Push " $\land$ " or " $\lor$ " side of the "SEEK/ TRACK" button until the number of the track you want to listen to appears on the display. If you want to return to the beginning of the current track, quickly push the down side of the button one time.

#### **MP3/WMA** Player

To file up or down to a different file: Push either side of the "TRACK" several times until the file you want to listen to appears on the display. If you want to return to the beginning of the current file, push the " $\lor$ " side of the button one time, quickly. To fast forward or reverse the disc: If you want to fast forward or reverse the disc, push and hold it until you hear a beep. When you release the button, the player will resume playing.

#### 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.

#### TEXT

#### Compact Disc Player

This button is used to change the display for the compact disc that contains text data.

To change the display, quickly push and release the "TEXT" while the compact disc is playing. The display changes in the order from the elapsed time to disc title to track title, then back to the elapsed time.

If this button is pushed while a compact disc that does not contain text data is playing, "NO TITLE" will appear on the display.

If the entire disc or track title does not appear on the display, push and hold it until you hear a beep. The rest of the title (up to 24 letters) will appear.

#### **MP3/WMA** Player

This button is used to change the display for the MP3/WMA file that contains text data.

To change the display, quickly push and release the "TEXT" while the MP3/WMA file is playing. The display changes in the order from the elapsed time to folder name to file name to album title (MP3 file only) to track title to artist name, then back to the elapsed time.

If this button is pushed while a MP3/WMA file that does not contain text data is playing, "NO TITLE" will appear on the display.

If the entire text data is not displayed, push and hold it until you hear a beep. The rest of the text data will appear.

#### TUNE·FILE (Tuning and File up/down) Radio

Turn the knob clockwise to step up the frequency. Turn the knob counterclockwise to step down the frequency.

#### MP3/WMA Player

Turn the knob clockwise to file up. Turn the knob counterclockwise to file down.

#### Audio system operating hints

#### NOTICE

To ensure correct audio system operations:

- Be careful not to spill beverages over the audio system.
- Do not put anything other than a 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, and 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 high performance from 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

- Extremely high temperatures can keep your compact disc player from working. On hot days, use the air conditioning to cool the vehicle interior before you listen to a disc.
- Bumpy roads or other vibrations may make your compact disc player skip.
- If moisture gets into your compact disc player, you may not hear any sound even though your compact disc player appears to be working. Remove the disc from the player and wait until it dries.

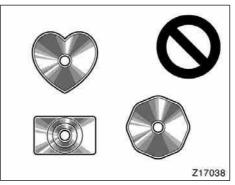
### 

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

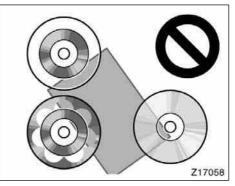


• Use only compact discs marked as shown above. The following products may not be playable on your compact disc player.

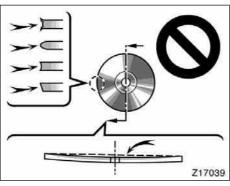
Copy-protected CD CD-R (CD-Recordable) CD-RW (CD-Re-writable) CD-ROM



Special shaped discs



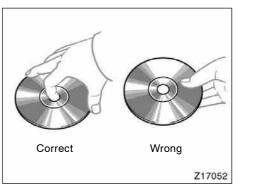
Transparent/translucent discs



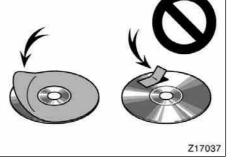
Low quality discs

#### NOTICE

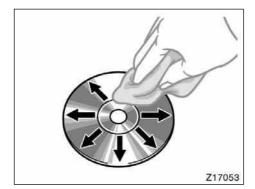
Do not use special shaped, transparent/translucent, low quality or labeled discs such as those shown in the illustrations. The use of such discs may damage the player or changer, or it may be impossible to eject the discs.



- 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, scratches, warping, pin holes, or other disc damage could cause the player to skip or to repeat a section of a track. (To see a pin hole, hold the disc up to the light.)
- 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.



Labeled discs



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.

#### MP3/WMA FILES

- MP3 is short for MPEG Audio Layer 3 and refers to an audio compression technology standard.
- WMA is short for Windows Media<sup>TM</sup> Audio. WMA is able to compress audio data to about 1/2 the level of MP3.
- The MP3/WMA player allows playback of MP3/WMA files on CD-ROM, CD-R and CD-RW discs.

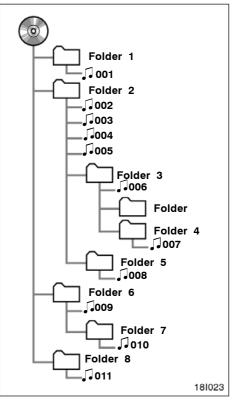
Disc recordings compatible with level 1 and level 2 of ISO 9660 and with the Romeo and Joliet file system can be played back.

- When naming a MP3/WMA file, add the corresponding filename extension (.mp3/.wma).
- The MP3/WMA player plays back files with the file name extension (.mp3/.wma) as an MP3/WMA file. To prevent noise and malfunctions, do not use this extension for files other than MP3/WMA files.

- It is possible to play back multi-session compatible recorded discs.
- When playing discs with MP3/WMA files and audio data (CD-DA) such as CD-EXTRA and MIXED-MODE CD, CD-DA only can be played.
- Files are compatible with the ID3 Tag Ver. 1.0, Ver. 1.1, Ver. 2.2 and Ver. 2.3 formats for display of album (disc title), track (track title) and artist (track artist).
- Files are compatible with the WMA Tag for display of album (disc title), track (track title) and artist (track artist).
- Only when MP3/WMA files of 32, 44.1 and 48 kHz frequencies are played back, the emphasis function is valid. (MP3 files: 16, 22.05, 24 kHz sampling frequencies can be played back.)

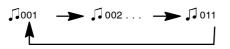
- The sound quality of MP3/WMA files generally becomes better with higher bit rates. This product can play recordings with bit rates as follows:
- MP3 files: 64 kbps to 320 kbps WMA files: 48 kbps to 320 kbps But in order to be able to enjoy a certain sound quality, it is recommended to use only discs recorded with a bit rate of at least 128 kbps.
- The MP3/WMA player does not play back MP3/WMA files from discs recorder using packet write data transfer (UDF format). Discs should be recorded using "pre-mastering" software rather than packet-write software.
- There is no m3u playlist compatibility.
- There is no compatibility with the MP3i (MP3 interactive) or mp3PRO format.
- The MP3/WMA player is compatible with VBR (Variable Bit Rate).
- When playing back files recorded as VBR (Variable Bit Rate) files, the play time will not be correctly displayed if fast-forward or reverse operations are used.
- It is not possible to check folders that do not include MP3/WMA files.

- MP3 files in up to 8 tiers of folders can be played back. However, there is a delay in the start of playback on discs with numerous tiers. For this reason we recommend creating discs with no more than 2 tiers.
- It is possible to play back up to 255 files on one disc.
- It is possible to play back up to 192 folders on one disc.



↓ : MP3/WMA file

• The turn of play of the compact disc having the structure shown on the left is as follows:



• The order changes depending on the PC and MP3/WMA encoding software you use.

#### CD-R and CD-RW discs

- CD-R/CD-RW discs that have not been subject to the "finalizing process" (a process that allows them to be played back on a conventional CD player) cannot be played back.
- It may not be possible to play back CD-R/CD-RW discs recorded on a music CD recorder or a personal computer because of disc characteristics, scratches or dirt on the disc, or dirt, condensation, etc. on the lens of this unit.
- Playback of discs recorded on a personal computer may not be possible depending on the application settings and the environment. Record with the correct format. (For details, contact the manufacturer of the applications.)
- Playback of CD-R/CD-RW discs may become impossible in case of direct exposure to sunlight, high temperatures, or the storage conditions in the vehicle.
- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by the MP3/WMA player (in the case of audio data (CD-DA)).

- The MP3/WMA player conforms to the track skip function of the CD-R/CD-RW disc.
- If you insert a CD-RW disc into the MP3/WMA player, load time to playback will be longer than for a conventional CD or CD-R disc.
- Read the precautions accompanying the CD-R/CD-RW discs before use.
- Recordings on CD-R/CD-RW cannot be played back using the DDCD (Double Density CD) system.

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#### TERMS

#### Packet write—

This is a general term for a method of writing on CD-R, etc. at the time required for a file, just as is done with files on floppy or hard discs.

#### Bit rate—

This expresses data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. Using the same encoding methods (such as MP3/WMA), the higher the rate, the better the sound.

#### Multi-session-

Multi-session is a recording method that allows additional data to be recorded later. When recording data on a CD-ROM, CD-R or CD-RW, etc., all data from beginning to end is treated as a single unit or session. Multi-session is a method of recording more than 2 sessions in one disc.

#### CD-DA-

CD-DA is an abbreviation of Compact Disc Digital Audio. It refers to the uncompressed format of regular CDs.

#### ID3/WMA Tag—

This is a method of embedding track-related information in a MP3/WMA file. This embedded information can include the track title, the artist's name, the album title, the music genre, the year of production, comments and other data. The contents can be freely edited using software with ID3/WMA tag editing functions. Although the tags are restricted to the number of characters, the information can be viewed when the track is played back.

#### ISO 9660 format—

This is the international standard for the format logic of CD-ROM folders and files. For the ISO 9660 format, there are regulations for the following two levels.

Level 1:

The file name is in 8.3 format (the name consists of up to 8 characters, half-byte English capital letters and half-byte numerals and the "-" sign, with a file extension of three characters.)

#### Level 2:

The file name can have up to 31 (MP3 files)/15 (WMA files) characters (including the separation mark "." and a file extension). Each folder contains less than 8 hierarchies.

#### Extended formats

Joliet:

File name can have up to 64 characters. Romeo:

File names can have up to 128 characters.

#### m3u—

Playlists created using the "WINAMP" software have a playlist file extension (.m3u).

#### МРЗ—

MP3 is short for MPEG 1 & 2 Audio Layer 3. It is an audio compression standard set by a working group (MPEG) of the ISO (International Standards Organization). MP3 is able to compress audio data to about 1/10 the level of a conventional disc.

### 05 11.10

#### WMA—

WMA is short for Windows Media<sup>TM</sup> Audio. It is the audio file format developed by Microsoft Corporation. WMA is able to compress audio data to about 1/2 the level of MP3.

Windows Media<sup>TM</sup> and Windows<sup>®</sup> are registered trademarks of Microsoft Corporation in the United States and other countries. 05 11.10

# <u>SECTION 1-9</u>

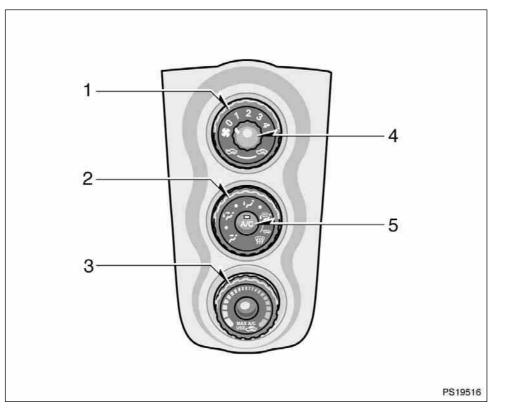
# OPERATION OF INSTRUMENTS AND CONTROLS

### Air conditioning system

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05 11.10

### Controls



- 1. Air intake selector
- 2. Air flow selector
- 3. Temperature selector
- 4. Fan speed selector
- 5. "A/C" Button (on some models)

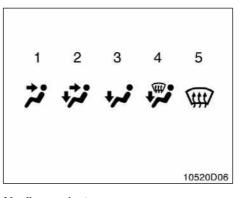
### 05 11.10

#### 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.
- 2. Bi-level—Air flows from both the floor vents and the instrument panel vents.
- **3. Floor**—Air flows mainly from the floor vents.
- **4. Floor/Windshield**—Air flows mainly from the floor vents and windshield vents.

Use with the air intake selector positioned in FRESH.

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

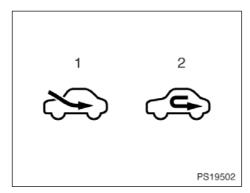
Turning the air flow selector to the windshield position turns on the defogging function with the purpose of clearing the front view.

Use with the air intake selector positioned in FRESH.

Vehicles with "A/C" button-

Press the "A/C" button for dehumidified heating or cooling. This setting clears the front view more quickly.

For details about air flow selector settings, see "Air flow selector settings" described below.



#### "A/C" button (on some models)

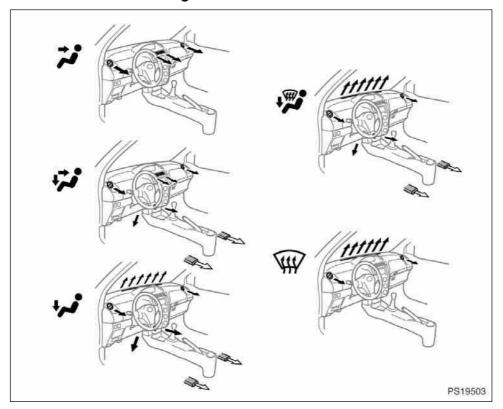
To turn on the air conditioning, press the "A/C" button. The "A/C" button indicator will come on. To turn the air conditioning off, press the button again.

#### Air intake selector

Turn the knob to select the air source.

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

#### 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 front seats clear to allow air to circulate throughout the vehicle.
- On cold days, set the fan speed to "high" for a minute to help clear the intake ducts of snow or moisture. This can reduce the amount of fogging on the windows.

 $\Rightarrow$ : on some models

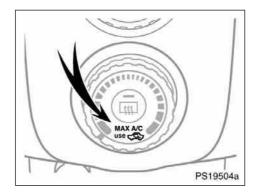
- When driving on dusty roads, close all windows. If dust thrown up by the vehicle is still drawn into the vehicle after closing the windows, it is recommended that the air intake selector be set to FRESH and the fan speed selector to any setting except "0".
- If following another vehicle on a dusty 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 "0" 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 "0" Temperature—Towards COLD (blue zone) Air intake—FRESH (outside air) Air flow—PANEL Air conditioning—ON

• For quick cooling, turn the temperature selector knob fully towards COLD and change the air intake selector mode RECIRCULATE.

#### Ventilation

For best results, set controls to:

Fan speed—Any setting except "0" Temperature—Towards COLD (blue zone) Air intake—FRESH (outside air) Air flow—PANEL Air conditioning—OFF

#### Defogging and defrosting

The inside of the windshield

For best results, set controls to:

Fan speed—Any setting except "0" Temperature—Towards WARM (red zone) to heat; COLD (blue zone) to cool Air intake—FRESH (outside air) Air flow—WINDSHIELD

Turning the air flow selector to windshield position turns on the defogging function with the purpose of clearing the front view.

Vehicles with "A/C" button-

Press the "A/C" button for dehumidified heating or cooling. This setting clears the front view more quickly.

• On humid days, do not blow cold air on the windshield—the difference between the outside and inside temperatures could make the fogging worse.

The outside of the windshield

For best results, set controls to:

Fan speed—Any setting except "0" Temperature—Towards WARM (red zone) Air intake—FRESH (outside air) Air flow—WINDSHIELD

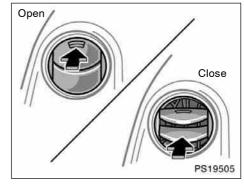
Turning the air flow selector to windshield position turns on the defogging function with the purpose of clearing the front view.

Vehicles with "A/C" button-

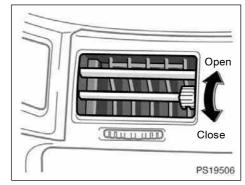
Press the "A/C" button for dehumidified heating or cooling. This setting clears the front view more quickly.

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

#### Instrument panel vents

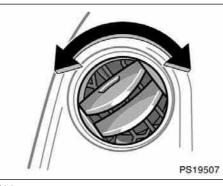


Side vents

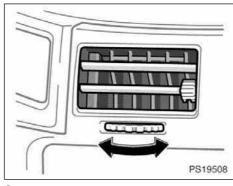


Center vents

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



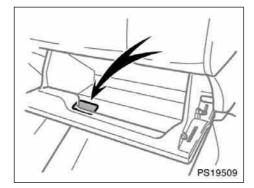
Side vents



Center vents

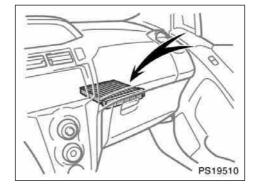
You can change air flow direction by turning the instrument panel vents.

# Air conditioning filter (on some models)—



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

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

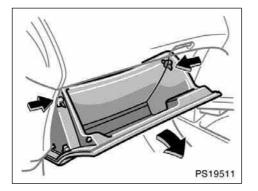


The air conditioning filter is behind the glove box.

