

# Owner's Manual

For your safety and comfort, read carefully and keep in the vehicle.

HILUX

#### **Foreword**

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

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

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

Please leave this Owner's Manual in this vehicle at the time of resale. The next owner will need this information also.

All information and specifications in this manual are current at the time of printing. However, because of Toyota's policy of continual product improvement, we reserve the right to make changes at any time without notice.

Please note that this manual applies to all models and explains all equipment, including options. Therefore, you may find some explanations for equipment not installed on your vehicle.

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#### Important information about this manual

#### Safety and vehicle damage warnings

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

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

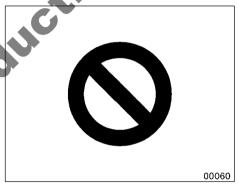
#### **↑** CAUTION

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

#### NOTICE

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

#### Safety symbol



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

#### Important information about your Toyota

# Fuel and fuel filter (diesel engine)

The fuel filter for a diesel engine does not need to be replaced periodically.

#### NOTICE

For long life performance of your vehicle, please follow these instructions:

- ♦ Only fill your fuel tank at a standard station.
- ♦ If the fuel system warning light comes on, have your vehicle checked and the warning light reset by your Toyota dealer as soon as possible.
- ◆ The fuel filter should only be replaced at your Toyota dealer to prevent the mixing of fuel with foreign material and impurities.

#### 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 death or 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.

# 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. Using these spare parts and accessories which are not genuine Toyota products may adversely affect the safety of your vehicle, even though these parts may be approved by certain authorities in your country. Toyota therefore cannot accept any liability or guarantee spare parts and accessories which are not genuine Toyota products, nor for replacement or installation involving such parts.

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

# Installation of a mobile two-way radio system

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

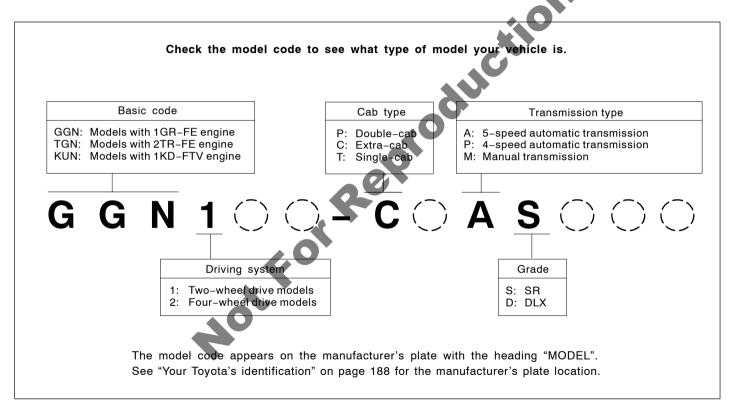
#### **Scrapping of your Toyota**

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

# On-pavement and off-road driving tips (on four-wheel drive models)

This vehicle will handle and maneuver differently from an ordinary passenger car because it is designed for off-road use also. It has a significantly higher rollover rate than other types of vehicles. In addition, this vehicle has a higher ground clearance and center of gravity than that of an ordinary passenger car. This vehicle design feature causes this type of vehicle to be more likely to rollover. Failure to operate this vehicle correctly may result in loss of control, accidents or vehicle rollover causing death or serious injury. Be sure to read "Off-road vehicle precautions" on page 176 and "Off-road driving precautions" on page 198.

#### Model code



Not For Reproduction

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

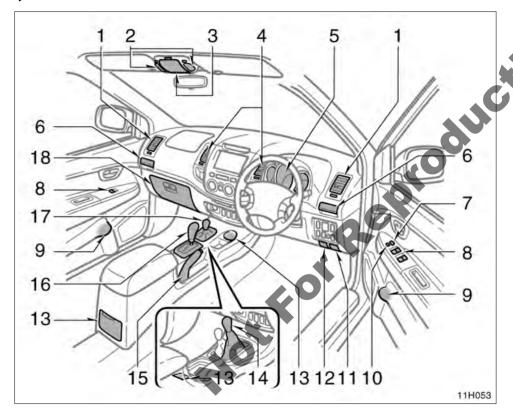
## OPERATION OF INSTRUMENTS AND CONTROLS

#### Overview of instruments and controls

Instrument panel overview	2
Instrument cluster overview	4
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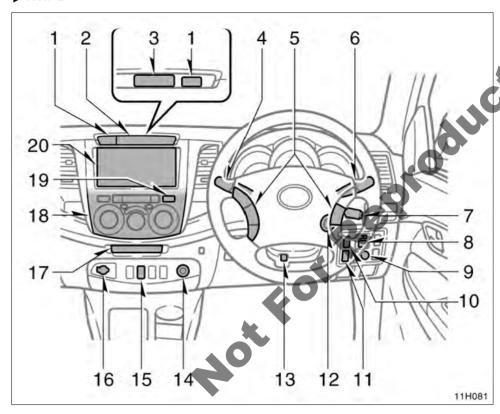
#### Instrument panel overview

#### **▶**View A



1.	Side vent 15
2.	Personal lights* 83
3.	Auxiliary box*
4.	Center vents 15
5.	Instrument cluster
6.	Cup holder 17
7.	Power door lock switch* 1
8.	Power window switches* 18
9.	Bottle holder
10.	Window lock switch* 19
11.	Fuel filler door opener* 2
12.	Hood lock release lever 2
13.	Cup holders* 17
14.	Manual transmission gear shift lever 109
15.	Parking brake lever 113
16.	Automatic transmission selector lever 103
17.	Front drive control lever* 11
18. *: If	Glove box