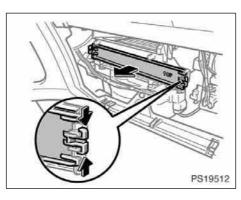
# -Checking and replacing the air conditioning filter

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

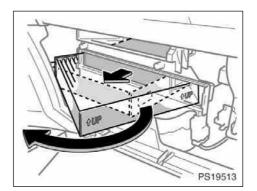
To maintain the air conditioning efficiency, inspect and replace the air conditioning filter according to the maintenance schedule. In dusty areas or areas with heavy traffic flow, such as inner city or desert areas, early replacement may be required. (For scheduled maintenance information, please refer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



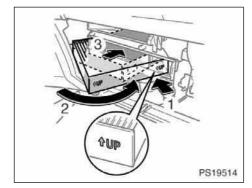
1. Push in each side of the glove box to disconnect the claws.



2. Pinch the knobs located on each side and remove the filter cover.



- 3. Pull out the filter and rotate it as shown in the illustration to remove. Inspect the filter on the surface.
- If it is dirty, it should be replaced.



When inserting the filter in the filter outlet, keep the arrow pointing up and insert the filter as shown in the illustration above.

#### INFORMATION

The air filter should be installed properly in position. The use of air conditioning with the air filter removed may cause deteriorated dustproof performance and then affect air conditioning performance. 05 11.10

# SECTION 2

# INFORMATION BEFORE DRIVING YOUR TOYOTA

### Information before driving your Toyota

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#### Break-in period

#### Drive gently and avoid high speeds.

Your vehicle does not need an elaborate break-in. But following a few simple tips for the first 1600 km (1000 miles) can add to the future economy and long life of your vehicle:

- Avoid full throttle acceleration when starting and driving.
- Avoid racing the engine.
- Try to avoid hard stops during the first 300 km (200 miles).
- Do not drive slowly with the manual transmission in a high gear.
- Do not drive for a long time at any single speed, either fast or slow.
- Do not tow a trailer during the first 800 km (500 miles).

## Fuel

### FUEL TYPE

# Your new vehicle must use only unleaded gasoline.

To help prevent gas station mix-ups, your Toyota has a smaller fuel tank opening. The special nozzle on pumps with unleaded fuel will fit it, but the larger standard nozzle on pumps with leaded gas will not.

At a minimum, the gasoline you use should meet specifications of ASTM D4814 in the U.S.A. and CGSB 3.5–M93 in Canada.

#### NOTICE

Do not use leaded gasoline. Use of leaded gasoline will cause the 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 gasoline with an octane rating or research octane number lower than stated above will cause persistent heavy knocking. If it is severe, this will lead to engine damage.

#### If your engine knocks...

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

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

# GASOLINES CONTAINING DETERGENT ADDITIVES

#### Toyota recommends the use of gasoline 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 four categories that depend on required emission levels. In the U.S., category 4 has been adopted. The WWFC improves air quality by providing for better emissions in vehicle fleets, and customer satisfaction through better vehicle performance.

CLEANER BURNING GASOLINE

Cleaner burning gasoline, including reformulated gasoline that contains oxygenates such as ethanol or MTBE is available in many areas.

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.

#### **OXGENATES 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

42 L (11.1 gal., 9.2 lmp. 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.

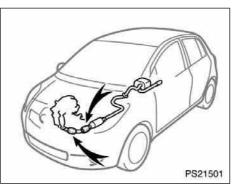
#### Operation in foreign countries

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.

The purpose is to reduce pollutants in the exhaust gas.

• Keep people and combustible materials away from the exhaust pipe while the engine is running. The exhaust gas is very hot.

 Do not drive, idle or park your vehicle over anything that might burn easily such as grass, leaves, paper or rags.

### NOTICE

- A large amount of unburned gases flowing into the three-way catalytic converter may cause it to overheat and create a fire hazard. To prevent this and other damage, observe the following precautions:
- ♦Use only unleaded gasoline.
- Do not drive with an extremely low fuel level; running out of fuel could cause the engine to misfire, creating an excessive load on the 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.

 Keep the back door closed while driving. An open or unsealed back door may cause exhaust gases to be drawn into the vehicle.

- To allow proper operation of your vehicle's ventilation system, keep the inlet grilles in front of the windshield clear of snow, leaves, or other obstructions.
- If you smell exhaust fumes in the vehicle, open the windows and close the back door to ensure plenty of fresh air enters the vehicle. If you can smell exhaust fumes even though there are no other vehicles in the surrounding area, have your vehicle checked by your Toyota dealer. Continued inhalation of exhaust fumes can lead to death by gas poisoning.

# Facts about engine oil consumption

### FUNCTIONS OF ENGINE OIL

Engine oil has the primary functions of lubricating and cooling the inside of the engine, and plays a major role in maintaining the engine in proper working order.

## ENGINE OIL CONSUMPTION

It is normal that an engine should consume some engine oil during normal engine operation. The causes of oil consumption in a normal engine are as follows.

- Oil is used to lubricate pistons, piston rings and cylinders. A thin film of oil is left on the cylinder wall when a piston moves downwards in the cylinder. High negative pressure generated when the vehicle is decelerating sucks some of this oil into the combustion chamber. This oil as well as some part of the oil film left on the cylinder wall is burned by the high temperature combustion gases during the combustion process.
- Oil is also used to lubricate the stems of the intake valves. Some of this oil is sucked into the combustion chamber together with the intake air and is burned along with the fuel. High temperature exhaust gases also burn the oil used to lubricate the exhaust valve stems.

The amount of engine oil consumed depends on the viscosity of the oil, the quality of the oil and the conditions the vehicle is driven under.

More oil is consumed by high-speed driving and frequent acceleration and deceleration.

A new engine consumes more oil, since its pistons, piston rings and cylinder walls have not become conditioned.

Oil consumption: Max. 1.0 L per 1000 km (1.1 qts./600 miles, 0.9 lmp.qts./600 miles)

When judging the amount of oil consumption, note that the oil may become diluted and make it difficult to judge the true level accurately. As an example, if a vehicle is used for repeated short trips, and consumes a normal amount of oil, the dipstick may not show any drop in the oil level at all, even after 1000 km (600 miles) or more. This is because the oil is gradually becoming diluted with fuel or moisture, making it appear that the oil level has not changed.

The diluting ingredients evaporate out when the vehicle is then driven at high speeds, as on an express way, making it appear that oil is excessively consumed after driving at high speeds.

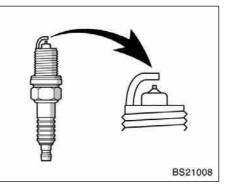
### IMPORTANCE OF ENGINE OIL LEVEL CHECK

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 270 in Section 7–2.

## Iridium-tipped spark plugs



Your engine is fitted with iridium-tipped spark plugs.

## NOTICE

Use only iridium-tipped spark plugs. Do not adjust gaps for engine performance or smooth 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 increase. Also, the brake system warning light may come on.

## 

Do not drive your vehicle with only a single brake system. Have your brakes fixed immediately.

### **BRAKE BOOSTER**

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

## CAUTION

 Do not pump the brake pedal if the engine stalls. Each push on the pedal uses up your reserved vacuum.

 Even if the power assist is completely lost, the brakes will still work. But you will have to push the pedal hard, much harder than normal. And your braking distance will increase.

ANTI-LOCK BRAKE SYSTEM (with "ABS" warning light)

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

## Effective way to press the ABS brake pedal:

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

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

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

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

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

## 

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.

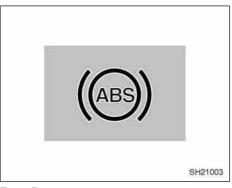
If tire grip performance exceeds its capability, or if hydroplaning occurs during high speed driving in the rain, the anti-lock brake system does not provide vehicle control. Anti-lock brake system is not designed to shorten the stopping distance: Always drive at a moderate speed and maintain a safe distance from the vehicle in front of you. Compared with vehicles without an anti-lock brake system, your vehicle may require a longer stopping distance in the following cases:

- Driving on rough, gravel or 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 tire 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.



Туре А





## "ABS" warning light

This 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 occurs, this indicates a malfunction somewhere in the components monitored by the warning light system. Contact your Toyota dealer as soon as possible to service the vehicle.

- The light does not come on when the ignition key is turned to the "ON" position, or remains on.
- The light comes on while you are driving.

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



If the "ABS" warning light remains on together with the brake system warning light, immediately stop your vehicle at a safe place and contact your Toyota dealer.

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

## Electric power steering system

The electric power steering system, using an electric motor, assists the turning of the steering wheel.

In the following cases, you may feel the steering becomes heavy. But it is not a malfunction.

• When maneuvering or turning frequently over a long time

The power steering effect will be reduced to prevent the system from overheating. Avoid turning the steering wheel, or stop the vehicle and turn the ignition key to "ACC" or "LOCK". The system will become cool in about 10 minutes.

### NOTICE

Frequent maneuvering and turning over a long time may cause damage to the system in which the mechanism prevents overheating of the electric power steering system.

• When the battery is discharged

Check the battery's condition. If necessary, recharge or replace the battery. For details, see "Checking battery condition" on page 284 in Section 7–3.

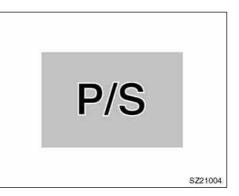
In the following case, you may feel the steering becoming heavy. Then, after 5 minutes or more, the electric power steering system warning light comes on. But it is not a malfunction.

• When racing the engine for 30 seconds or more with the vehicle stopped

The normal power steering effect will be obtained and the warning light will go off when you start driving.

## INFORMATION

When the steering wheel is turned, a motor operating sound (whining sound) may be heard. This occurs when the power steering motor works and is not defective.



# Electric power steering system warning light

The light comes on when the ignition key is turned to the "ON" position. If the electric power steering system warning light works properly, the light turns off after a few seconds. If the system has malfunctions, the light comes on again.

If the following conditions occur, this indicates a malfunction somewhere in the 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.

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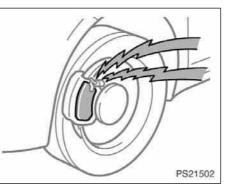
• The light stays on while you are driving.

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

## 

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

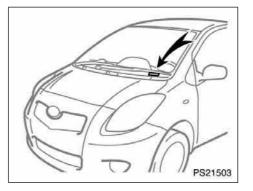
## Brake pad wear limit indicators



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.

## Your Toyota's identification— —Vehicle identification number



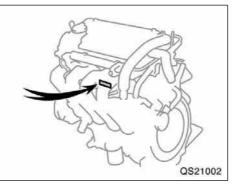
The vehicle identification number (VIN) is the legal identifier for your vehicle. This number is on the left top of the instrument panel, and can be seen through the windshield from outside.

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 (except for Canada)

Your new vehicle carries theft prevention labels which are approximately 47 mm (1.85 in.) by 12 mm (0.47 in.).

The purpose of these labels is to reduce the incidence of vehicle thefts by facilitating the tracing and recovery of parts from stolen vehicles. The label is designed so that once it is applied to a surface, any attempt to remove it will result in destroying the integrity of the label. Transferring these labels intact from one part to another, will be impossible.

## NOTICE

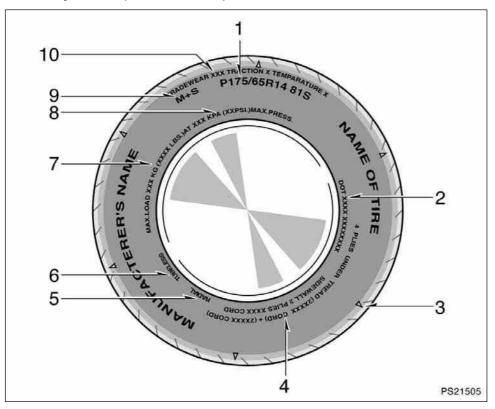
You should not attempt to remove the theft prevention labels as it may violate certain state or federal laws.

## Suspension and chassis



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

## Tire information— —Tire symbols (Standard tire)

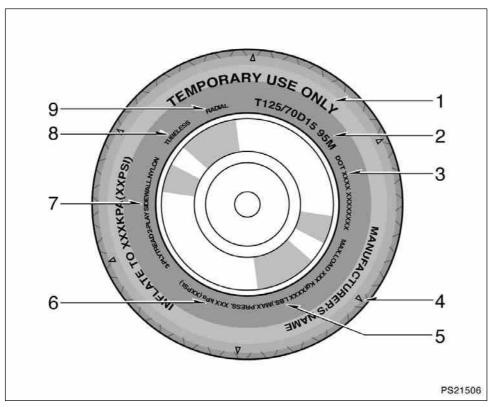


This illustration indicates typical tire symbols.

- 1. Tire size—For details, see "Tire size" on page 195.
- 2. DOT and Tire Identification Number (TIN)—For details, see "DOT and Tire Identification Number (TIN)" on page 194.
- Location of tread wear indicators—For details, see "Checking and replacing tires" on page 276.
- 4. Tire ply composition and materials—Plies mean a layer of rubber-coated parallel cords. Cords mean the strands forming the plies in the tire.
- 5. Radial tires or bias-ply tires—A radial tire has "RADIAL" on the sidewall. A tire not marked with "RADIAL" is a bias-ply tire.

- 6. "TUBELESS" or "TUBE TYPE"—A tubeless tire does not have a tube inside the tire and air is directly filled in the tire. A tube type tire has a tube inside the tire and the tube maintains the air pressure.
- 7. Load limit at maximum cold tire inflation pressure—For details, see "Checking and replacing tires" on page 276.
- 8. Maximum cold tire inflation pressure—This means the pressure to which a tire may be inflated. For recommended cold tire inflation pressure, see "Tires" on page 299.
- 9. Summer tire or all season tire—An all season tire has "M+S" on the sidewall. The tire not marked with "M+S" is a summer tire. For details, see "Types of tires" on page 204.
- **10.Uniform tire quality grading** For details, see "Uniform tire quality grading" that follows.

# —Tire symbols (Compact spare tire)



This illustration indicates typical tire symbols.

- 1. "TEMPORARY USE ONLY"—A compact spare tire is identified by the phrase "TEMPORARY USE ONLY" molded into its sidewall. This tire is designed for temporary emergency use only. For details, see "Compact spare tire" on page 229.
- 2. Tire size—For details, see "Tire size" on page 195.
- 3. DOT and Tire Identification Number (TIN)—For details, see "DOT and Tire Identification Number (TIN)" on page 194.
- Location of tread wear indicators—For details, see "Checking and replacing tires" on page 276.
- 5. Load limit at maximum cold tire inflation pressure—For details, see "Checking and replacing tires" on page 276.

## —DOT and Tire Identification Number (TIN)

- 6. Maximum cold tire inflation pressure—This means the pressure to which a tire may be inflated. For recommended cold tire inflation pressure, see "Tires" on page 299.
- 7. Tire ply composition and materials—Plies mean a layer of rubber-coated parallel cords. Cords mean the strands forming the plies in the tire.
- 8. "TUBELESS" or "TUBE TYPE"—A tubeless tire does not have a tube inside the tire and air is directly filled in the tire. A tube type tire has a tube inside the tire and the tube maintains the air pressure.
- 9. Radial tires or bias-ply tires—A radial tire has "RADIAL" on the sidewall. A tire not marked with "RADIAL" is a bias-ply tire.

		2		_
DOT 1	M68J	B30	<u>R01</u> 6	03
			SU	J21021b

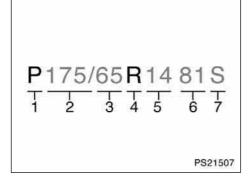
This illustration indicates typical DOT and Tire Identification Number (TIN).

- 1. "DOT" symbol
- 2. Tire Identification Number (TIN)
- 3. Tire manufacturer's identification mark
- 4. Tire size code
- 5. Manufacturer's optional tire type code (3 or 4 letters)
- 6. Manufacturing week
- 7. Manufacturing year

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The "DOT" symbol certifies that the tire conforms to applicable Federal Motor Vehicle Safety Standards.

## —Tire size

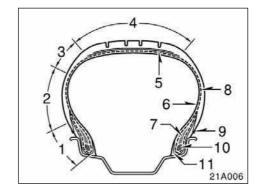


This illustration indicates typical tire size.

- 1. Tire use (P=Passenger car, T=Temporary use)
- 2. Section width (in millimeters)
- 3. Aspect ratio (tire height to section width)
- 4. Tire construction code (R=Radial, D=Diagonal)
- 5. Wheel diameter (in inches)
- 6. Load index (2 digits or 3 digits)
- 7. Speed symbol (alphabet with one letter)

- 2 3 SU21026a
- 1. Section width
- 2. Tire height
- 3. Wheel diameter

## -Name of each section of tire



- 1. Bead
- 2. Sidewall
- 3. Shoulder
- 4. Tread
- 5. Belt
- 6. Inner liner
- 7. Reinforcing rubber
- 8. Carcass
- 9. Rim lines
- 10.Bead wires
- 11. Chafer

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## -Uniform tire quality grading

This information has been prepared in accordance with regulations issued by the National Highway Traffic Safety Administration of the U.S. Department of Transportation. It provides the purchasers and/or prospective purchasers of Toyota vehicles with information on uniform tire quality grading.

Your Toyota dealer will help answer any questions you may have as you read this information.

DOT quality grades—All passenger vehicle tires must conform to Federal Safety Requirements in addition to these grades. Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example: Treadwear 200 Traction AA Temperature A. **Tread wear**—The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and a half (1-1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate. **Traction AA, A, B, C**—The traction grades, from highest to lowest, are AA, A, B, and C, and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

Warning: The traction grade assigned to this tire is based on braking (straight ahead) traction tests and does not include cornering (turning) traction.

Temperature A, B, C-The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Warning: The temperature grades for this tire are established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

## —Glossary of tire terminology

Tire related term	Meaning
Cold tire inflation pressure	tire inflation pressure when the vehicle has been parked for at least 3 hours or more, or it has not been driven more than 1.5 km or 1 mile under that condition
Maximum inflation pressure	the maximum cold inflation pressure to which a tire may be inflated and it is shown on the sidewall of the tire
Recommended inflation pressure	cold tire inflation pressure recommended by a manufacturer
Accessory weight	the combined weight (in excess of those standard items which may be replaced) of automatic transmission, power steering, power brakes, power windows, pow- er seats, radio, and heater, to the extent that these items are available as factory-installed equipment (whether installed or not)
Curb weight	the weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil, and coolant, and, if so equipped, air conditioning and addi- tional weight optional engine
Maximum loaded vehicle weight	the sum of— (a) curb weight; (b) accessory weight; (c) vehicle capacity weight; and (d) production options weight
Normal occupant weight	68 kg (150 lb.) times the number of occupants specified in the second column of Table 1 that follows

the combined weight of those installed regular production options weighing over 2.3 kg (5 lb.) in excess of those standard items which they replace, not pre-Production options weight viously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim Vehicle capacity weight the rated cargo and luggage load plus 68 kg (150 lb.) times the vehicle's desig-(Total load capacity) nated seating capacity (A) the sidewall that contains a whitewall, bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire, or Intended outboard sidewall (B) the outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle distribution of occupants in a vehicle as specified in the third column of Table Occupant distribution 1 that follows a metal support for a tire or a tire and tube assembly upon which the tire beads Rim are seated Rim diameter (Wheel diameter) nominal diameter of the bead seat Rim size designation rim diameter and width Rim type designation the industry of manufacturer's designation for a rim by style or code Rim width nominal distance between rim flanges the load on an individual tire that is determined by distributing to each axle Vehicle maximum load on the tire its share of the maximum loaded vehicle weight and dividing by two

Meaning

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Tire related term

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Vehicle normal load on the tire	the load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight (distributed in accordance with Table 1 that follows) and dividing by two	
Weather side	the surface area of the rim not covered by the inflated tire	

Meaning

Table 1–Occupant loadin	g and distribution for vehi	cle normal load for various of	lesignated seating capacities

Designated seating capacity, Number of occupants	Vehicle normal load, Number of occupants	Occupant distribution in a normally loaded vehicle
2 through 4	2	2 in front
5 through 10	3	2 in front, 1 in second seat

Tire related term

## Vehicle load limits

Vehicle load limits include total load capacity, seating capacity, towing capacity and cargo capacity. Follow the load limits shown below. Total load capacity and seating capacity are also described on the tire and loading information label. For location of the tire and loading information label, see "Checking tire inflation pressure" on page 274.

## Total load capacity:

383 kg (845 lb.)

Total load capacity means combined weight of occupants, cargo and luggage. Tongue load is included when trailer towing.

## Seating capacity:

Total 5 (Front 2, Rear 3) Seating capacity means the maximum number of occupants whose estimated average weight is 68 kg (150 lb.) per person. Depending on the weight of each person, the seating capacity given may exceed the total load capacity.

NOTICE

Even if the number of occupants are within the seating capacity, do not exceed the total load capacity.

# Towing capacity (except for Canada):

Toyota does not recommend towing a trailer with your vehicle. Your vehicle is not designed for trailer towing.

## Towing capacity (for Canada):

318 kg (700 lb.)

Towing capacity means the maximum gross trailer weight (trailer weight plus its cargo weight) that your vehicle is able to tow.

## Cargo capacity

Cargo capacity may increase or decrease depending on the size (weight) and the number of occupants. For details, see "Capacity and distribution" that follows.

## 

Do not apply the load more than each load limit. That may cause not only damage to the tires, but also deterioration to the steering ability and braking ability, which may cause an accident.

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## Cargo and luggage— —Stowage precautions

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

- Put cargo and luggage in the luggage compartment when at all possible. Be sure all items are secured in place.
- Be careful to keep the vehicle balanced. Locating the weight as far forward as possible helps maintain the balance.
- For better fuel economy, do not carry unneeded weight.

## 

• To prevent cargo and luggage from sliding forward during braking, do not stack anything in the luggage compartment higher than the seatbacks. Keep cargo and luggage low, as close to the floor as possible. • Never allow anyone to ride in the luggage compartment. It is not designed for passengers. They should ride in their seats with their seat belts properly fastened. Otherwise, they are much more likely to suffer serious bodily injury, in the event of sudden braking or a collision.

- Do not place anything on the luggage cover. Such items may be thrown about and possibly injure people in the vehicle during sudden braking or an accident. Secure all items in a safe place.
- Do not drive with objects left on top of the instrument panel. They may interfere with the driver's field of view. Or they may move during sharp vehicle acceleration or turning, and impair the driver's control of the vehicle. In an accident they may injure the vehicle occupants.

## NOTICE

Do not load the vehicle beyond the vehicle capacity weight given in Section 8.

## -Capacity and distribution

## Cargo capacity depends on the total weight of the occupants.

(Cargo capacity) = (Total load capacity) - (Total weight of occupants)

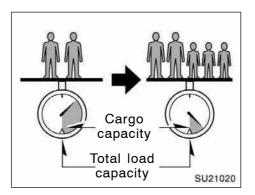
## STEPS FOR DETERMINING CORRECT LOAD LIMIT

- 1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX pounds" on your vehicle's placard.
- 2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- Subtract the combined weight of the driver and passengers from XXX kilograms or XXX pounds.
- 4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400–750 (5x150)=650 lbs).

- 5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
- 6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

Except for Canada—Toyota does not recommend towing a trailer with your vehicle. Your vehicle is not designed for trailer towing.

For Canada—For details about trailer towing, see page 213.



## EXAMPLE ON YOUR VEHICLE

In case that 2 people with the combined weight of 166 kg (366 lb.) are riding in your vehicle with the total load capacity of 383 kg (845 lb.), the available amount of cargo and luggage load capacity will be as follows:

383 kg - 166 kg = 217 kg. (845 lb. - 366 lb. = 479 lb.)

From this condition, if 3 more passengers with the combined weight of 176 kg (388 lb.) get on, the available cargo and luggage load will be reduced as follows:

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217 kg - 176 kg = 41 kg.(479 lb. - 388 lb. = 91 lb.)

As shown in the above example, if the number of occupants increases, the cargo and luggage load equaling the combined weight of occupants who got on later must be reduced. In other words, if the increase in the number of occupants causes the excess of the total load capacity (combined weight of occupants plus cargo and luggage load), you have to reduce the cargo and luggage on your vehicle.

For details about total load capacity, see "Vehicle load limits" on page 201.

## 

Even if the total load of occupant's weight and the cargo load is less than the total load capacity, do not apply the load unevenly. That may cause not only damage to the tire but also deterioration to the steering ability due to unbalance of the vehicle, causing an accident.

## Types of tires

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

## 1. Summer tires

Summer tires are high-speed capability tires best suited to highway driving under dry conditions.

Since summer tires do not have the same traction performance as snow tires, summer tires are inadequate for driving on snow-covered or icy roads. For driving on snow-covered or icy roads, we recommend using snow tires. If installing snow tires, be sure to replace all four tires.

## 2. All season tires

All season tires are designed to provide better traction in snow and to be adequate for driving in most winter conditions, as well as for use all year round.

All season tires, however, do not have adequate traction performance compared with snow tires in heavy or loose snow. Also, all season tires fall short in acceleration and handling performance compared with summer tires in highway driving.

The details about how to distinguish summer tires from all season tires are described on page 191.

## 

- Do not mix summer and all season tires on your vehicle as this can cause dangerous handling characteristics, resulting in loss of control.
- Do not use tires other than the manufacturer's designated tires, and do not mix tires or wheels of the sizes different from the originally equipped tires and wheels as this can cause dangerous handling characteristics, resulting in loss of control.

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# SECTION 3

## **STARTING AND DRIVING**

## Starting and driving

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Dinghy towing	211
Trailer towing	213
How to save fuel and make your vehicle last longer	218

## Before starting the engine

- 1. Check the area around the vehicle before entering it.
- 2. Adjust seat position, seatback angle, head restraint height and steering wheel angle.
- 3. Adjust inside and outside rear view mirrors.
- 4. Lock all doors.
- 5. Fasten seat belts.

How to start the engine— —Cranking hold function

Once you turn the ignition key to "START" position and release it, the cranking hold function continues to crank the engine in "ON" position until it starts.

The function stops cranking the engine after about 20 seconds maximum if the engine has not started yet. When you crank the engine again, wait a few seconds and restart it.

If you hold the key in "START" position, the function will keep cranking.

## (a) Before cranking

- 1. Apply the parking brake firmly.
- 2. Turn off unnecessary lights and accessories.
- 3. **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.

Automatic transmission: Put the selector lever in "P". If you need to restart the engine while the vehicle is moving, put the selector lever in "N". A starter safety device will prevent the starter from operating if the selector lever is in any drive position.

4. Automatic transmission only: Depress the brake pedal and hold it to the floor until driving off.

## (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:

With your foot off the accelerator pedal, crank the engine by turning the key to "START". Release it when the engine starts.

Engine should be warmed up by driving, not in idle. For warming up, drive with smoothly turning engine until engine coolant temperature is within normal range.

### If the engine stalls ...

Simply restart it, using the correct procedure given in normal starting.

#### If the engine will not start ...

See "If your vehicle will not start" on page 222 in Section 4.

## NOTICE

♦Do not race a cold engine.

♦If the engine becomes difficult to start or stalls frequently, have the engine checked immediately.

# Tips for driving in various conditions

- Always slow down in gusty crosswinds. This will allow you much better control.
- Drive slowly onto curbs and, if possible, at a right angle. Avoid driving onto high, sharp-edged objects and other road hazards. Failure to do so can lead to severe tire damage such as a tire burst.

Drive slowly when passing over bumps or travelling on a bumpy road. Otherwise, the impact could cause severe damage to the tires and/or wheels.

• When parking on a hill, turn the front wheels until they touch the curb so that the vehicle will not roll. Apply the parking brake, and place the transmission in "P" (automatic) or in first or reverse (manual). 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 skid or spin.

- Do not drive in excess of the speed limit. Even if the legal speed limit permits it, do not drive over 140 km/h (85 mph) unless your vehicle has high-speed capability tires. Driving over 140 km/h (85 mph) may result in tire failure, loss of control and possible injury. Be sure to consult a tire dealer to determine whether the tires on your vehicle are high-speed capability tires or not before driving at such speeds.
- Do not continue normal driving when the brakes are wet. If they are wet, your vehicle will require a longer stopping distance, and it may pull to one side when the brakes are applied. Also, the parking brake will not hold the vehicle securely.

## Winter driving tips

# Make sure you have a proper freeze protection for engine coolant.

Only use "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology. (Coolant with long-life hybrid organic acid technology is a combination of low phosphates and organic acids.)

See "Checking the engine coolant level" on page 272 in Section 7–2 for details of coolant type selection.

For the U.S.A.—"Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water. This coolant provides protection down to about  $-35^{\circ}C$  ( $-31^{\circ}F$ ).

For Canada—"Toyota Super Long Life Coolant" is a mixture of 55% coolant and 45% deionized water. This coolant provides protection down to about  $-42^{\circ}C$  ( $-44^{\circ}F$ ).

### NOTICE

Do not use plain water alone.

# Check the condition of the battery and cables.

Cold temperatures reduce the capacity of any battery, so it must be in top shape to provide enough power for winter starting. 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 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—they 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 "P" (automatic) or into first or reverse (manual) and block the rear wheels. Do not use the parking brake, or snow or water accumulated in and around the parking brake mechanism may freeze, making it hard to release.

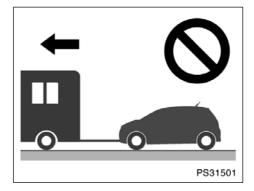
# Keep ice and snow from accumulating under the fenders.

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 (with automatic transmission)

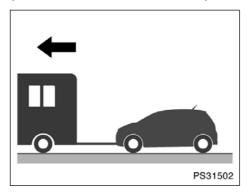


Your vehicle is not designed to be dinghy towed (with four wheels on the ground) behind a motorhome.

## NOTICE

Do not tow your vehicle with four wheels on the ground. This may cause serious damage to your vehicle.

## Dinghy towing (with manual transmission)



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.

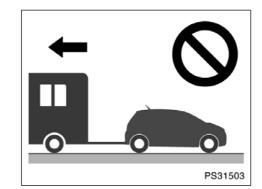
- 1. Put the shift lever in neutral.
- 2. Turn the ignition switch to the "ACC" position. Make sure the audio is turned off and any item is not plugged into the power outlet.

## 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.

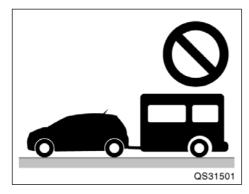


## NOTICE

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

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# Trailer towing (except for Canada)



Toyota does not recommend towing a trailer with your Toyota. Toyota also does not recommend the installation of a tow hitch or the use of a tow hitch carrier for a wheelchair, scooter, bicycle, etc. Your Toyota is not designed for trailer towing or for the use of tow hitch mounted carriers.

## Trailer towing (for Canada)

Your vehicle is designed primarily as a passenger-carrying vehicle. Towing a trailer will have an adverse effect on handling, performance, braking, durability and driving economy (fuel consumption, etc.). Your safety and satisfaction depend on the proper use of correct equipment and cautious driving habits. For your safety and the safety of others, you must not overload your vehicle or trailer. Toyota warranties do not apply to damage or malfunction caused by towing a trailer for commercial purposes. Ask your local Toyota dealer for further details before towing.

## WEIGHT LIMITS

Before towing, make sure the total trailer weight, gross vehicle weight, gross axle weight and trailer tongue load are all within the limits.

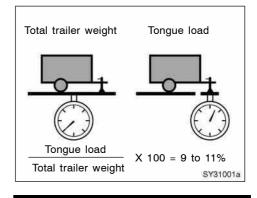
The total trailer weight and tongue load can be measured with platform scales found at a highway weighing station, building supply company, trucking company, junk yard, etc.



## 

 The total trailer weight (trailer weight plus its cargo load) must not exceed 318 kg (700 lb.). Exceeding this weight is dangerous. • Trailer hitch assemblies have different weight capacities established by the hitch manufacturer. Even though the vehicle may be physically capable of towing a higher weight, the operator must determine the maximum weight rating of the particular hitch assembly and never exceed the maximum weight rating specified for the trailer-hitch. Exceeding the maximum weight rating set by the trailer hitch manufacturer can cause an accident resulting in serious personal injuries.

• The gross vehicle weight must not exceed the Gross Vehicle Weight Rating (GVWR) indicated on the Certification Label. The gross vehicle weight is the sum of weights of the unloaded vehicle, driver, passengers, luggage, hitch and trailer tongue load. It also includes the weight of any special equipment installed on your vehicle.  The load on either the front or rear axle resulting from distribution of the gross vehicle weight on both axles must not exceed the Gross Axle Weight Rating (GAWR) listed on the Certification Label.



• The trailer cargo load should be distributed so that the tongue load is 9 to 11% of the total trailer weight, not exceeding the maximum of 32 kg (70 lb.). Never load the trailer with more weight in the back than in the front. About 60% of the trailer load should be in the front half of the trailer and the remaining 40% in the rear.

## HITCHES

- Use only a hitch (Toyota genuine hitch or equivalent) which is recommended by the hitch manufacturer and conforms to the total trailer weight requirement.
- Follow the directions supplied by the hitch manufacturer. Lubricate the hitch ball with a light coat of grease.
- Toyota recommends removing the trailer hitch whenever you are not towing a trailer to reduce the possibility of additional damage caused by the hitch if your vehicle is struck from behind.

## NOTICE

Do not use axle-mounted hitches as they can cause damage to the axle housing, wheel bearings, wheels or tires. Also, never install a hitch which may interfere with the normal function of an Energy Absorbing Bumper, if so equipped.

**BRAKE AND SAFETY CHAINS** 

 Toyota recommends trailers with brakes that conform to any applicable federal and state/provincial regulations. • A safety chain must always be used between the towing vehicle and the trailer. Leave sufficient slack in the chain for turns. The chain should cross under the trailer tongue to prevent the tongue from dropping to the ground in case it becomes damaged or separated. For correct safety chain procedures, follow the hitch or trailer manufacturer's recommendation.

## 

- Never tap into your vehicle's hydraulic system as it would lower its braking effectiveness.
- Never tow a trailer without using a safety chain securely attached to both the trailer and the vehicle. If damage occurs to the coupling unit or hitch ball, there is danger of the trailer wandering over into another lane.