#### **▶**View B

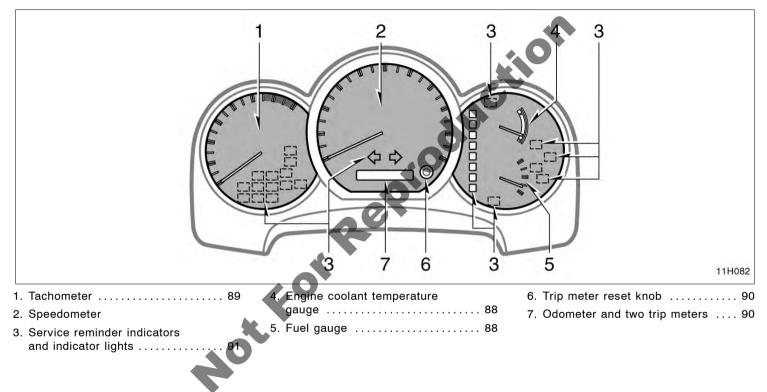


1.	Front passenger's seat belt reminder light 91
2.	Clock with multi–information display* 160, 167
	Clock
3. 4.	
	Wiper and washer switches 84
5.	Steering switches* 140, 160
6.	Headlight, turn signal and front driving light switches 80, 82
7.	Cruise control switch* 114
8.	Power rear view mirror control switches*
9.	Instrument cluster light control knob* 82
10.	Engine immobilizer system indicator light 12
11.	Power heater switch* 156
12.	Engine (ignition) switch 102
13.	Tilt steering lock release lever 74
14.	Cigarette lighter 168
15.	Rear window defogger switch* 85
16.	Power outlet*
17.	Ashtray
18.	Air conditioning controls 150
19.	Emergency flasher switch 81
20.	Audio system*

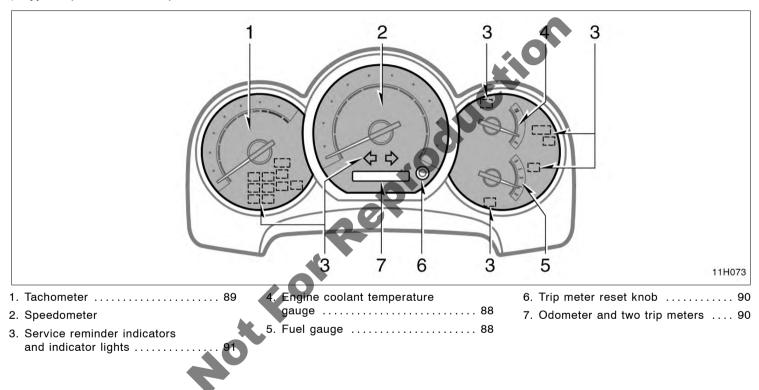
\*: If equipped

#### Instrument cluster overview

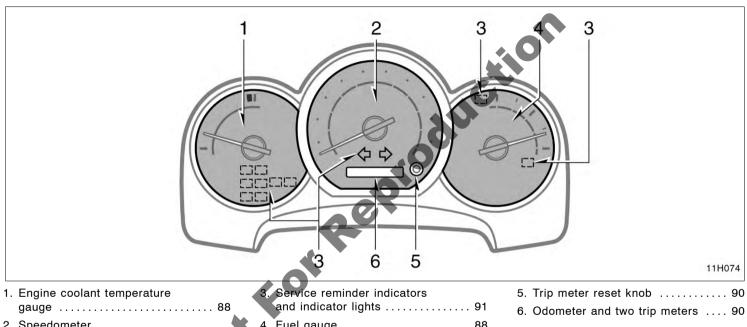
#### ▶Type A



#### ►Type B (with tachometer)



#### ►Type B (without tachometer)



4. Fuel gauge ...... 88

#### Indicator symbols on the instrument panel

(1)	Brake system warning light*1
4	Driver's seat belt reminder light*1
PASSENGER	Front passenger's seat belt reminder light*1
<del></del>	Charging system warning light*1
مِيِّح.	Low engine oil pressure warning light*1
<b>(</b> →	Malfunction indicator lamp*1
n or 🎉	Low fuel level warning light*1

(ABS)	Anti-lock brake system warning light*1 (on some models)
	Open door warning light*1
2	SRS warning light*1
T-BELT	Timing belt replacement warning light*1 (diesel engine)
<u> </u>	Fuel system warning light*1 (diesel engine)
A/T P	Unengaged "Park" warning light* <sup>1</sup> (on some models)
A/T OIL TEMP	Automatic transmission fluid temperature warning light*1 (on some models)

€D 0€	Tail light indicator light (on some models)
	Headlight high beam indicator light
<b>\$</b>	Turn signal indicator lights
却	Front driving light indicator light (on some models)
CRUISE	Cruise control indicator light*2 (on some models)
PRND 432L	Automatic transmission indicator light (on some 5-speed models)
PRND 32L	Automatic transmission indicator light (on some 4-speed models)

POI POI	Four-wheel drive indicator light (on some models)
$\mathfrak{M}$	Engine preheating indicator light (diesel engine)

<sup>\*1:</sup> For details, see "Service reminder indicators and warning buzzers" on page 91
\*2: If this light flashes, see "Cruise control" on page 114.

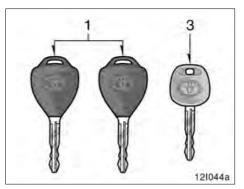
# SECTION 1-2

## OPERATION OF INSTRUMENTS AND CONTROLS

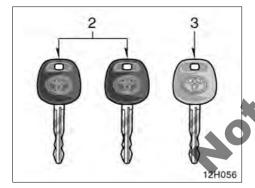
#### **Keys and Doors**

Keys 1	0
Engine immobilizer system	
Wireless remote control	3
Side doors	
Power windows	8
Quarter windows	
Tailgate	
Hood	2
Fueltank cap 2	3

#### Keys



Type A



Type B

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

- Master keys—These keys work in every lock.
  - These keys are equipped with the wireless remote control transmitter.
- Master keys—These keys work in every lock.
- 3. Sub key—This key does not work in the glove box.

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

Your Toyota dealer will need one of master keys to make a new key with a built-in-transponder chip.

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

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

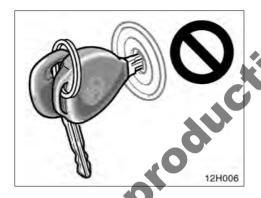
For information on use of the wireless remote control key, see "Wireless remote control" on page 13.





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

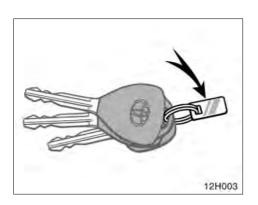
When starting the engine, do not use the key with a key ring resting on the key grip and do not press the key ring against the key grip. Otherwise the engine may not start, or may stop soon after it starts.



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



- ◆ Do not bend the key grip.
- Do not cover the key grip with any material that cuts off electromagnetic waves.
- ◆ Do not knock the key hard against other objects.
- ◆ Do not leave the key exposed to high temperatures for a long period, such as on the dashboard and hood under 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.

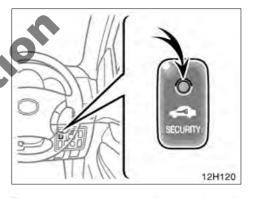
If you should lose your keys or if you need additional keys, duplicates can be made by a Toyota dealer using the key number.

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 engine 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 engine 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 engine switch.
- The indicator light flashes inconsistently.

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

The system is maintenance-free.

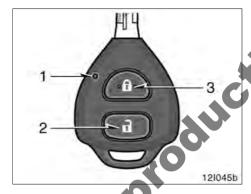
For your Toyota dealer to make a new key with a built-in transponder chip, your dealer will need your key number and master key. However, there is a limit to the number of additional keys your Toyota dealer can make for you.

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

#### **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.

### Wireless remote control (on some models)—



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

The wireless remote control system is designed to lock or unlock all the doors 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.

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.

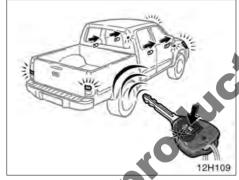
You can use up to 4 wireless remote control keys for the same vehicle. Contact your Toyota dealer for detailed information.

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

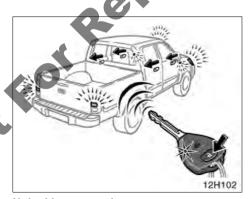
- Check for closeness to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the key.
- The battery may have been consumed. Check the battery in the key. To replace the battery, see "—Replacing battery" on page 15.

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 233.)

### —Locking and unlocking doors



Locking operation



Unlocking operation

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

To lock:

Push the lock switch with all the doors closed. All the doors are locked simultaneously. At this time, the turn signal lights flash once.

Check to see that the doors are securely locked.

If the lock switch is pushed while any door is not securely closed, locking will not be performed.

If the lock switch is pushed while the key is in the engine switch, locking will not be performed.

#### To unlock:

Push the unlock switch. All the doors are unlocked simultaneously. At this time, the turn signal lights flash twice.

You have 30 seconds to open a door after using the wireless remote unlock feature. If a door is not opened by then, all the doors will be automatically locked again. 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.

#### -Replacing battery

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

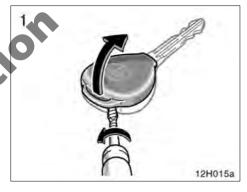
#### / CAUTION

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

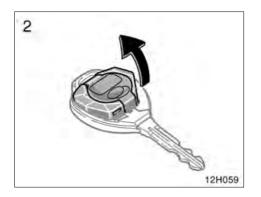
#### **NOTICE**

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

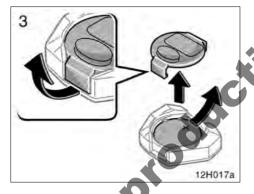
Replace the battery by following these procedures:



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



2. Remove the module from the key frame.



3. Remove the battery cover of the module.

#### NOTICE

Do not bend the terminals.

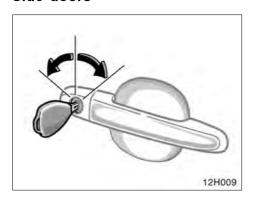
Remove the discharged battery and put in a new battery with positive (+) side up.

#### **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.
- 5. Install the battery cover of the module.
- 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 a power door lock system—All the doors lock and unlock simultaneously with the driver's door.

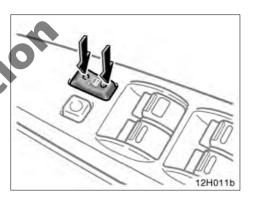


### LOCKING AND UNLOCKING WITH INSIDE LOCK KNOB

#### Move the lock knob.

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

If you want to lock the door from the outside, set the knob in the lock position before closing the door. The outside door handle must be held up while the front door is being closed. Be careful not to lock your keys in the vehicle.



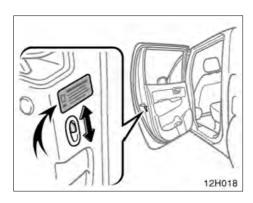
# LOCKING AND UNLOCKING WITH POWER DOOR LOCK SWITCH (on some models)

#### Push the switch.

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

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

All the doors lock or unlock simultaneously.



### REAR DOOR CHILD-PROTECTORS (on double-cab models)

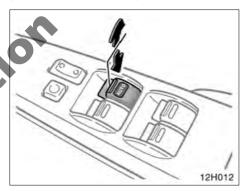
Move the lock lever to the "LOCK" position as shown on the label.

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.

### Power windows (on some models)



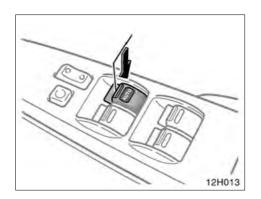
The windows can be operated with the switch on each door.

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

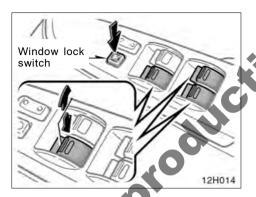
OPERATING THE DRIVER'S WINDOW
Use the switch on the driver's door.

**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 opening operation: 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.



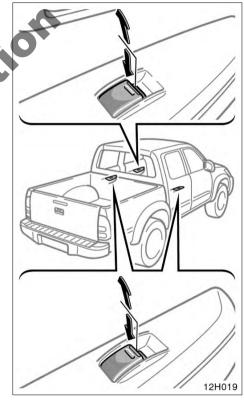
OPERATING THE PASSENGERS' WINDOWS

Use the switch on 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 passengers' windows cannot be operated.