### TIRES

- Ensure that your vehicle's tires are properly inflated. See page 274 in Section 7–2 and page 299 in Section 8 for instructions.
- The trailer tires should be inflated to the pressure recommended by the trailer manufacturer in respect to the total trailer weight.

### TRAILER LIGHTS

• Trailer lights must comply with federal, state/provincial and local regulations. See your local recreational vehicle dealer or rental agency for the correct type of wiring and relays for your trailer. Check for correct operation of the turn signals and stop lights each time you hitch up. Direct splicing may damage your vehicle's electrical system and cause a malfunction of your lights.

### **BREAK-IN SCHEDULE**

 Toyota recommends that you do not tow a trailer with a new vehicle or a vehicle with any new power train component (engine, transmission, differential, wheel bearing, etc.) for the first 800 km (500 miles) of driving.

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### MAINTENANCE

- If you tow a trailer, your vehicle will require more frequent maintenance due to the additional load. For this information, please refer to the scheduled maintenance information in the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".
- Retighten all fixing bolts of the towing ball and bracket after approximately 1000 km (600 miles) of trailer driving.

### **PRE-TOWING SAFETY CHECK**

- Check that your vehicle remains level when a loaded or unloaded trailer is hitched. Do not drive if the vehicle has an abnormal nose-up or nose-down condition, and check for improper tongue load, overload, worn suspension or other possible causes.
- Make sure the trailer cargo is securely loaded so that it can not shift.
- Check that your rear view mirrors conform to any applicable federal, state/ provincial or local regulations. If not, install the rear view mirrors required for towing purpose.

### TRAILER TOWING TIPS

When towing a trailer, your vehicle will handle differently than when not towing. The three main causes of vehicletrailer accidents are driver error, excessive speed and improper trailer loading. Keep these in mind when towing:

- Before starting out, check operation of the lights and all vehicle-trailer connections. After driving a short distance, stop and recheck the lights and connections. Before actually towing a trailer, practice turning, stopping and backing with a trailer in an area away from traffic until you learn the feel.
- Backing with a trailer is difficult and requires practice. Grip the bottom of the steering wheel and move your hand to the left to move the trailer to the left. Move your hand to the right to move the trailer to the right. (This procedure is generally opposite to that when backing without a trailer.) Also, just turn the steering wheel a little at a time, avoiding sharp or prolonged turning. Have someone guide you when backing to reduce the risk of an accident.

- Because stopping distance may be increased, vehicle-to-vehicle distance should be increased when towing a trailer. For each 16 km/h (10 mph) of speed, allow at least one vehicle and trailer length between you and the vehicle ahead. Avoid sudden braking as you may skid, resulting in jackknifing and loss of control. This is especially true on wet or slippery surfaces.
- Avoid jerky starts or sudden acceleration. If your vehicle has a manual transmission, prevent excessive clutch slippage by keeping engine rpm low and not racing the engine. Always start out in first gear.
- Avoid jerky steering and sharp turns. The trailer could hit your vehicle in a tight turn. Slow down before making a turn to avoid the necessity of sudden braking.
- Remember that when making a turn, the trailer wheels will be closer than the vehicle wheels to the inside of the turn. Therefore, compensate for this by making a larger than normal turning radius with your vehicle.

- Crosswinds and rough roads will adversely affect handling of your vehicle and trailer, causing sway. Pay attention to the rear from time to time to prepare yourself for being passed by large trucks or buses, which may cause your vehicle and trailer to sway. If swaying happens, firmly grip the steering wheel and reduce speed immediately but gradually. Never increase speed. Steer straight ahead. If you make no extreme correction with the steering or brakes, the vehicle and trailer will stabilize.
- Be careful when passing other vehicles. Passing requires considerable distance. After passing a vehicle, do not forget the length of your trailer and be sure you have plenty of room before changing lanes.
- In order to maintain engine braking efficiency, do not use fifth gear (manual) or do not put the transmission in "D" (automatic).

- Because of the added load of the trailer, your vehicle's engine may overheat on hot days (at temperatures over 30°C [85°F]) when going up a long or steep grade with a trailer. If the engine coolant temperature gauge indicates overheating, immediately turn off the air conditioning (if in use), pull off the road and stop in a safe spot. Refer to "If your vehicle overheats" on page 227 in Section 4
- Always place wheel blocks under both the vehicle and trailer wheels when parking. Apply the parking brake firmly. Put the transmission in "P" (automatic) or in first or reverse (manual). Avoid parking on a slope with a trailer, but if it cannot be avoided, do so only after performing the following:
- 1. Apply the brakes and hold.
- 2. Have someone place wheel blocks under both the vehicle and trailer wheels.
- 3. When the wheel blocks are in place, release your brakes slowly until the blocks absorb the load.
- 4. Apply the parking brake firmly.
- 5. Shift into first or reverse (manual) or "P" (automatic) and turn off the engine.

When restarting out after parking on a slope:

- With the transmission in "P" position (automatic) or the clutch pedal depressed (manual), start the engine. (With an automatic transmission, be sure to keep the brake pedal depressed.)
- 2. Shift into gear.
- Release the parking brake (also foot brake on automatic transmission vehicles) and slowly pull or back away from the wheel blocks. Stop and apply your brakes.
- 4. Have someone retrieve the blocks.

### 

- Do not exceed 72 km/h (45 mph) or the posted towing speed limit, whichever is lower. Because instability (swaying) of a towing vehicletrailer combination usually increases as the speed increases, exceeding 72 km/h (45 mph) may cause loss of control.
- Slow down and downshift before descending steep or long downhill grades. Do not make sudden downshifts.
- Avoid holding the brake pedal down too long or too frequently. This could cause the brakes to overheat and result in reduced braking efficiency.

# How to save fuel and make your vehicle last longer

Improving fuel economy is easy-just take it easy. It will help make your vehicle last longer, too. Here are some specific tips on how to save money on both fuel and repairs:

- Keep your tires inflated at the correct pressure. Underinflation causes tire wear and wastes fuel. See 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.
- Put the selector lever into the "D" when engine braking is not required.

Driving with the selector lever in "3" will reduce the fuel economy (For details, see "Automatic transmission" on page 125 in Section 1-7.)

 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 needless 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. scheduled maintenance (For information, please refer to the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".)

#### 

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. 05 11.10

# SECTION 4

## IN CASE OF AN EMERGENCY

### In case of an emergency

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#### If your vehicle will not start— (a) Simple checks

Before making these checks, make sure you have followed the correct starting procedure given in "How to start the engine" in Section 3 and that you have sufficient fuel. If your vehicle is equipped with the engine immobilizer system, also check whether the other keys will start the engine. If they work, your key may be broken. Have the key checked at your Toyota dealer. If none of your keys work, there may be a malfunction in the immobilizer system. Call your Toyota dealer. (See "Keys (with engine immobilizer system)" on page 11 in Section 1–2.)

## If the engine does not turn over or turns over too slowly—

- 1. Check that the battery terminals are tight and clean.
- 2. If the battery terminals are connected correctly, switch on the interior light.
- 3. If the light does not come on, is dim or goes out when the starter is cranked, the battery is discharged. You may try jump starting. See "(c) Jump starting" for further instructions.

If the light comes on and is normal, but the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop.

#### NOTICE

Do not pull- or push-start the vehicle. It may damage the vehicle or cause a collision when the engine starts. Also the three-way catalytic converter may overheat and become a fire hazard.

## If the engine turns over at its normal speed but will not start—

- 1. Turn the ignition key to "ACC" or "LOCK" and try starting the engine again.
- If the engine will not start, the engine may be flooded because of repeated cranking. See "(b) Starting a flooded engine" for further instructions.
- 3. If the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop.

#### (b) Starting a flooded engine

If the engine will not start, your engine may be flooded because of repeated cranking.

If this happens, turn the ignition key to "START" with the accelerator pedal fully depressed, and hold the key at this position for about 30 seconds. Then the cranking hold function stops cranking automatically, and you can try starting the engine with your foot off the accelerator pedal.

If the engine does not start, wait a few minutes and try again.

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

#### (c) Jump starting

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

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

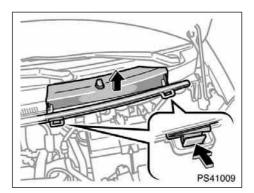
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- Batteries contain sulfuric acid which is poisonous and corrosive. Wear protective safety glasses when jump starting, and avoid spilling acid on your skin, clothing, or vehicle.
- If you should accidentally get acid on yourself or in your eyes, remove any contaminated clothing and flush the affected area with water immediately. Then get immediate medical attention. If possible, continue to apply water with a sponge or cloth while en route to the medical office.

 The gas normally produced by a battery will explode if a flame or spark is brought near. Use only standardized jumper cables and do not smoke or light a match while jump starting.

#### NOTICE

The battery used for boosting must be 12 V. Do not jump start unless you are sure that the booster battery is correct.



#### **BEFORE JUMP STARTING**

Remove the cover as shown in the illustration.

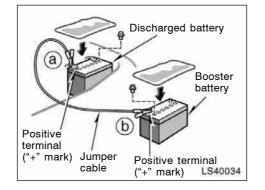
#### JUMP STARTING PROCEDURE

 If the booster battery is installed in another vehicle, make sure the vehicles are not touching. Turn off all unnecessary lights and accessories.

When boosting, use the battery of matching or higher quality. Any other battery may be difficult to jump start with.

If jump starting is difficult, charge the battery for several minutes.

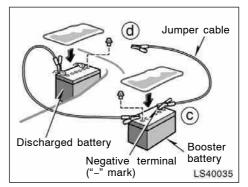
- If required, remove all the vent plugs from the booster and discharged batteries. Lay a cloth over the open vents on the batteries. (This helps reduce the explosion hazard, personal injuries and burns.)
- 3. If the engine in the vehicle with the booster battery is not running, start it and let it run 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.

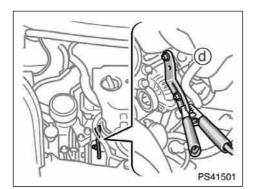
b. Connect the clamp at the other end of the positive (red) jumper cable to the positive (+) terminal on the booster battery.



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.

### 

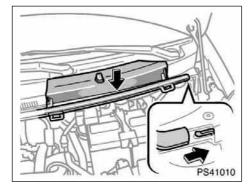
When making the connections, to avoid serious injury, do not lean over the battery or accidentally let the jumper cables or clamps touch anything except the correct battery terminals or the ground.

- 5. Charge the discharged battery with the jumper cables connected for approximately 5 minutes. At this time, run the engine in the vehicle with the booster battery at about 2000 rpm with the accelerator pedal lightly depressed.
- 6. Start your engine in the normal way. After starting, run it at about 2000 rpm for several minutes with the accelerator pedal lightly depressed.
- 7. Carefully disconnect the cables in the exact reverse order: the negative cable and then the positive cable.
- 8. Carefully dispose of the battery cover cloths—they may now contain sulfuric acid.
- 9. If removed, replace all the battery vent plugs.

If the cause of your battery discharging is not apparent (for example, lights left on), you should have it checked at your Toyota dealer.

If the first start attempt is not successful...

Check that the clamp on the jumper cables are tight. Recharge the discharged battery with the jumper cables connected for several minutes and restart your engine in the normal way. If another attempt is not successful, the battery may be depleted. Have it checked at your Toyota dealer.



#### AFTER JUMP STARTING

Install the cover as shown in the illustration.

#### NOTICE

After installed the cover, make sure the cover is securely in its original position. If it is not secured, it may be damaged to your vehicle.

# If your engine stalls while driving

If your engine stalls while driving...

- 1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
- 2. Turn on your emergency flashers.
- 3. Turn the ignition key to "ACC" or "LOCK", and try starting the engine again.

If the engine will not start, see "If your vehicle will not start" 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 engine speed

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

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

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 "P" (automatic) or neutral (manual) 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.

- 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. For the coolant type see "Coolant type selection" on page 272 in Section 7-2.

### 

Do not attempt to remove the radiator cap when the engine and radiator are hot. Serious injury could result from scalding hot fluid and steam blown out under pressure. 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.

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

### CAUTION

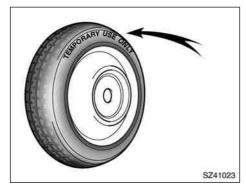
When jacking, be sure to observe the following to reduce the possibility of personal injury:

- Follow jacking instructions.
- Do not put any part of your body under the vehicle supported by the jack. Otherwise, personal injury may occur.
- Do not start or run the engine while your vehicle is supported by the jack.
- Stop the vehicle on a level firm ground, firmly set the parking brake and put the transmission in "P" (automatic) or reverse (manual). 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 wording "TEM-PORARY USE ONLY" molded into the sidewall of the tire.

The compact spare tire saves space in your luggage compartment, and its lighter weight helps to improve fuel economy and permits easier installation in case of a flat tire. The compact spare tire 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 information in Section 7–2 for details on the tread wear indicators and other service information.

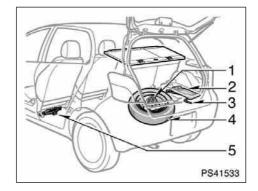
### 

- The compact spare tire was designed especially for your Toyota. Do not use it on any other vehicle.
- Do not use more than one compact spare tire at the same time.
- The pressure for the compact spare tire must be 420 kpa (4.2 kgf/cm<sup>2</sup> or bar, 60 psi).
- Do not exceed 80 km/h (50 mph) when driving with the compact spare tire.
- Replace the compact spare tire with the standard tire as soon as possible.
- Avoid sudden acceleration, sudden deceleration and sharp turns with the compact spare tire.

#### NOTICE

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

# —Required tools and spare tire



# 1. Get the required tools and spare tire.

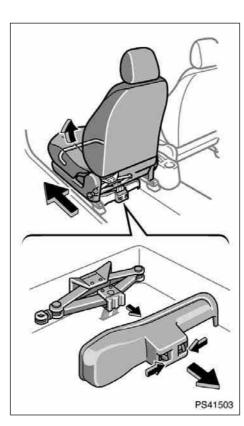
- 1. Tie-down belt
- 2. Tool bag
- 3. Jack handle
- 4. Spare tire
- 5. Jack

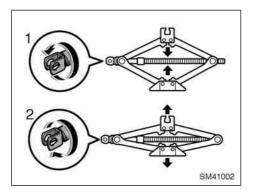
Split seat only—Before removing the deck board, slide the rear seat fully forward.

To remove the deck board, see "Luggage storage box" on page 175 in Section 1-10.

You will find a wheel nut wrench 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.

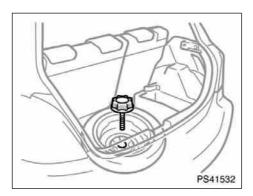




To remove the jack, move the driver seat to the front-most position and remove the cover.

To remove: Turn the joint in direction 1 by hand until the jack is free.

To store: Turn the joint in direction 2 by hand until the jack is firmly secured to prevent it flying forward during a collision or sudden braking.

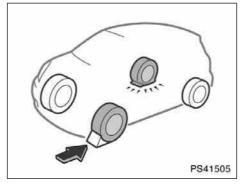


To remove the spare tire, loosen the bolt and remove it.

Then take the spare tire out of the vehicle.

When storing the spare tire, put it in place with the inner 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.

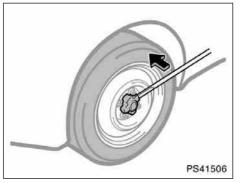
The compact tire storage area is designed only for a compact spare tire. Standard size tire cannot be stored in this storage area. -Blocking the wheel



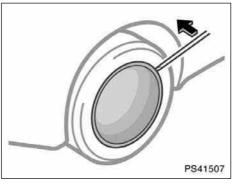
2. Block the wheel diagonally opposite the flat tire to keep the vehicle from rolling when it is jacked up.

When blocking the wheel, place a wheel block in front of one of the front wheels or behind one of the rear wheels.

-Removing wheel ornament (on some models)



Steel wheels (type A)



Steel wheels (type B)

2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)

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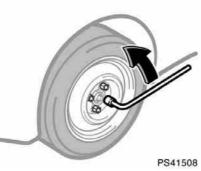
#### -Loosening wheel nuts

#### 3. Remove the wheel ornament.

Pry off the wheel ornament, using the beveled end of the wheel nut wrench as shown.

### 

Do not try to pull off the ornament by hand. Take due care in handling the ornament to avoid unexpected personal injury.



# 4. Loosen all the wheel nuts.

Always loosen the wheel nuts before raising the vehicle.

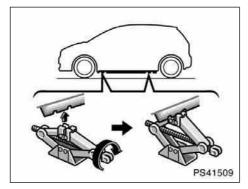
The nuts turn counterclockwise to loosen. To get maximum leverage, fit the wrench to the nut so that the handle is on the right side, as shown above. Grasp the wrench near the end of the handle and pull up on the handle. Be careful that the wrench does not slip off the nut.

Do not remove the nuts yet—just unscrew them about one-half turn.

### 

Never use oil or grease on the bolts or nuts. The nuts may loosen and the wheels may fall off, which could cause a serious accident.