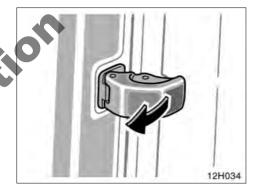
#### A CAUTION

To avoid death or serious 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/she operates the windows safely.
- When small children are in the vehicle, never let them use the power window switches without supervision. Use the window lock switch to prevent them from making unexpected use of the switches.

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

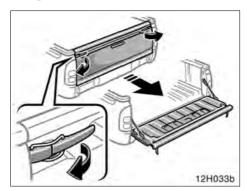
### Quarter windows (on extra-cab models)



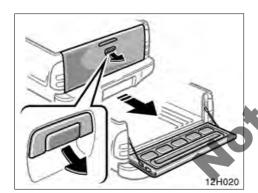
To open the quarter window, pull the latch handle toward you and swing it fully out.

When closing the window, make sure it is completely closed.

#### **Tailgate**



Type A



Type B

Type A: To open the tailgate, unlock the latches as shown.

Type B: To open the tailgate, pull the handle up.

The support cables will hold the tailgate horizontal.

See "Luggage stowage precautions" on page 187 for precautions when loading luggage.

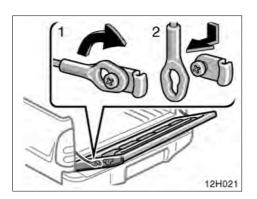
After closing the tailgate, try pulling it toward you to make sure it is securely locked.

#### CAUTION

If the open tailgate hides the stop/tail lights, rear turn signal lights, back-up lights or rear retro reflectors while you are parked, other road users must be warned of the presence of your vehicle by a warning triangle or other device.

#### NOTICE

Avoid driving with the tailgate open.

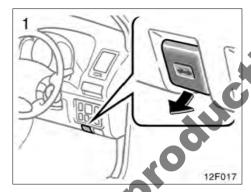


To lower the tailgate fully, release the support brackets from the lugs as shown.

#### **NOTICE**

- ◆ Lower the tailgate gently when it is unhooked.
- Make sure the tailgate is securely caught by the support brackets before closing the tailgate.

#### Hood

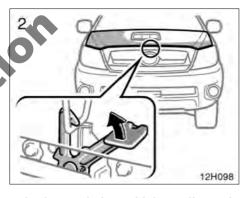


To open the hood:

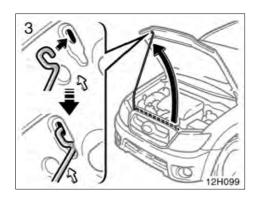
1. Pull the hood lock release lever. The hood will spring up slightly.



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.



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.

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

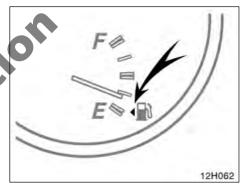


After inserting the support rod into the slot, make sure the rod supports the hood securely from falling down on to your head or body.

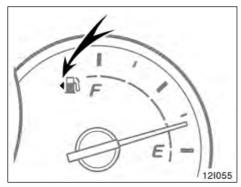
#### **NOTICE**

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.

#### Fuel tank cap (type A)

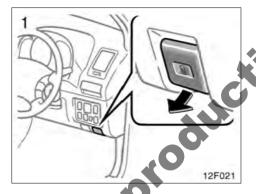


With tachometer



Without tachometer

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

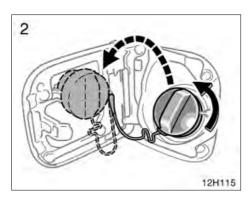


- 1. To open the fuel filler door, pull the lever up.
  - When refueling, turn off the engine.

#### **!** CAUTION

- o 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.
- Do not fill a fuel container with fuel on a plastic truck bed liner, a rubber truck bed mat, or any other insulating material. A static electricity charge could cause a spark and fire hazard. The proper procedure is to place an approved fuel container on the ground away from the truck for filling.



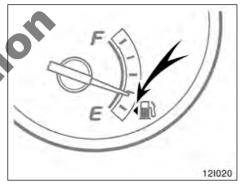
2. To remove the fuel tank cap, turn the cap slowly counterclockwise, then pause slightly before removing it. After removing the cap, hang it on the cap hanger.

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

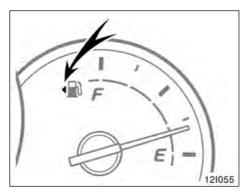
#### / CAUTION

- Make sure the cap is tightened 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.

#### Fuel tank cap (type B)



With tachometer



Without tachometer

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



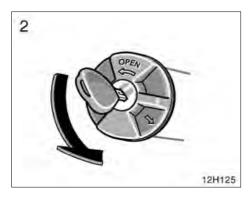
 To unlock the fuel tank cap, insert ignition key and turn it counterclockwise.

When refueling, turn off the engine.

#### / CAUTION

- Do not smoke, cause sparks or allow open flames when refueling.

  The fumes are flammable.
- When opening the cap, do not remove the cap quickly. In hot weather, fuel under pressure could cause injury by spraying out of the filler neck if the cap is suddenly removed.



To remove the fuel tank cap, turn the cap slowly counterclockwise, then pause slightly before removing it.

It is not unusual to hear a slight swoosh when the cap is opened. When installing, make sure the tabs in the cap are properly aligned with the cutouts in the tank opening. Then lock the cap by turning the fuel tank cap key clockwise.

## **!** CAUTION

- Make sure the cap is tightened 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.

Aot For Reproduction

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

# OPERATION OF INSTRUMENTS AND CONTROLS

## Occupant restraint systems

	Seats	30
	Front seats	30
	Removing rear seat cushions	
	Tumbling rear seat cushion	35
	Head restraints	
	Seat belts	
	SRS driver and front passenger airbags	
	Child restraint	
Not con		

#### Seats

While the vehicle is being driven, all vehicle occupants should have the seatback upright, sit well back in the seat and properly wear the seat belts provided.

#### **CAUTION**

- Do not drive the vehicle unless the occupants are properly seated. Do not allow any occupants to sit on top of a folded-down seatback, or in the luggage compartment or cargo area. If the occupants are improperly seated or restrained by seat belts, death or serious injury could result 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, death or serious injuries can occur in the event of emergency braking or a collision.

# Front seats— —Front seat precautions

Driver seat

## **∕!** CAUTION

The SRS driver airbag deploys with considerable force, and can cause death or serious injury especially if the driver is very close to the airbag. Since the risk zone for driver airbag is the first 50 - 75 mm (2 - 3 in ) of

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 above, while still maintaining control of the foot pedals, steering wheel, and your view of the instrument panel controls.

#### Front passenger seat

#### **CAUTION**

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

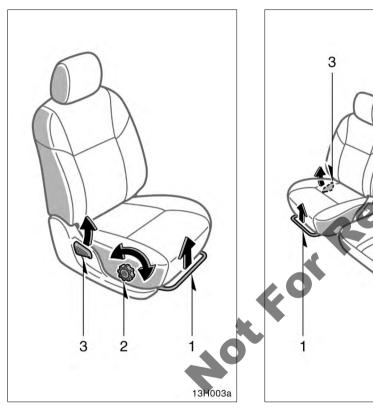
#### —Seat adjustment precautions

## **♠** CAUTION

- Do not adjust the seat while the vehicle is moving as the seat may unexpectedly move and cause the driver to lose control of the vehicle.
- Be careful that the seat does not hit a passenger or luggage.
- After adjusting the seat position, 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
- up. Then slide the seat to the desired position with slight body pressure and release the lever.
- 2. SEAT HEIGHT ADJUSTING KNOB (only driver's seat of some models)

  Turn the knob either way.
- 3. SEATBACK ANGLE ADJUSTING LEVER

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

Separate type

Bench type

13H211

## **↑** CAUTION

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

# —Moving front passenger's seat (on extra-cab models)



## For easy access to behind the front passenger's seat.

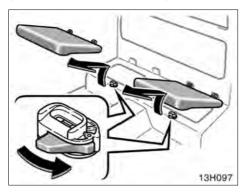
- Lift the seatback angle adjusting lever or press the pedal behind the seatback.
  - The seat will slide forward.
- 2 Move the seat to the front-most position.

When access is no longer needed, lift up the seatback and return the seat until it locks.

#### CAUTION

- After putting back the seat, try pushing the seat forward and rearward to make sure it is secured in place.
- Never allow anyone to rest their foot on the release pedal while the vehicle is moving.

# Removing rear seat cushions (on extra-cab models)



To remove the seat cushions, unhook the lock release lever by moving it as shown and pull them up and then toward the front of vehicle.

The seat cushions can be removed separately.

#### / CAUTION

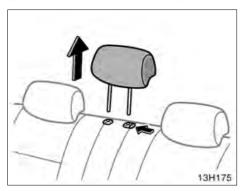
When removing or reinstalling the seat cushions, observe the following precautions to prevent death or serious injury:

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

To prevent death or serious injury in a collision or sudden stop:

- When reinstalling the seat cushions, be careful not to hit the seat cushions against you or inside of the vehicle.
- Install each seat in the same position from which it was removed.
   Failure to do so will prevent rear seat occupants from using seat belts properly.

# Tumbling rear seat cushion (on double-cab models)



1. Remove the center head restraint.



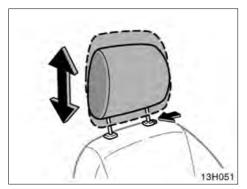
- Pull the strap as shown. The latch under the seat cushion will release, allowing the seat cushion to be raised.
- 3. Raise the seat cushion as shown and anchor the strap to the bracket behind the rear seat.
- 4. Replace the center head restraint.

#### / CAUTION

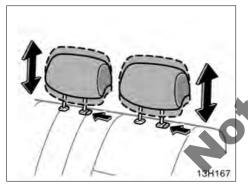
When returning the seats to their original position, observe the following precautions in order to prevent death or serious injury in a collision or sudden stop:

- Be careful not to get your hands or feet pinched in the seat.
- Make sure there are no obstacles under the seat which would prevent the seat from properly locking into place.
- Make sure the seat cushion is securely locked by trying to pull upward and downward on the edge of the seat cushion. Failure to do so will prevent the seat belt from operating properly.
- Make sure the seat belts are not twisted or caught under the seat cushion and are arranged in their proper position and are ready to use.

#### **Head restraints**



Front seats



Rear seats (on double-cab models)

## 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.

To remove: Pull it up while pressing the

lock release button.

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

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

#### **CAUTION**

- Adjust the center of the head restraint so that it is closest to the top of your ears.
- Use the head restraint designed for each respective seat.
- 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 53 for details.

#### Single-cab models:

If a child is too large for a child restraint system, the child should sit in the seat and must be restrained using the vehicle's seat belt. Extra-cab and double-cab models:

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.

If seat belt regulations exist in the country where you reside, please contact your Toyota dealer for seat belt replacement or installation.

#### **CAUTION**

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

When using the seat belts, observe the following:

- Use the belt for only one person at a time. Do not use a single belt for two or more people—even children.
- Avoid reclining the seatback any more than needed. The seat belts provide maximum protection in a frontal or rear collision when the driver and the front passenger are sitting up straight and well back in the seats. If you are reclined, the lap belt may slide past your hips and apply restraint forces directly to the abdomen or your neck may contact the shoulder belt. In the event of a frontal collision, the more the seat is reclined, the greater the risk of death or serious 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 240.)
- 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.

Australian owners: Observe the following additional WARNINGS.

WARNING: Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

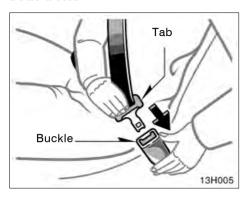
It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

Belts should not be worn with straps twisted.

Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

WARNING: No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

# —Fastening 3-point type seat belts



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

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

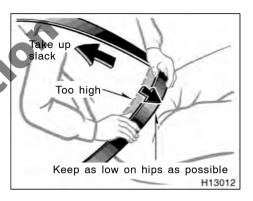
The seat belt length automatically adjusts to your size and the seat position.