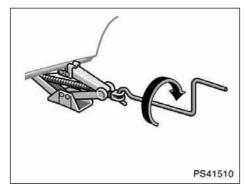
#### —Positioning the jack



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

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

-Raising your vehicle



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

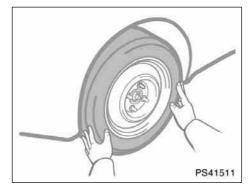
Remember you will need more ground clearance when putting on the spare tire than when removing the flat tire.

To raise the vehicle, insert the jack handle 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.

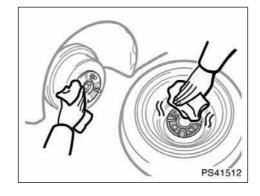
#### -Changing wheels



# 7. Remove the wheel nuts and change tires.

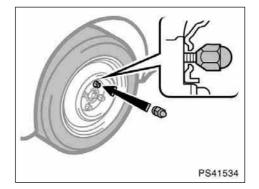
Lift the flat tire straight off and put it aside.

Roll the spare wheel into position and align the holes in the wheel with the bolts. Then lift up the wheel and get at least the top bolt started through its hole. Wiggle the tire and press it back over the other bolts.



Before putting on wheels, remove any corrosion on the mounting surfaces with a wire brush or such. Installation of wheels without good metal-to-metal contact at the mounting surface can cause wheel nuts to loosen and eventually cause a wheel to come off while driving.

#### -Reinstalling wheel nuts



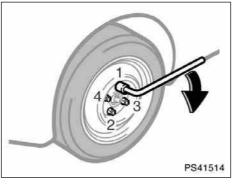
#### 8. Reinstall all the wheel nuts finger tight.

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

### 

Never use oil or grease on the bolts or nuts. Doing so may lead to overtightening the nuts and damaging the bolts. The nuts may loosen and the wheels may fall off, which could cause a serious accident. If there is oil or grease on any bolt or nut, clean it.

#### -Lowering your vehicle



# 9. Lower the vehicle completely and tighten the wheel nuts.

Turn the jack handle counterclockwise to lower the vehicle.

Use only the wheel nut wrench to tighten the nuts. Do not use other tools or any additional leverage other than your hands, such as a hammer, pipe or your foot. Make sure the wrench is securely engaged over the nut.

Tighten each nut a little at a time in the order shown. Repeat the process until all the nuts are tight.

### 

- When lowering the vehicle, make sure all portions of your body and all other persons around will not be injured as the vehicle is lowered to the ground.
- Have the wheel nuts tightened with torque wrench to 103 N·m (10.5 kgf·m, 76 ft·lbf), as soon as possible after changing wheels. Otherwise, the nuts may loosen and the wheels may fall off, which could cause a serious accident.
- Do not attach a heavily damaged plastic wheel ornament. It may fly off the wheel and cause accidents while the vehicle is moving.

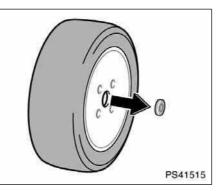
#### -Stowing flat tire

10.Restow all the tools and jack securely. Then secure the flat tire with the tire tie-down belt in the luggage compartment as follows.

Before stowing flat tire, remove the luggage cover. (See "Luggage cover" on page 175 in Section 1–10.)

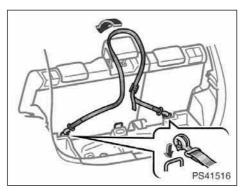
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Before driving, make sure all the tools, jack and flat tire are securely in place in their storage location to reduce the possibility of personal injury during a collision or sudden braking.

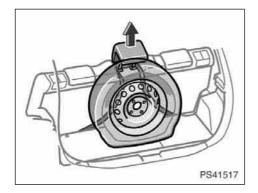


1. Aluminum wheels—Before stowing the flat tire, remove the center wheel ornament by pushing from the reverse side.

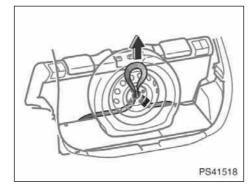
Be careful not to lose the wheel ornament.



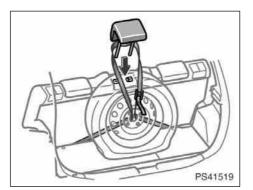
- 2. Hook each belt end to the corresponding anchor brackets. Then, put the center portion of the belt onto the rear center head restraint.
- Return the deck board to the original position and then lock it. (See "Luggage storage box" on page 175 in Section 1–10.)



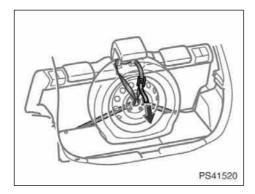
4. Lay the flat tire on the luggage floor so that the outer side of the tire wheel faces toward the rear of the vehicle. Detach the rear center head restraint from the seat and release the belt.



5. Pass the belt through the center hole of the flat tire wheel.



6. Put the center portion of the belt onto the rear center head restraint position and then return the rear center head restraint.



7. Hold the buckle and pull the belt to secure the tire.

After stowing the flat tire, check that the tire and belt are secured.

#### —After changing wheels

#### 11. Check the air pressure of the replaced tire.

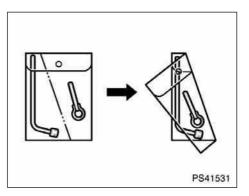
Adjust the air pressure to the specification designated on page 299 in Section 8. If the pressure is lower, drive slowly to the nearest service station and fill to the correct pressure.

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.

As soon after changing wheels as possible, tighten the wheel nuts to the torque specified on page 299 in Section 8 with a torque wrench. And have a technician repair the flat tire.

### 

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.



Position the tools as shown in the illustration. Fold the tool bag over and then restow it.

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#### If your vehicle becomes stuck

If your vehicle becomes stuck in snow, mud, sand, etc., then you may attempt to rock the vehicle free by moving it forward and backward.

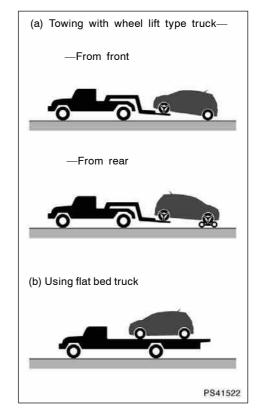


Do not attempt to rock the vehicle free by moving it forward and backward if people or objects are any where near the vehicle. During the rocking operation the vehicle may suddenly move forward or backward as it becomes unstuck, causing injury or damage to nearby people or objects. NOTICE

If you rock your vehicle, observe the following precautions to prevent damage to the transmission and other parts.

- Do not depress the accelerator pedal while shifting the selector lever or before the transmission is completely shifted to forward or reverse gear.
- Do not race the engine and avoid spinning the wheels.
- If your vehicle remains stuck after rocking the vehicle several times, consider other ways such as towing.

# If your vehicle needs to be towed—



If towing is necessary, we recommend you to have it done by your Toyota dealer or a commercial tow truck service. In consultation with them, have your vehicle towed using either (a) or (b).

Only when you cannot receive a towing service from a Toyota dealer or commercial tow truck service, tow your vehicle carefully in accordance with the instructions given in "—Emergency towing" in this Section.

Proper equipment will help ensure that your vehicle is not damaged while being towed. Commercial operators are generally aware of the state/provincial and local laws pertaining to towing.

Your vehicle can be damaged if it is towed incorrectly. Although most operators know the correct procedure, it is possible to make a mistake. To avoid damage to your vehicle, make sure the following few 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—Release the parking brake.

#### NOTICE

When lifting wheels, take care to ensure adequate ground clearance for towing at the opposite end of the raised vehicle. Otherwise, the bumper and/or underbody of the towed vehicle will be damaged during towing.

#### From rear—

Manual transmission:

We recommend using a towing dolly under the front wheels. If you do not use a towing dolly, place the ignition key in the "ACC" position and put the transmission in neutral.

#### NOTICE

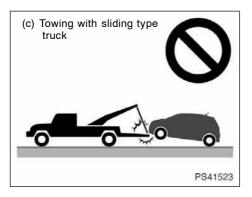
Do not tow with the key removed or in the "LOCK" position when towing from the rear without a towing dolly. The steering lock mechanism is not strong enough to hold the front wheels straight. • Automatic transmission:

Use a towing dolly under the front wheels.

#### NOTICE

Never tow a vehicle with an automatic transmission from the rear with the front wheels on the ground, as this may cause serious damage to the transmission.

#### (b) Using flat bed truck

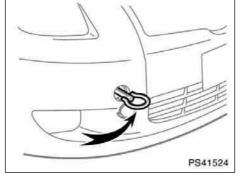


(c) Towing with sling type truck

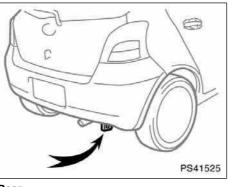
#### NOTICE

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

#### —Emergency towing



Front



Rear

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 to the right emergency towing eyelet under the rear of the vehicle. Use extreme caution when towing vehicles.

Vehicles with an automatic transmission, use only the front towing eyelet when towing your vehicle.

To install the front towing eyelet, see "—Installing front towing eyelet" on page 243 in this Section.

#### NOTICE

- Only use specified towing eyelet; otherwise your vehicle may be damaged.
- Vehicles with an automatic transmission, never tow a vehicle from the rear with four wheels on the ground. This may cause serious damage to the transmission.

A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speeds. Also, the wheels, axles, drive train, steering and brakes must all be in good condition.

#### 

Use extreme caution when towing vehicles. 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.

#### NOTICE

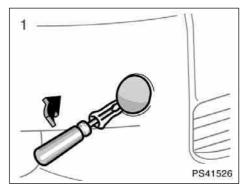
Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing eyelet provided.

Do not use the left rear eyelet. It is not designed for towing. Before towing, release the parking brake and put the transmission in neutral (manual) or "N" (automatic). The key must be in "ACC" (engine off) or "ON" (engine running).

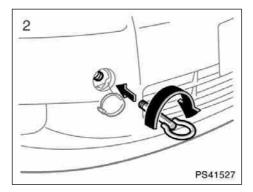
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If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.

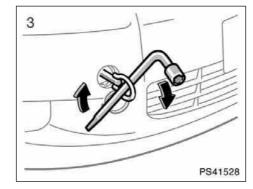
#### —Installing front towing eyelet



 Remove the front towing eyelet cover on the front bumper, using a flathead screwdriver which is wrapped with a cloth.



2. Use the towing eyelet in the tool bag. Secure the front towing eyelet to the hole on the front bumper by turning clockwise. (For the tool bag storage location, see "—Required tools and spare tire" on page 230.)

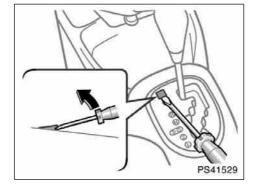


3. Tighten the front towing eyelet securely by a wheel nut wrench.

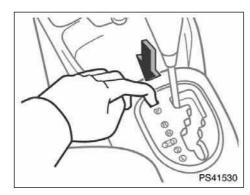
### 

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

# If you cannot shift automatic transmission selector lever



- If you cannot shift the selector lever out of "P" position to other positions even though the brake pedal is depressed, use the shift lock override button as follows:
- 1. Turn the ignition key to "LOCK" position. Make sure the parking brake is applied.
- 2. Pry up the cover with a flathead screwdriver or equivalent.



- Insert your finger into the hole to push down the shift lock override button. You can shift out of "P" position only while pushing the button.
- 4. Shift into "N" position.
- 5. Insert the cover.
- 6. Start the engine. For your safety, keep the brake pedal depressed.

Be sure to have the system checked by your Toyota dealer as soon as possible.

#### If you lose your keys

You can purchase a new key at your Toyota dealer if you can give them the key number. If your vehicle is equipped with the engine immobilizer system, the dealer will also need your master key.

Vehicles with engine immobilizer system—Even if you lose only one key, contact your Toyota dealer to make a new key. If you lose all your master keys, you cannot make new keys; the whole engine immobilizer system must be replaced.

See the suggestion given in "Keys" on page 10 in Section 1–2.

You can use the wireless remote control system with the new key. Contact your Toyota dealer for detailed information.

If your keys are locked in the vehicle and you cannot get a duplicate, many Toyota dealers can still open the door for you, using their special tools. If you must break a window to get in, we suggest breaking the smallest side window because it is the least expensive to replace. Be extremely cautious to avoid cuts from the glass. 05 11.10

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# SECTION 5

# CORROSION PREVENTION AND APPEARANCE CARE

### Corrosion prevention and appearance care

Protecting your Toyota from corrosion	248
Washing and waxing your Toyota	249
Cleaning the interior	251

# Protecting your Toyota from corrosion

Toyota, through its diligent research, design and use of the most advanced technology available, helps prevent corrosion and provides you with the finest quality vehicle construction. Now, it is up to you. Proper care of your Toyota can help ensure long-term corrosion prevention.

# The most common causes of corrosion to your vehicle are:

- The accumulation of road salt, dirt and moisture in hard-to-reach areas under the vehicle.
- Chipping of paint, or undercoating caused by minor accidents or by stones and gravel.

Care is especially important if you live in particular areas or operate your vehicle under certain environmental conditions:

- Road salt or dust control chemicals will accelerate corrosion, as will the presence of salt in the air near the 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 do not dry quickly due to lack of proper ventilation.

The above signifies the necessity to keep your vehicle, particularly the underside, as clean as possible and to repair any damage to paint or protective coatings as soon as possible.

To help prevent corrosion on your Toyota, follow these guidelines:

Wash your vehicle frequently. It is, of course, necessary to keep your vehicle clean by regular washing, but to prevent corrosion, the following points should be observed:

 If you drive on salted roads in the winter or if you live near the ocean, you should hose off the undercarriage at least once a month to minimize corrosion.

- High pressure water or steam is effective for cleaning the vehicle's underside and wheel housings. Pay particular attention to these areas as it is difficult to see all the mud and dirt. It will do more harm than good to simply wet the mud and debris without removing. The lower edge of doors, rocker panels and frame members have drain holes which should not be allowed to clog with dirt as trapped water in these areas can cause corrosion.
- Wash the underside of the vehicle thoroughly when winter is over.

See "Washing and waxing your Toyota" for more tips.

Check the condition of your vehicle's paint and trim. If you find any chips or scratches in the paint, touch them up immediately to prevent corrosion from starting. If the chips or scratches have gone through the bare metal, have a qualified body shop make the repair.

**Check the interior of your vehicle.** Water and dirt can accumulate under the floor mats and could cause corrosion. Occasionally check under the mats to make sure the area is dry. Be particularly careful when transporting chemicals, cleansers, fertilizers, salt, etc.; these should be transported in proper containers. If a spill or leak should occur, immediately clean and dry the area.

Use mud shields on your wheels. If you drive on salted or gravel roads, mud shields help protect your vehicle. Full-size shields, which come as near to the ground as possible, are the best. We recommend that the fittings and the area where the shields are installed be treated to resist corrosion. Your Toyota dealer will be happy to assist in supplying and installing the shields if they are recommended for your area.

Keep your vehicle in a well ventilated garage or a roofed place. Do not park your vehicle in a damp, poorly ventilated garage. If you wash your vehicle in the garage, or if you drive it covered with water or snow, your garage may be so damp as to 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 exposed to coal tar, tree sap, bird droppings and carcass of an insect
- When driving in areas where there is a lot of smoke, soot, dust, iron dust or chemical substances
- When the vehicle becomes remarkably dirty with dust and mud

#### Hand-washing your Toyota

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

#### 

- When cleaning under floor or chassis, be careful not to injure your hands.
- Exhaust gases cause the exhaust pipe to become quite hot. When washing the vehicle, be careful not to touch the pipe until it has cooled sufficiently, as touching a hot exhaust pipe can cause burns.

#### NOTICE

When the front wiper arms need to be lifted away from the windshield to wash the vehicle, raise the arm on the driver side first. Conversely, when returning the wipers to their original positions, fold down the arm on the front passenger side first. Failure to perform the operations in the correct order results in damage. 1. Rinse off loose dirt with a hose. Re-

- move any mud or road salt from the underside of the vehicle or the wheel wells.
- 2. Wash with a mild car-wash soap, mixed according to the manufacturer's instructions. Use a soft cotton mitt and keep it wet by dipping it frequently into the wash water. Do not rub hard—let the soap and water remove the dirt.

Fuel filler door: Do not apply water (highpressure car wash, for example) at or near the fuel tank inlet with the fuel filler door opened. If the water enters the air vent, you may experience trouble with refueling or rough engine idling.

Plastic wheel ornaments: The plastic wheel ornaments are damaged easily by organic substances. If any organic substance splash an ornament, be sure to wash them off with water and check if the ornament is damaged.

Aluminum wheels: Use only a mild soap or neutral detergent.

Plastic bumpers: Wash carefully. Do not scrub with abrasive cleaners. The bumper faces are soft.

Exterior lights: Wash carefully. Do not use organic substances or scrub them with a hard brush. This may damage the surfaces of the lights.

Road tar: Remove with turpentine or cleaners that are marked safe for painted surfaces.

- 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.

#### NOTICE

Do not use organic substances (gasoline, kerosene, benzine or strong solvents), which may be toxic or cause damage.