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

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

## **CAUTION**

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

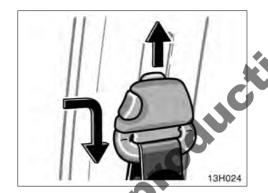


## Adjust the position of the lap and shoulder belts.

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.

#### A CAUTION

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



Seat belts with an adjustable shoulder anchor (on extra-cab and double-cab models)—

Adjust the shoulder anchor position to your size.

To raise: Slide the anchor up.

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

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

#### **CAUTION**

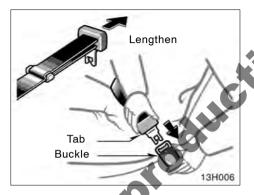
Always make sure the shoulder belt is positioned across the center of your shoulder. The belt should be kept away from your neck, but not falling off your shoulder. Failure to do so could reduce the amount of protection in an accident and cause death or serious injuries in a collision.



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

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

# —Fastening 2-point type seat belts



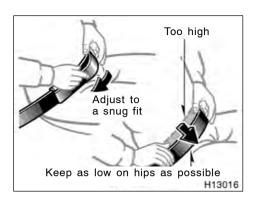
Sit up straight and well back in the seat. To fasten your belt, insert the tab into the buckle.

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

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

## / CAUTION

- After inserting the tab, make sure the tab and buckle are locked and that the 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.



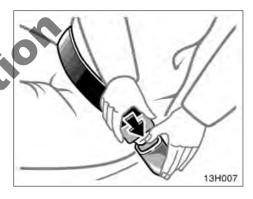
## Remove excess length of the belt and adjust the belt position.

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

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



Both high-positioned and loose-fitting lap 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 hips as possible.

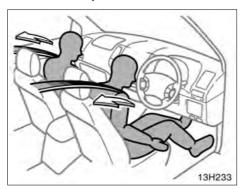


## To release the belt, press the buckle release button.

Vehicles with front bench seat:

Always place the latched belt on the center seat when not in use.

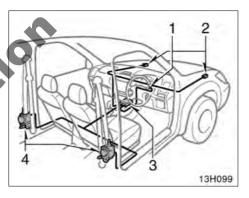
#### -Seat belt pretensioners



The driver and front passenger seat belt pretensioners (vehicles with separate front seats) or driver and front outside passenger seat belt pretensioners (vehicles with bench front seat) 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 retractor so that the belts snugly restrain the occupants.

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

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



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

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

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. In this case, the affected belts must be replaced.

If the vehicle is involved in multiple collisions, the pretensioner will activate for the first collision, but will not activate for the second or subsequent collisions.

## / CAUTION

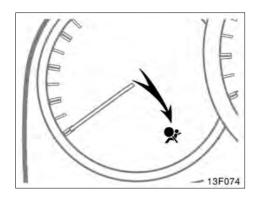
Observe the following precautions to reduce the risk of injury in the event of sudden braking or an accident. Failure to do so may cause death or serious injury.

- If the pretensioner has activated, the seat belt becomes locked: it cannot be further extended, nor will it return to the stowed position. The seat belt cannot be used again and must be replaced at your Toyota dealer.
- Do not modify, remove, strike or open the seat belt pretensioner assemblies, airbag sensor or surrounding area or wiring. Consult your Toyota dealer about any repair and modification.

#### **NOTICE**

Do not perform any of the following changes without consulting your Toyota dealer. Such changes can interfere with proper operation of the 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

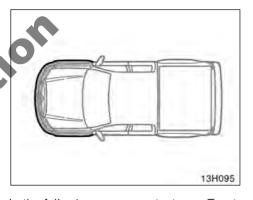


This indicator comes on when the engine switch is turned to the "ON" position. It goes off after about 6 seconds. This means the seat belt pretensioners are operating properly.

This warning light system monitors the airbag sensor assembly, front airbag sensors, seat belt pretensioner assemblies, inflators, interconnecting wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" on page 91.)

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.

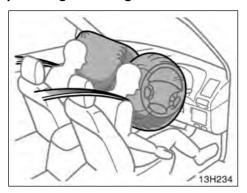
- The light does not come on when the engine switch is turned to the "ON" position or remains on for more than 6 seconds.
- The light comes on while driving.
- If any seat belt does not retract or can not be pulled out due to a malfunction or activation of the relevant seat belt pretensioner.
- The seat belt pretensioner assembly or surrounding area has been damaged.



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

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

# SRS driver and front passenger airbags



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

- Vehicles with separate front seats—The SRS airbags are designed to protect the driver and front passenger.
- Vehicles with bench front seats—The SRS airbags are designed to protect the driver and front outside passenger.
   They are not designed to protect an occupant in the front center seating position.

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

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

Always wear your seat belts properly.

#### **CAUTION**

● The SRS front airbag system is designed only as a supplement to the primary protection of the driver and front passenger seat belt systems. The driver and front passenger can be killed or seriously injured by the inflating airbags if they do not wear the available seat belts properly. During sudden braking just before a collision, an unrestrained driver or front passenger can move forward into direct contact with or close proximity to the airbag which may then deploy during the collision. To ensure maximum protection in an accident, the driver and all passengers in the vehicle must wear their seat belts properly. Wearing a seat belt properly during an accident reduces the chances of death or serious injury or being thrown out of the vehicle. For instructions and precautions concerning the seat belt system, see "Seat belts" on page 36.

• 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. Tovota 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 53.

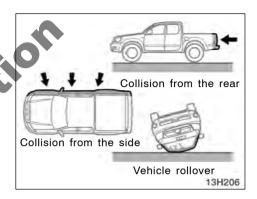
The SRS front airbags are designed to deploy in severe (usually frontal) collisions where the magnitude and duration of the forward deceleration of the vehicle exceeds the designed threshold level.

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

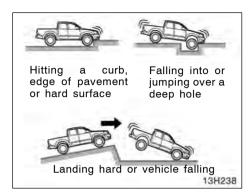
However, this threshold velocity will be considerably higher if the vehicle strikes an object, such as a parked vehicle or sign pole, which can move or deform on impact, or if the vehicle is involved in an underride collision (e.g. a collision in which the front of the vehicle "underrides", or goes under,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

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

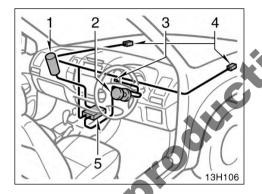
Always wear your seat belts properly.



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



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



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

- 1. Airbag module for front passenger (airbag and inflator)
- 2. Airbag module for driver (airbag and inflator)
- 3. SRS warning light
- 4. Front airbag sensors
- 5. 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 non-toxic gas to help restrain the forward motion of the occupants. The front airbags then quickly deflate, so that there is no obstruction of the driver's vision should it be necessary to continue driving.

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

If you can safely exit from the vehicle, you should do so immediately.



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

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

## **CAUTION**

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 must be properly restrained using the available seat belts.

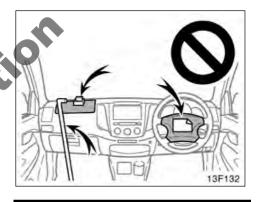
For instructions and precautions concerning the seating position, see "—Front seat precautions" on page 30.



• 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.



 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 53.



• Do not put anything or any part of • Toyota strongly recommends that all infants and children be placed in your body on or in front of the the rear seat of the vehicle and be dashboard or steering wheel pad properly restrained. that houses the front airbag sys-• Do not allow a child to stand up or tem. They might restrict inflation or kneel on the front passenger seat, cause death or serious injury as since the front passenger airbag they are projected rearward by the inflate with considerable could force of the deploying airbags. Likespeed and force. Otherwise, the wise, the driver and front passenger child may be killed or seriously inshould not hold objects in their jured. arms or on their knees.

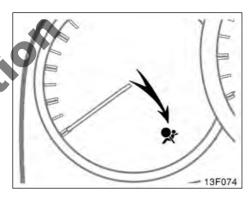
• Do not modify or remove any wiring. Do not modify, remove, strike or open any components, such as the steering wheel pad, steering wheel, column cover, dashboard near the front passenger airbag, front passenger airbag cover, front passenger airbag or airbag sensor assembly. Doing so may prevent the 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.

#### **NOTICE**

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

- ♦ Installation of electronic devices such as a mobile two-way radio, cassette tape player or compact disc player
- ♦ Modification of the suspension system
- ♦ Modification of the front end structure
- ◆ Attachment of a grille guard (bull bar, kangaroo bar, etc.), snowplow, winches or any other equipment to the front end
- Repairs made on or near the front fenders, front end structure, console, steering column, steering wheel or dashboard near the front passenger airbag

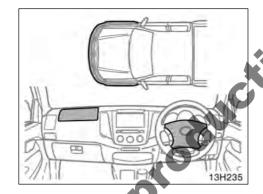


This indicator comes on when the engine switch is turned to the "ON" position. It goes off after about 6 seconds. This means the SRS front airbags are operating properly.

This warning light system monitors the airbag sensor assembly, front airbag sensors, seat belt pretensioner assemblies, inflators, interconnecting wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" on page 91.)

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 engine switch is turned to the "ON" position or remains on for more than 6 seconds.
- The light comes on while driving.



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

- The SRS front airbags have been inflated.
- The front of the vehicle (shaded in the illustration) was involved in an accident that was not severe enough to cause the SRS front airbags to inflate.
- The pad section of the steering wheel or front passenger airbag cover (shaded in the illustration) is scratched, cracked, or otherwise damaged.

#### **NOTICE**

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

# Child restraint— —Child restraint precautions

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

If a child is too large for a child restraint system, the child should sit in the seat and must be restrained using the vehicle's seat belt. See "Seat belts" on page 36 for details.

## A CAUTION

For effective protection in automobile accidents and sudden stops, a child must be properly restrained, using a seat belt or child restraint system depending on the age and size of the child. Holding a child in your arms is not a substitute for a child restraint system. In an accident, the child can be crushed against the windshield, or between you and the vehicle's interior.

- Single-cab and extra-cab models: Toyota strongly urges use of a proper child restraint system which conforms to the size of the child.
- Double-cab models:

Toyota strongly urges use of a proper child restraint system which conforms to the size of the child, installed on the rear seat. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.

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

- If child restraint system regulations exist in the country where you reside, please contact your Toyota dealer for the installation of the child restraint system in the front seat.
- 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.
- Do not allow children to play with the child restraint lock function belt. If the belt becomes twisted around a child's neck, it will not be possible to pull the belt out leading to choking or other serious injuries that could result in death.

If this occurs and the buckle cannot be unfastened, scissors should be used to cut the belt.

#### -Child restraint system

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

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

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

Double-cab models-

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.

## **!** CAUTION

When the child restraint system is not in use:

- Keep the child restraint system properly secured on the seat even if it is not in use. Do not store the restraint unsecured in the passenger compartment.
- If it is necessary to detach the child restraint system, remove it from the vehicle or store it securely in the luggage compartment. This will prevent it from injuring passengers in the event of a sudden stop or accident.

#### Types of 3-point seat belts

There are two types of 3-point seat belt. Check the type before installing a child restraint system.

ALR/ELR (Automatic Locking Retractor/ Emergency Locking Retractor) belt—

This belt locks when the belt is pulled out quickly. Also, this belt has an additional fully-extended lock mode; When the shoulder belt is completely extended and is then retracted even slightly, the retractor locks the belt in that position and the belt cannot be extended. When installing a child restraint system, fully extend the belt to put it in the lock mode.

ALR/ELR belts are equipped for the rear seat belts.

ELR (Emergency Locking Retractor) belt— This belt also locks when the belt is pulled out quickly but it does not have an additional fully-extended lock mode. When installing a child restraint system, you will need a locking clip.

If your child restraint system does not provide a locking clip, you can purchase the following item from your Toyota dealer.

Locking clip for child restraint system (Part No. 73119-22010)

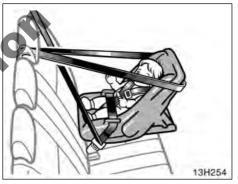
# —Types of child restraint system

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

- (A) Baby (infant) seat
- (B) Child (convertible) seat
- (C) Junior (booster) seat

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

Your vehicle has two anchorages for securing the upper anchorage strap of a child restraint. For instructions about how to use the child restraint anchorages, see "Child restraint anchorages" on page 65.