Do not scrub any part of the vehicle with a hard brush, which may cause damage.

#### Automatic car wash

Your vehicle may be washed in an automatic car wash, but remember that the paint can be scratched by some types of brushes, unfiltered washing water, or the washing process itself. Scratching reduces paint durability and gloss, especially on darker colors. The manager of the car wash should be able to advise you whether the process is safe for the paint on your vehicle.

#### NOTICE

To prevent damage to the antenna, make sure to remove it before driving your Toyota through an automatic car wash.

#### Waxing your Toyota

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

Apply wax once a month or if the vehicle surface does not repel water well.

- Always wash and dry the vehicle before you begin waxing, even if you are using a combined cleaner and wax.
- 2. Use a good quality polish and wax. If the finish has become extremely weathered, use a car-cleaning polish, followed by a separate wax. Carefully follow the manufacturer's instructions and precautions. Be sure to polish and wax the chrome trim as well as the paint.

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

#### NOTICE

If a nozzle becomes blocked, do not try to clear it with a pin or other object. The nozzle will be damaged. Exterior lights: Do not apply wax on the surfaces of the lights. Wax may cause damage to the lenses. If you accidentally put wax on the light surfaces, wipe or wash it off.

3. Wax the vehicle again when water does not bead but remains on the surface in large patches.

#### NOTICE

Always remove the plastic bumpers if your vehicle is re-painted and placed in a high heat paint waxing booth. High temperatures could damage the bumpers.

#### Cleaning the interior

#### 

- Vehicles with side airbags and curtain shield airbags:
- Be careful not to splash water or spill liquid on the floor. This may prevent the side airbags and curtain shield airbags from activating correctly, resulting in serious injury.
- Do not wash the vehicle floor with water, or allow water to get onto the floor when cleaning the vehicle interior or exterior. Water may get into audio components or other electrical components above or under the floor carpet (or mat) and cause a malfunction; and it may cause body corrosion.

#### Vinyl interior

# The vinyl upholstery may be easily cleaned with a mild soap or detergent and water.

First vacuum over the upholstery to remove loose dirt. Then, using a sponge or soft cloth, apply the soap solution to the vinyl. After allowing it to soak in for a few minutes to loosen the dirt, remove the dirt and wipe off the soap with a clean damp cloth. If all the dirt do not come off, repeat the procedure. Commercial 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 windows, be careful not to scratch or damage the heater wires or connectors.

Air conditioning control panel, car audio, instrument panel, console panel, and switches

Use a soft damp cloth for cleaning.

Soak a clean soft cloth in water or lukewarm water then lightly wipe off dirt.

## NOTICE

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

# Leather Interior

# The leather upholstery may be cleaned with neutral detergent for wool.

Remove dirt using a soft cloth dampened with 5% solution of neutral detergent for wool. Then thoroughly wipe off all traces of detergent with a clean damp cloth.

After cleaning or whenever any part of the leather gets wet, dry with a soft clean cloth. Allow the leather to dry in a ventilated shaded area.

# NOTICE

- If a stain should fail to come out with a neutral detergent, apply a cleaner that does not contain an organic solvent.
- Never use organic substances such as benzine, alcohol or gasoline, or alkaline or acid solutions for cleaning the leather as these could cause discoloring.
- Use of a nylon brush or synthetic fiber cloth, etc. may scratch the fine grained surface of the leather.

- Mildew may develop on soiled leather upholstery. Be especially careful to avoid oil spots. Try to keep your upholstery always clean.
- Long exposure to direct sunlight may cause the leather surface to harden and shrink. Keep your vehicle in a shaded area, especially in the summer.
- The interior of your vehicle is apt to heat up on hot summer days, so avoid placing on the upholstery items made of vinyl or plastic or containing wax as these tend to stick to leather when warm.
- Improper cleaning of the leather upholstery could result in discoloration or staining.

If you have any questions about the cleaning of your Toyota, your local Toyota dealer will be pleased to answer them.

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# SECTION 6

# **VEHICLE MAINTENANCE AND CARE**

# Vehicle maintenance and care

Maintenance requirements	256
General maintenance	257
Does your vehicle need repairing?	259
Emissions Inspection and Maintenance (I/M) programs	260

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 recommended that any replacement parts used for maintenance or for the repair of the emission control system be Toyota supplied.

The owner may elect to use non-Toyota supplied parts for replacement purposes without invalidating the emission control system warranty. However, use of replacement parts which are not of equivalent quality may impair the effectiveness of the emission control systems.

You may also elect to have maintenance, replacement, or repair of the emission control devices and system performed by any automotive repair establishment or individual without invalidating this warranty. See "Owner's Warranty Information Booklet" or "Owner's Manual Supplement" for complete warranty information.

#### Where to go for service?

Toyota technicians are well-trained specialists and are kept up to date with the latest service information through technical bulletins, service tips, and in-dealership training programs. They learn to work on Toyotas before they work on your vehicle, rather than while they are working on it.

You can be confident that your Toyota dealer's service department performs the best job to meet the maintenance requirements on your vehicle—reliably and economically.

Your copy of the repair order is proof that all required maintenance has been performed for warranty coverage. If any problems should arise with your vehicle while under warranty, your Toyota dealer will promptly take care of it. Again, be sure to keep a copy of the repair order for any service performed on your Toyota.

#### What about do-it-yourself maintenance?

Many of the maintenance items are easy to do yourself if you have a little mechanical ability and a few basic automotive tools. Simple instructions for how to perform them are presented in Section 7.

If you are a skilled do-it-yourself mechanic, the Toyota service manuals are recommended. Please be aware that do-it-yourself maintenance can affect your warranty coverage. See "Owner's Warranty Information Booklet" or "Owner's Manual Supplement" for the details.

# **General maintenance**

Listed below are the general maintenance items that should be performed as frequently as specified. In addition to checking the items listed, if you notice any unusual noise, smell or vibration, you should investigate the cause or take your vehicle to your Toyota dealer or a qualified service shop immediately. It is recommended that any problem you notice be brought to the attention of your dealer or the qualified service shop for their advice.

# 

Make these checks only with adequate ventilation if you run the engine.

## IN THE ENGINE COMPARTMENT

Items listed below should be checked from time to time, e.g. each time when refueling.

#### Washer fluid

Make sure there is sufficient fluid in the tank. See 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 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 Section 7-2 for additional information.

### **Battery condition**

Check the battery condition by the indicator color. See page 284 in Section 7–3 for additional information.

## Brake fluid level

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

# Engine oil level

Check the level on the dipstick with the engine turned off and the vehicle parked on a level ground. See 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 181 in Section 2.)

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# INSIDE THE VEHICLE

Items listed below should be checked regularly, e.g. while performing periodic services, cleaning the vehicle, etc.

## Lights

Make sure the headlights, stop lights, tail lights, turn signal lights, and other lights are all working. Check headlight aim.

# Service reminder indicators and warning buzzers

Check that all service reminder indicators and warning buzzers function properly.

#### Steering wheel

Be alert for changes in steering condition, such as hard steering or strange noise.

### Seats

Check that all front seat controls such as seat adjusters, seatback recliner, etc. operate smoothly and that all latches lock securely in any position. Check that the head restraint move up and down smoothly and that the locks hold securely in any latched position. For folding-down rear seatbacks, check that the latches lock securely.

### Seat belts

Check that the seat belt system such as buckles, retractors and anchors operate properly and smoothly. Make sure the belt webbing is not cut, frayed, worn or damaged.

## Accelerator pedal

Check the pedal for smooth operation and uneven pedal effort or catching.

### 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

In a safe place, check that the brakes do not pull to one side when applied.

#### Parking brake

Check that the lever has the proper travel and that, on a safe incline, your vehicle is held securely with only the parking brake applied.

## Automatic transmission "Park" mechanism

Check the lock release button of the selector lever for proper and smooth operation. On a safe incline, check that your vehicle is held securely with the selector lever in "P" position and all brakes released.

### OUTSIDE THE VEHICLE

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

### Fluid leaks

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

## Doors and engine hood

Check that all doors and back door operate smoothly and all latches lock securely. Make sure the engine hood secondary latch secures the hood from opening when the primary latch is released.

# Tire inflation pressure

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

# Tire surface and wheel nuts

Check the tires carefully for cuts, damage or excessive wear. See 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.

# Tire rotation

Rotate the tries according to the maintenance schedule. (For scheduled maintenance information, please refer to the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".) See Section 7–2 for additional information.

# Does your vehicle need repairing?

Be on the alert for changes in performance, sounds, and visual tip-offs that indicate service is needed. Some important clues are as follows:

- Engine missing, stumbling, or pinging
- Appreciable loss of power
- Strange engine noises
- A 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.

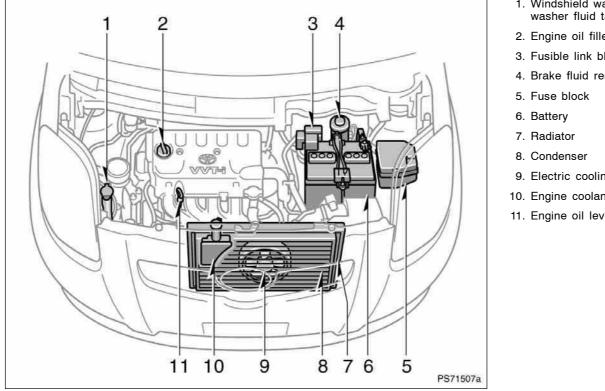
# <u>SECTION 7-1</u>

# **DO-IT-YOURSELF MAINTENANCE**

# Introduction

Engine compartment overview	262
Fuse locations	263
Do-it-yourself service precautions	264
Parts and tools	266
Positioning the jack	267

# Engine compartment overview

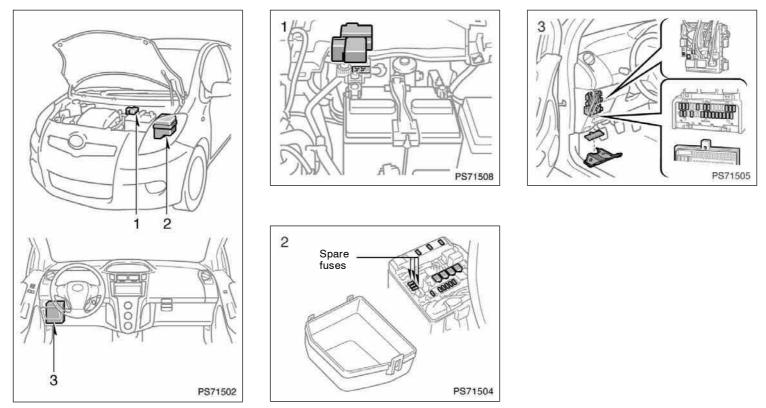


1. Windshield washer and rear window washer fluid tank

- 2. Engine oil filler cap
- 3. Fusible link block
- 4. Brake fluid reservoir

- 9. Electric cooling fan
- 10. Engine coolant reservoir
- 11. Engine oil level dipstick

# **Fuse locations**



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# 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".

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—the engine, radiator, exhaust manifold and spark plug boots, etc.—will be hot. So be careful not to touch them. Oil, fluids and spark plugs may also be hot.
- If the engine is hot, do not remove the radiator cap or loosen the drain plugs to prevent burning yourself.
- Do not leave anything that may burn easily, such as paper or rags, in the engine compartment.
- Do not smoke, cause sparks or allow open flames around fuel or the battery. Their fumes are flammable.
- Be extremely cautious when working on the battery. It contains poisonous and corrosive sulfuric acid.

 Do not get under your vehicle with just the body jack supporting it. Always use automotive jack stands or other solid supports.

- Be sure that the ignition is off if you work near the electric cooling 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.
- 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 immediately. If you still feel uncomfortable with your eyes, go to the doctor.

# NOTICE

- Remember that battery and ignition cables carry high currents or voltages. Be careful of accidentally causing a short circuit.
- ♦Add only "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology to fill the radiator. "Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water (for the U.S.A.) or 55% coolant and 45% deionized water (for Canada).
- If you spill some of the coolant, be sure to wash it off with water to prevent it from damaging the parts or paint.
- Do not allow dirt or anything else to fall through the spark plugholes.
- Use only spark plugs of the specified type. Using other types will cause engine damage, loss of performance or radio noise.

- Do not reuse iridium-tipped spark plugs by cleaning or regapping.
- Do not overfill automatic transmission sion fluid, or the transmission could be damaged.
- Do not drive with the air cleaner filter removed, or excessive engine wear could result. Also backfiring could cause a fire in the engine compartment.
- Be careful not to scratch the glass surface with the wiper frame.
- When closing the engine hood, check to see that you have not forgotten any tools, rags, etc.

# Parts and tools

Here is a list of parts and tools you will need to perform do-it-yourself maintenance. Remember all Toyota parts are designed in metric sizes, so your tools must be metric.

# CHECKING THE ENGINE OIL LEVEL

## Parts (if level is low):

 "Toyota Genuine Motor Oil" or equivalent
 See page 270 in Section 7-2 for de-

tails about engine oil selection.

### Tools:

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

# CHECKING THE ENGINE COOLANT LEVEL

# Parts (if level is low):

 "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with longlife hybrid organic acid technology.

"Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water (for the U.S.A.) or 55% coolant and 45% deionized water (for Canada).

## Tools:

• Funnel (only for adding coolant)

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# 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 BATTERY CONDITION

# Tools:

- Warm water
- Baking soda
- Grease
- Conventional wrench (for terminal clamp bolts)

### CHECKING AND REPLACING FUSES

#### Parts (if replacement is necessary):

• Fuse with same amperage rating as original

## ADDING WASHER FLUID

## Parts:

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

## Tools:

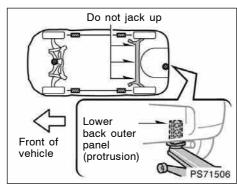
Funnel

# REPLACING LIGHT BULBS

## Parts:

- Bulb with same number and wattage rating as original (See charts in "Replacing light bulbs" on page 288 in Section 7–3.)
- Flathead screw driver

# Positioning the jack



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

Jack position .....

Pantograph jack .....

# 

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 "P" (automatic) or reverse (manual). Block the wheels on the opposite side of the jack up point if necessary.
- Make sure to set the jack properly in the jack point. Raising the vehicle with jack improperly positioned will damage the vehicle or may allow the vehicle to fall off the jack and cause personal injury.
- Never get under the vehicle when the vehicle is supported by the jack alone; use vehicle support stands.

- Do not raise the vehicle with someone in the vehicle.
- When raising the vehicle, do not place any objects on top of or underneath the jack.

# NOTICE

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

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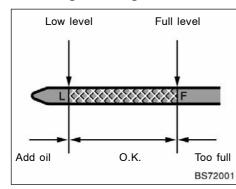
# SECTION 7-2

# DO-IT-YOURSELF MAINTENANCE

# **Engine and Chassis**

Checking the engine oil level 270
Checking the engine coolant level
Checking the radiator and condenser 273
Checking brake fluid
Checking tire inflation pressure
Checking and replacing tires 276
Rotating tires 278
Installing snow tires and chains
Replacing wheels
Aluminum wheel precautions

# Checking the engine oil level



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

- 1. To get a correct reading, the vehicle should be on level ground. After turning off the engine, wait a few minutes for the oil to drain back into the bottom of the engine.
- 2. Pull the dipstick out, hold a rag under the end and wipe it clean.
- 3. Reinsert the dipstick—Push it in as far as it will go, or the reading will not be correct.
- 4. Pull the dipstick out and look at the oil level while holding a rag under the end.

# 

Be careful not to touch the hot exhaust manifold.

# NOTICE

Be careful not to drop engine oil on the vehicle components.

If the oil level is below or only slightly above the low level, add engine oil of the same type as already in the engine.

Remove the oil filler cap and add engine oil in small quantities at a time, checking the dipstick. We recommend that you use a funnel when adding oil.

The approximate quantity of oil needed to raise the level between low and full on the dipstick is indicated as follows:

1.5 L (1.6 qt., 1.3 lmp.qt.)

For the engine oil capacity, see "Service specifications" on page 297 in Section 8.

When the level reaches within the correct range, install the filler cap hand-tight.

# NOTICE

- Be careful not to spill engine oil on the vehicle components.
- Avoid overfilling, or the engine could be damaged.
- Check the oil level on the dipstick once again after adding the oil.

# ENGINE OIL SELECTION

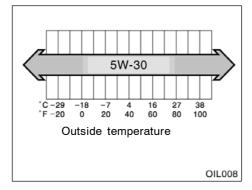
"Toyota Genuine Motor Oil" is used in your Toyota vehicle. Use Toyota approved "Toyota Genuine Motor Oil" or equivalent to satisfy the following grade and viscosity.

Oil grade:

ILSAC multigrade engine oil.

Recommended viscosity:

SAE 5W-30



SAE 5W-30 is the best choice for good fuel economy, and good starting in cold weather.

If SAE 5W–30 oil is not available, SAE 10W–30 oil may be used. However, it should be replaced with SAE 5W–30 at the next oil change.



# Oil identification mark

The ILSAC (International Lubricant Standardization and Approval Committee) Certification Mark is added to some oil containers to help you select the oil you should use.



To ensure excellent lubrication performance for your engine, "Toyota Genuine Motor Oil" is available, which has been specifically tested and approved for all Toyota engines.

Please contact your Toyota dealer for further details about "Toyota Genuine Motor Oil".

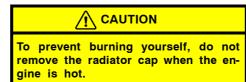
# Checking the engine coolant level

Look at the see-through coolant reservoir when the engine is cold. The coolant level is satisfactory if it is between the "FULL" and "LOW" lines on the reservoir. If the level is low, add the coolant. (For the coolant type, see "Coolant type selection" described below.)

The coolant level in the reservoir will vary with engine temperature. However, if the level is on or below the "LOW" line, add coolant. Bring the level up to the "FULL" line.

If the coolant level drops within a short time after replenishing, there may be a leak in the system. Visually check the radiator, hoses, engine coolant filler cap, radiator cap and drain cock and water pump.

If you can find no leak, have your Toyota dealer test the cap pressure and check for leaks in the cooling system.



## Coolant type selection

Use of improper coolants may damage your engine cooling system.

Only use "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology. (Coolant with long-life hybrid organic acid technology is a combination of low phosphates and organic acids.)

For the U.S.A.—"Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water. This coolant provides protection down to about  $-35^{\circ}C$  ( $-31^{\circ}F$ ).

For Canada—"Toyota Super Long Life Coolant" is a mixture of 55% coolant and 45% deionized water. This coolant provides protection down to about  $-42^{\circ}C$  ( $-44^{\circ}F$ ).

# NOTICE

Do not use plain water alone.



Toyota recommends "Toyota Super Long Life Coolant", which has been tested to ensure that it will not cause corrosion nor result in malfunction of your engine coolant system with proper usage. "Toyota Super Long Life Coolant" is formulated with long-life hybrid organic acid technology and has been specifically designed to avoid engine cooling system malfunction on Toyota vehicles.

Please contact your Toyota dealer for further details.

# Checking the radiator and condenser

If any of the above parts are extremely dirty or you are not sure of their condition, take your vehicle to a Toyota dealer.

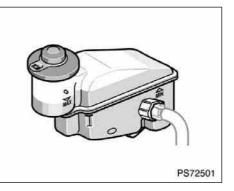
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To prevent burning yourself, be careful not to touch the radiator or condenser when the engine is hot.

# NOTICE

To prevent damage to the radiator and condenser, do not perform the work by yourself.

# Checking brake fluid



Before checking or adding the brake fluid, remove the cover. (See "(c) Jump starting" on page 223 in Section 4.)

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.

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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.

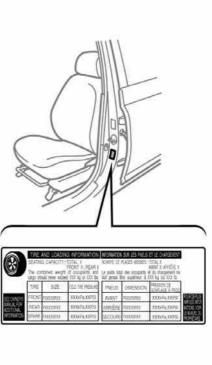


Take care when filling the reservoir because brake fluid can harm your hands or eyes. If fluid gets on your hands or in your eyes, flush the affected area with clean water immediately. If you still feel uncomfortable with your hands or eyes, go to the doctor.

# NOTICE

If you spill some of the fluid, be sure to wipe it off to prevent it from damaging the parts or paintwork.

# Checking tire inflation pressure



# Keep your tire inflation pressures at the proper level.

The recommended cold tire inflation pressures, tire sizes and the combined weight of occupants and cargo (vehicle capacity weight) are described on page 296 and 299. They are also described on the tire and loading information label as shown.

You should check the tire inflation pressures every two weeks, or at least once a month. And do not forget the spare!

The following instructions for checking tire inflation pressure should be observed:

• The pressure should be checked only when the tires are cold. If your vehicle has been parked for at least 3 hours and has not been driven for more than 1.5 km or 1 mile since, you will get an accurate cold tire inflation pressure reading.

PS72502

- Always use a tire pressure gauge. The appearance of a tire can be misleading. Besides, tire inflation pressures that are even just a few pounds off can degrade 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 inflation pressure after driving. It is normal for the tire inflation pressure to be higher after driving.
- Never exceed the vehicle capacity weight. Passenger and luggage weight should be located so that the vehicle is balanced.

- 5. After completing the tire inflation pressure measurement and adjustment, apply soapy water to the valve and check for leakage.
- 6. Install the tire valve cap.

If a gauge and air pump are not available, have your vehicle checked by vour Tovota dealer.

# **A** CAUTION

Be sure to reinstall the tire valve caps. Without the valve caps, dirt or moisture could get into the valve core and cause air leakage. If the caps have been lost, have new ones put on as soon as possible.

Incorrect tire inflation pressure may waste fuel, reduce the comfort of driving, reduce tire life and make your vehicle less safe to drive.

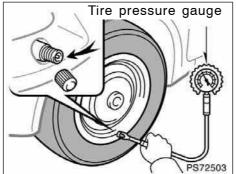
If a tire frequently needs refilling, have it checked by your Toyota dealer.

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- PROCEDURE 1. Remove the tire valve cap. 2. Press the tip of the tire pressure
  - gauge to the tire valve. 3. Read the pressure using the graduations of the gauge.

**INSPECTION AND ADJUSTMENT** 

4. In case the tire inflation pressure is not within the prescribed range, insert the compressed air from the valve. In case of applying too much air, press the center of the valve and release the air to adjust.



# 

Keep your tires properly inflated. Otherwise, the following conditions may occur and cause an accident resulting in death or serious injuries.

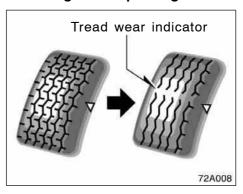
Low tire pressure (underinflation)—

- Excessive wear
- Uneven wear
- Poor handling
- Possibility of blowouts from an overheated tire
- Poor sealing of the tire bead
- Wheel deformation and/or tire separation
- A greater possibility of tire damage from road hazards

High tire pressure (overinflation)—

- Poor handling
- Excessive wear
- Uneven wear
- A greater possibility of tire damage from road hazards

# Checking and replacing tires



# **CHECKING YOUR TIRES**

Check the tire's tread for tread wear indicators. If the indicators show, replace the tires. The location of tread wear indicators is shown by the "TWI" or " $\Delta$ " marks, etc., molded on the sidewall of each tire.

The tires on your Toyota have built-in tread wear indicators to help you know when the tires need replacement. When the tread depth wears to 1.6 mm (0.06 in.) or less, the indicators will appear. If you can see the indicators in two or more adjacent grooves, the tire should be replaced. The lower the tread, the higher the risk of skidding.

The effectiveness of snow tires is lost if the tread wears down below 4 mm (0.16 in.).

If you have tire damage such as cuts, splits, cracks deep enough to expose the fabric, or bulges indicating internal damage, the tire should be replaced.

If a tire often goes flat or cannot be properly repaired due to the size or location of a cut or other damage, it should be replaced. If you are not sure, consult with your Toyota dealer. If air loss occurs while driving, do not continue driving. Driving even a short distance can damage a tire beyond repair.

# Any tires which are over 6 years old must be checked by a qualified technician even if damage is not obvious.

Tires deteriorate with age even if they have never or seldom been used.

This applies also to the spare tire and tires stored for future use.

# **REPLACING YOUR TIRES**

When replacing a tire, use a tire of the same size and construction, and the same or greater maximum load as the originally installed tires.

Using any other size or type of tire may seriously affect handling, ride, speedometer/odometer calibration, ground clearance, and clearance between the body and tires or snow chains.

Check that the maximum load of the replaced tire is greater than 1/2 of the Gross Axle Weight Ratings (GAWR) of either the front axle or the rear axle, whichever is greater. As for the maximum load of the tire, see the load limit at maximum cold tire inflation pressure mentioned on the sidewall of the tire, and as for the Gross Axle Weight Ratings (GAWR), see the Certification Label.

For details about the sidewall of the tire and the Certification Label, see pages 191 and 188.

# 

Observe the following instructions. Otherwise, an accident may occur resulting in death or serious injuries.

- Do not mix radial, bias belted, or bias-ply tires on your vehicle, as this may cause dangerous handling characteristics resulting in loss of control.
- Do not use tires other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control.

Toyota recommends all four tires, or at least both of the front or rear tires be replaced at a time as a set.

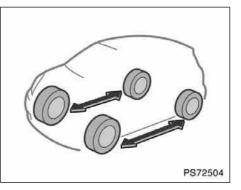
See "If you have a flat tire" on page 228 in Section 4 for tire change procedure.

# 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**



To equalize the wear and help extend tire life, Toyota recommends that you rotate your tires according to the maintenance schedule. (For scheduled maintenance information, please refer to the "Scheduled Maintenance Guide" or "Owner's Manual Supplement".). However, the most appropriate timing for tire rotation may vary according to your driving habits and road surface conditions. See "If you have a flat tire" on page 228 in Section 4 for tire change procedure.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire pressure, improper wheel alignment, outof-balance wheels, or severe braking.

# 

Do not include a compact spare tire when rotating the tires. It is designed for temporary use only.

# Installing snow tires and chains

WHEN TO USE SNOW TIRES OR CHAINS

Snow tires or chains are recommended when driving on snow or ice.

On wet or dry roads, conventional tires provide better traction than snow tires.

# SNOW TIRE SELECTION

If you need snow tires, select tires of the same size, construction and load capacity as the originally installed tires.

Do not use tires other than those mentioned above. Do not install studded tires without first checking local regulations for possible restrictions.

# 

Do not use snow tires other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control. Otherwise, an accident may occur resulting in death or serious injuries.

## SNOW TIRE INSTALLATION

# Snow tires should be installed on all wheels.

Installing snow tires on the front wheels only can lead to an excessive difference in road grip capability between the front and rear tires which could cause loss of vehicle control.

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 of correct size and type.

Use SAE Class "S" type radial tire chains except radial cable chains or V-bar type chains.

Regulations regarding the use of tire chains vary according to location or type of road, so always check local regulations before installing chains.

## CHAIN INSTALLATION

Install the chains on the front tires as tightly as possible. Do not use tire chains on the rear tires. Retighten chains after driving 0.5-1.0 km (1/4-1/2 mile).

When installing chains on your tires, carefully follow the instructions of the chain manufacturer.

If wheel covers are used, they will be scratched by the chain band, so remove the covers before putting on the chains.

# / CAUTION

- Do not exceed 50 km/h (30 mph) or the chain manufacturer's recommended speed limit, whichever is lower.
- Drive carefully avoiding bumps, holes, and sharp turns, which may cause the vehicle to bounce.
- Avoid sharp turns or locked-wheel braking, as use of chains may adversely affect vehicle handling.
- When driving with chains installed, be sure to drive carefully. Slow down before entering curves to avoid losing control of the vehicle. Otherwise an accident may occur.

# 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 a damaged wheel, the tire may slip off the wheel or they may 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.

# 

Do not use wheels other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control. Otherwise, an accident may occur resulting in death or serious injuries.

# Aluminum wheel precautions

- When installing aluminum wheels, check that the wheel nuts are tight after driving your vehicle the first 1600 km (1000 miles).
- If you have rotated, repaired, or changed your tires, check that the wheel nuts are still tight after driving 1600 km (1000 miles).
- When using tire chains, be careful not to damage the aluminum wheels.
- Use only 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.

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# SECTION 7-3

# DO-IT-YOURSELF MAINTENANCE

# **Electrical components**

Checking battery condition	284
Battery recharging precautions	285
Checking and replacing fuses	286
Adding washer fluid	288
Replacing light bulbs	288

# Checking battery condition— —Precautions

# 

# **BATTERY PRECAUTIONS**

The battery produces flammable and explosive hydrogen gas.

- Do not cause a spark from the battery with tools.
- Do not smoke or light a match near the battery.

The electrolyte contains poisonous and corrosive sulfuric acid.

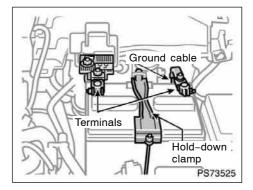
- Avoid contact with eyes, skin or clothes.
- Never ingest electrolyte.
- Wear protective safety glasses when working near the battery.
- Keep children away from the battery.

# EMERGENCY MEASURES

 If electrolyte gets in your eyes, flush your eyes with clean water immediately and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while en route to the medical office.  If electrolyte gets on your skin, thoroughly wash the contact area. If you feel pain or burning, get medical attention immediately.

- If electrolyte gets on your clothes, there is a possibility of its soaking through to your skin, so immediately take off the exposed clothing and follow the procedure above, if necessary.
- If you accidentally swallow electrolyte, drink a large quantity of water or milk. Follow with milk of magnesia, beaten raw egg or vegetable oil. Then go immediately for emergency help.

# -Checking battery exterior



Before checking the battery, remove the cover. (See "(c) Jump starting" on page 223 in Section 4.)

Check the battery for corroded or loose terminal connections, cracks, or loose hold-down clamp.

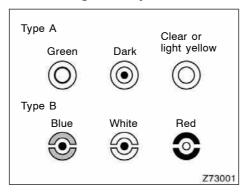
- a. If the battery is corroded, wash it off with a solution of warm water and baking soda. Coat the outside of the terminals with grease to prevent further corrosion.
- b. If the terminal connections are loose, tighten the clamp nut—but do not overtighten.

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.

# -Checking battery condition



# CHECKING BY THE 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.

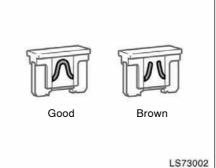
- Always charge the battery in an unconfined area. Do not charge the battery in a garage or closed room where there is not sufficient ventilation.
- Only do a slow charge (5A or less). Charging at a quicker rate is dangerous. The battery may explode, causing personal injuries.

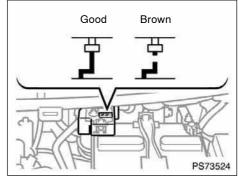
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# Checking and replacing fuses

# NOTICE

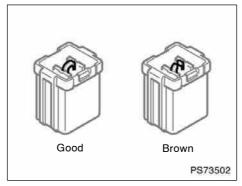
Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.



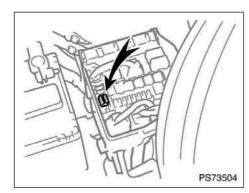












If the headlights or other electrical components do not work, check the fuses. If any of the fuses are blown, they must be replaced.

See "Fuse locations" on page 263 in Section 7-1 for locations of the fuses.

# Turn the ignition switch and inoperative component off. Pull the 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 Section 8 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 "A/C" fuse, which may be dispensable for normal driving, and use it if its amperage rating is the same.

If you cannot use one of the same amperage, use one that is lower, but as close to the rating as possible. If the amperage is lower than that specified, the fuse might blow out again but this does not indicate anything wrong. Be sure to get the correct fuse as soon as possible and return the substitute to its original 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 or the low windshield washer fluid level warning light comes on, the washer tank may be empty. Add washer fluid.

You may use plain water as washer fluid. However, in cold areas where temperatures range below the 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 burning yourself, do not replace the light bulbs while they are hot.
- Halogen bulbs have pressurized gas inside and require special handling. They can burst or shatter if scratched or dropped. Hold a bulb only by its plastic or metal case. Do not touch the glass part of a bulb with bare hands.

The inside of the lens of exterior lights such as headlights may temporarily fog up when the lens becomes wet in the rain or in a car wash. This is not a problem because the fogging is caused by the temperature difference between the outside and inside of the lens, just like the windshield fogs up in the rain. However, if there is a large drop of water on the inside of the lens, or if there is water pooled inside the light, contact your Toyota dealer.

# NOTICE

Only use a bulb of the listed type.

Light bulbs

Headlights

lights

Parking lights

Front fog lights

Front side marker

Bulb

No.

\_

\_

\_

\_\_\_\_

w

60/55

5

55

5

Туре

А

Е

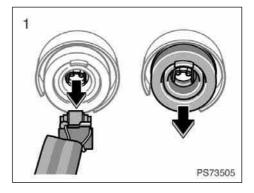
В

Е

\*: Side turn signal lights should be replaced as an assembly.

- A: HB2 halogen bulbs
- B: H11 halogen bulbs
- C: Single end bulbs
- D: Single end bulbs (amber)
- E: Wedge base bulbs
- F: Wedge base bulbs (amber)
- G: Double end bulbs

### —Headlights

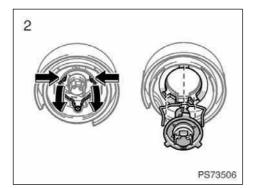


1. Open the hood. Unplug the connector. Remove the rubber cover.

If the connector is tight, wiggle it.

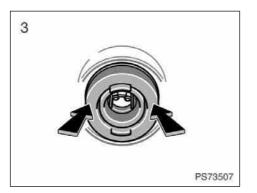
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Front turn signal lights	 21	D
Side turn signal lights	 5	F*
Rear turn signal lights	 21	D
Tail/stop and rear side marker lights	 21/5	Е
Back-up lights	 21	С
License plate lights	 5	Е
Interior light	 8	G
Personal light	 8	Е
Luggage compartment light	 5	G



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 fit it securely on the boss. Plug in the connector.

Make sure the rubber cover fits securely on the connector and the headlight body.

Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, contact your Toyota dealer.

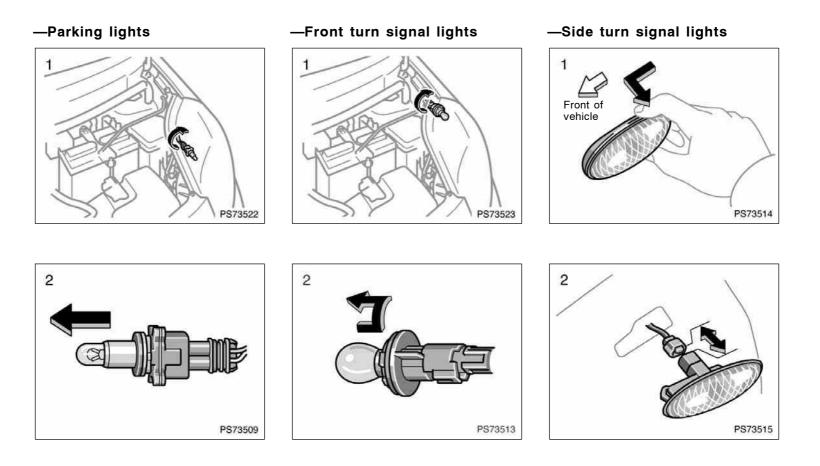
### —Front fog, front side marker lights and LED type high mounted stoplight

If either the left or right front fog, front side marker lights or LED type high mounted stoplight burns out, contact your Toyota dealer.

### NOTICE

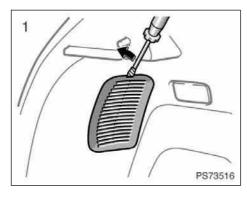
Do not try to replace the front fog or front side marker lights by yourself. You may damage the vehicle.

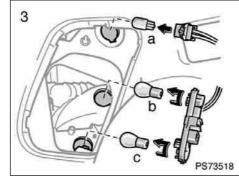
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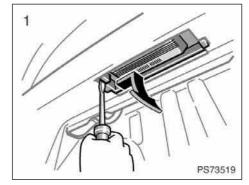
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—Tail/stop and rear side marker, rear turn signal and back–up lights

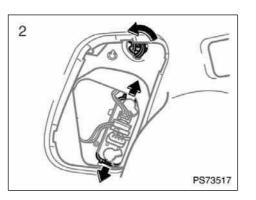


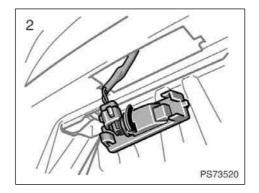


a: Tail/stop and rear side marker lights b: Rear turn signal light c: Back-up lights —License plate lights



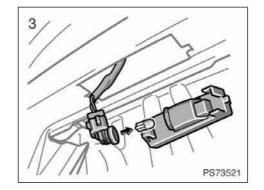
Use a flathead screwdriver.





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# SECTION 8

# **SPECIFICATIONS**

# Specifications

Dimensions and weights 2	96
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Fuses	00

Dimensions	and w	eights	3
Overall length	mm (in.)	3825	(150.6)
Overall width	mm (in.)	1695	(66.7)
Overall height	mm (in.)	1530	(60.2)
Wheelbase	mm (in.)	2460	(96.9)
Front tread	mm (in.)	1480 1470	( /
Rear tread	mm (in.)	1470 1460	(57.9) <sup>*1</sup> (57.5) <sup>*2</sup>
Vehicle capacity (occupants + lu	•	383	(845)
Towing capacity (trailer + cargo		318	(700)
<sup>*1</sup> : With P175/6 <sup>*2</sup> : With P185/6 <sup>*3</sup> : For Canada	50R15 847		

# Engine

Model:

1.5 L 4-cylinder (1NZ-FE) Type: 4 cylinder in line, 4 cycle, gasoline Bore and stroke, mm (in.): 75.0  $\times$  84.7 (2.95  $\times$  3.33) Displacement, cm<sup>3</sup> (cu. in.): 1497 (91.3)

### Fuel

Fuel type: Unleaded gasoline, Octane Rating 87 (Research Octane Number 91) or higher Fuel tank capacity, L (gal., Imp. gal.):

42 (11.1, 9.2)

### 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)

Drive belt tension measured with Boroughs drive belt tension gauge No. BT-33-73F (used belt), lbf:

Generator belt 100±20

### ENGINE LUBRICATION

Oil capacity (drain and refill), L (qt., Imp. qt.):

With filter	3.7 (3.9, 3.3)
Without filter	3.4 (3.6, 3.0)

"Toyota Genuine Motor Oil" is used in your Toyota vehicle. Use Toyota approved "Toyota Genuine Motor Oil" or equivalent to satisfy the following grade and viscosity.

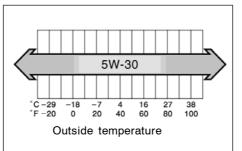
### Oil grade:

ILSAC multigrade engine oil

Please contact your Toyota dealer for further details.

Recommended oil viscosity:

SAE 5W-30



### COOLING SYSTEM

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

Manual transmission4.8 (5.1, 4.2)Automatic transmission4.7 (5.0, 4.1)

### Coolant type:

"Toyota Super Long Life Coolant" is used in your Toyota vehicle at factory fill. In order to avoid technical problems, only use "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, nonnitrite, and non-borate coolant with long-life hybrid organic acid technology. (Coolant with long-life hybrid organic acid technology is a combination of low phosphates and organic acids.)

Do not use plain water alone.

Please contact your Toyota dealer for further details.

### BATTERY

OIL008

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

11.6—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.

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### CLUTCH

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.): 1.9 (2.0, 1.7)

Oil type: Gear oil API GL-4 or GL-5

Recommended oil viscosity: SAE 75W-90

#### AUTOMATIC TRANSAXLE

Fluid capacity (drain and refill), L (qt., Imp. qt.): 2.5 (2.6, 2.2) Fluid type:

Toyota Genuine ATF WS

Change automatic transmission fluid only as necessary.

Generally, it is necessary to change automatic transmission fluid only if your vehicle is driven under one of the Special Operating Conditions listed in your "Scheduled Maintenance Guide" or "Owner's Manual Supplement". When changing the automatic transmission fluid, use only "Toyota Genuine ATF WS" (ATF JWS3324 or NWS9638) to aid in assuring maximum transaxle performance.

Notice: Using automatic transmission fluid other than "Toyota Genuine ATF WS" may cause deterioration in shift quality, locking up of your transmission accompanied by vibration, and ultimately damage the automatic transmission of your vehicle.

Please contact your Toyota dealer for further details.

### BRAKES

Minimum pedal clearance when depressed with the pressure of 300 N (30 kgf, 66 lbf) with the engine running, mm (in.): With anti-lock brake system 73 (2.9) Without anti-lock brake system 70 (2.8) Pedal free play, mm (in.): 1-6 (0.04-0.24) Pad wear limit, mm (in.): 1.0 (0.04) Lining wear limit, mm (in.): 1.0 (0.04) Parking brake adjustment when pulled with the force of 200 N (20 kgf, 45 lbf): 6-9 clicks

Fluid type: SAE J1703 or FMVSS No. 116 DOT 3

### STEERING

Wheel free play: Less than 30 mm (1.2 in.)

### Tires

### Tire size and cold tire inflation pressure:

Front and rear

kPa (kgf/cm<sup>2</sup> or bar, psi)

Tire size	Front	Rear	Wheel size
P175/65R14 81S	220 (2.2, 32)	220 (2.2, 32)	14 x 5J
P185/60R15 84T	220 (2.2, 32)	220 (2.2, 32)	15 x 5 1/2J

For sustained high speeds above 160 km/h (100 mph), in countries where such speeds are permitted by law, add 20 kPa ( $0.2 \text{ kgf/cm}^2$  or bar, 3 psi) to the front tires and rear tires, but never exceed the maximum cold tire inflation pressure molded on the tire sidewall.

### Spare

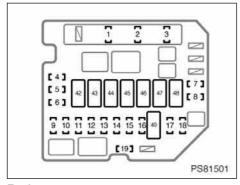
Tire size	Tire inflation pressure kPa (kgf/cm <sup>2</sup> or bar, psi)	Wheel size
T125/70D15 95M	420 (4.2, 60)	15 x 4T

# 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 inflation pressure" through "Aluminum wheel precautions", page 274 through 281 in Section 7–2.

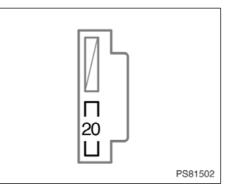
### Fuses



Engine compartment

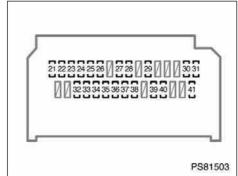
### Fuses (type A)

- AM2 15 A: Starting system, multiport fuel injection system/sequential multiport fuel injection system
- 2. HORN 10 A: Horn
- **3. EFI 20 A:** Multiport fuel injection system/sequential multiport fuel injection system
- 4. SPARE 30 A: Spare fuse
- 5. SPARE 15 A: Spare fuse
- 6. SPARE 10 A: Spare fuse
- 7. FR DEF 20 A: No circuit



Instrument panel

- 8. ABS2/VSC2 30 A: Anti-lock brake system
- 9. H-LP MAIN 30 A: No circuit
- 10. ST 30 A: Starting system
- 11. S-LOCK 20 A: No circuit
- 12. DOME 15 A: Interior light, personal lights, theft deterrent system, audio system, wireless remote control system
- **13. ECU-B 7.5 A:** Engine immobilizer system, daytime running light system, front passenger occupant classification system, power windows, door lock system, theft deterrent system, meter and gauge



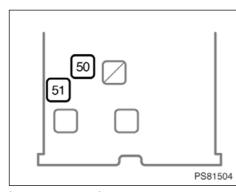
Instrument panel

14. ALT-S 7.5 A: Charging system

- **15. ETCS 10 A:** Multiport fuel injection system/sequential multiport fuel injection system, electronic throttle control system
- 16. HAZ 10 A: Turn signal lights, emergency flashers
- 17. H-LP RH/H-LP LO RH 10 A: Righthand headlight
- 18. H-LP LH/H-LP LO LH 10 A: Lefthand headlight
- **19. EFI2 10 A:** Multiport fuel injection system/sequential multiport fuel injection system

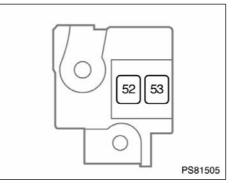
2006 YARIS HATCHBACK from Aug. '05 Prod. (OM52703U)

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Instrument panel

- 20. ACC2 7.5 A: Shift lock system
- 21. TAIL 10 A: Side marker lights, parking lights, tail lights, license plate lights, multiport fuel injection system/sequential multiport fuel injection system
- 22. PANEL1 7.5 A: Illuminations, instrument panel light control, meter and gauge
- 23. A/C 7.5 A: Rear window defogger, air conditioning system
- 24. D DOOR 20 A: No circuit
- **25. RL DOOR 20 A:** Rear passenger's power window (left side)



Engine compartment

- 26. RR DOOR 20 A: Rear passenger's power window (right side)
- 27. CIG 15 A: Power outlet
- 28. ACC 7.5 A: Door lock system, outside rear view mirrors, audio system
- 29. ID/UP/MIR HTR 10 A: Multiport fuel injection system/sequential multiport fuel injection system
- **30. IGN 7.5 A:** Multiport fuel injection system/sequential multiport fuel injection system, engine immobilizer system, SRS airbag system, front passenger occupant classification system

- 31. MET 7.5 A: Meter and gauge
- 32. WIP 25 A: Windshield wiper
- 33. RR WIP 15 A: Rear wiper
- 34. WSH 15 A: Windshield wiper and rear wiper
- **35. ECU-IG 10 A:** Daytime running light system, anti-lock brake system, electric power steering system, power windows, door lock system, theft deterrent system, electric cooling fan
- **36. GAUGE 10 A:** Charging system, turn signal lights, emergency flashers, buck-up lights, instrument panel light control, shift lock system, rear window defogger, air conditioning system, automatic transmission system
- 37. OBD2 7.5 A: On-board diagnosis system
- **38. STOP 10 A:** Stop lights, high mounted stop light, multiport fuel injection system/sequential multiport fuel injection system, shift lock system, anti-lock brake system
- 39. D/L 25 A: Door lock system
- 40. FR FOG 15 A: Front fog lights
- **41. AM1 25 A:** Multiport fuel injection system/sequential multiport fuel injection system

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Fuses (type B) 42. HTR SUB2 40 A: Air conditioning system 43. EPS 50 A: Electric power steering system 44. ABS1/VSC1 50 A: Anti-lock brake system 45. HTR 40 A: Air conditioning system 46. RDI 30 A: Electric cooling fan 47. HTR SUB1 30 A: Air conditioning system 48. H-LP CLN/PWR HTR 30 A: No circuit 49. AMT 50 A: No circuit 50. DEF 30 A: Rear window defogger 51. PWR 30 A: Power windows Fuses (type C) 52. ALT 120 A: Charging system, "HTR SUB2", "EPS", "ABS1/VSC1", "HTR", "ABS2/VSC2", "HTR SUB1", "RDI", "DEF", "FR FOG", "OBD2", "D/L", "STOP" and "AM1" fuses 53. MAIN 60 A: "EFI", "HORN", "AM2", "ALT-S", "DOME", "ST", "ECU-B", "ETCS", "HAZ", "H-LP LH/H-LP LO LH" and "H-LP RH/H-LP LO RH" fuses 05 11.10

# SECTION 9

# **REPORTING SAFETY DEFECTS FOR U.S. OWNERS**

**Reporting safety defects for U.S. owners** 

# 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 tollfree 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.

# **¿U−3**

### Quick index

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### Gas station information

#### Fuel type:

UNLEADED gasoline, Octane Rating 87 (Research Octane Number 91) or higher

See page 178 for detailed information.

#### Fuel tank capacity:

42 L (11.1 gal., 9.2 lmp.gal.)

#### Engine oil:

ILSAC multigrade engine oil is recommended.

See page 271 for detailed information.

Tire information: See pages 274 through 281.

Tire inflation pressure: See page 299.

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# Important information about this manual

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## 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.

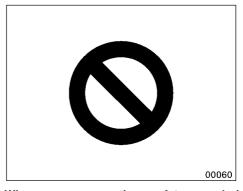
# 

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

### NOTICE

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

## Safety symbol



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

# Important information about your Toyota

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## **Occupant restraint systems**

Toyota encourages you and your family to take the time to read Section 1–3 of this Owner's Manual carefully. In terms of helping you understand how you can receive the maximum benefit of the occupant restraint systems this vehicle provides, Section 1–3 of this Owner's Manual is the most important section for you and your family to read.

Section 1–3 describes the function and operation concerning seats, seat belts, SRS airbags and child restraint systems of this vehicle and some potential hazards you should be aware of. These systems work together along with the overall structure of this vehicle in order to provide occupant restraint in the event of a crash. The effect of each system is enhanced when it is used properly and together with other systems. No single occupant restraint system can, by itself, provide you or your family with the equal level of restraint which these systems can provide when used together. That is why it is important for you and your family to understand the purpose and proper use of each of these systems and how they relate to each other. The purpose of all occupant restraint systems is to help reduce the possibility of death or serious injury in the event of a collision. None of these systems, either individually or together, can ensure that there is no injury in the event of collision. However, the more you know about these systems and how to use them properly, the greater your chances become of surviving an accident without death or serious injury.

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

In order to be effective, the SRS airbags must deploy with tremendous speed. The rapid deployment of the SRS airbags makes the SRS airbags themselves potential sources of serious injury if an occupant is too close to an airbag, or if an object or some part of his or her body has been placed between the occupant and the airbag at the time of deployment. This is just one example of how the instructions in Section 1–3 of this Owner's Manual will help ensure proper use of the occupant restraint systems, and increase the safety they can provide to you and your family in the event of an accident.

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

### **Event data recorder**

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

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

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

- SRS airbag deployment data
- SRS airbag system diagnostic data

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

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

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

However, if necessary Toyota will:

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

### 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".

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# 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".

# Important health and safety information about your Toyota

# **ACAUTION**

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

# Accessories, spare parts and modification of your Toyota

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

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

# Spark ignition system of your Toyota

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

# Installation of a mobile two-way radio system

As the installation of a mobile two-way radio system in your vehicle could affect electronic systems such as multiport fuel injection system/sequential multiport fuel injection system, electronic throttle control system, electronic engine 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.

# Tires and loading on your Toyota

Underinflated or overinflated tire inflation pressure and the excess load may result in the deterioration of steering ability and braking ability, leading to an accident. Check the tire inflation pressure periodically and be sure to keep the load limits given in this Owner's Manual. For details about tire inflation pressure and load limits, see pages 274 and 201.

# 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, it may cause an accident such as a fire. Be sure to have the systems of the SRS airbag and seat belt pretensioner removed and disposed of by the qualified service shop or by your Toyota dealer before you dispose of your vehicle.

## Leak detection pump

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