(A) Baby (infant) seat

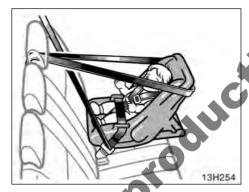


(B) Child (convertible) seat

# 13H256

(C) Junior (booster) seat

# —Installation with 3-point type seat belt (ALR/ELR belt)



(A) BABY (INFANT) SEAT INSTALLATION
A baby (infant) seat must be used in rear-facing position only.



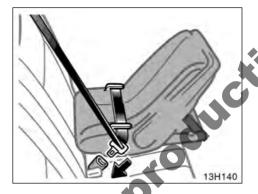
## **!** CAUTION

#### • Extra-cab models:

Do not install a child restraint system on the rear seat. These seats are not designed to hold a child restraint system.



- 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 left seat.

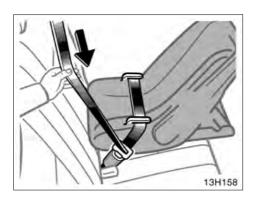


To install the baby (infant) seat:

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

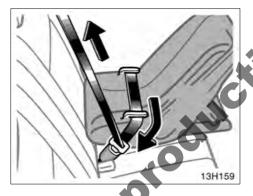
## **CAUTION**

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

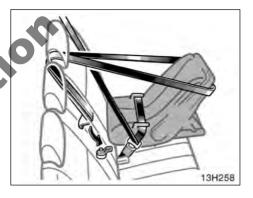


Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted even slightly, it cannot be extended.

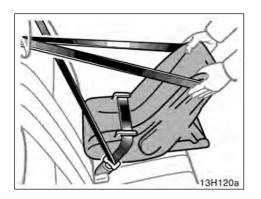
To hold the baby (infant) seat securely, make sure the belt is in the lock mode before letting the belt retract.



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

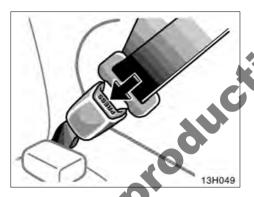


4. Attach the child restraint attaching clip to the child restraint anchor fitting. Make sure the clip is securely attached and tighten the upper anchorage strap. See "—Child restraint anchorages" on page 65 for instructions.



## A CAUTION

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



5. To remove the baby (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. Unhook the child restraint attaching clip from the child restraint anchor fitting.



(B) CHILD (CONVERTIBLE) SEAT INSTALLATION

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



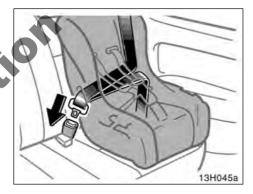


● Extra-cab models:

Do not install a child restraint system on the rear seat. These seats are not designed to hold a child restraint system.



- 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 left seat.



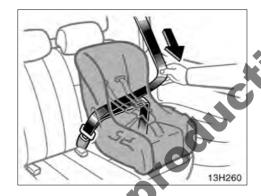
To install the forward-facing child (convertible) seat:

 Run the lap and shoulder belt through or around the child (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.

For instructions concerning the installation of the rear-facing child (convertible) seat, see "(A) BABY (INFANT) SEAT INSTALLATION" on page 56.

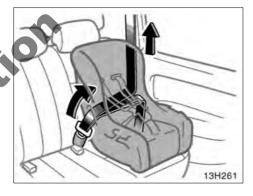
#### A CAUTION

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

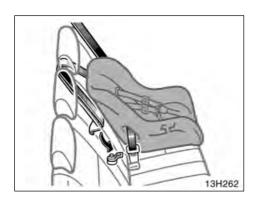


Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted even slightly, it cannot be extended.

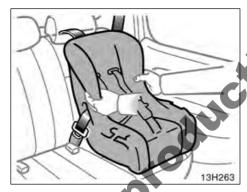
To hold the child (convertible) seat securely, make sure the belt is in the lock mode before letting the belt retract.



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

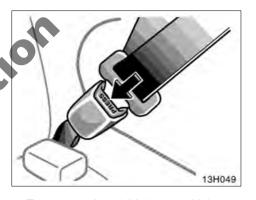


4. Attach the child restraint attaching clip to the child restraint anchor fitting. Make sure the clip is securely attached and tighten the upper anchorage strap. See "—Child restraint anchorages" on page 65 for instructions.



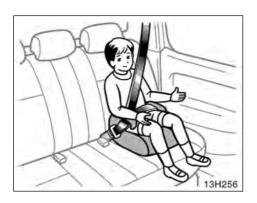
### A CAUTION

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



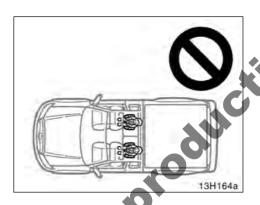
5. To remove the child (convertible) seat, press the buckle release button and allow the belt to retract completely. The belt will move freely again and be ready to work for an adult or older child passenger. Unhook the child restraint attaching clip from the child restraint anchor fitting.





(C) JUNIOR (BOOSTER) SEAT INSTALLATION

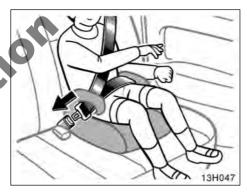
A junior (booster) seat must be used in forward-facing position only.



### **CAUTION**

### Extra-cab models:

Do not install a child restraint system on the rear seat. These seats are not designed to hold a child restraint system



To install the junior (booster) seat:

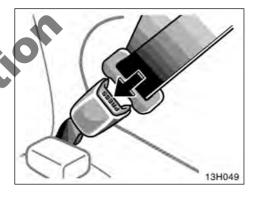
 Sit the child on a junior (booster) seat. Run the lap and shoulder belt through or around the junior (booster) seat and across the child following the instructions provided by its manufacturer and insert the tab into the buckle, taking care not to twist the belt.

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 36 for details.

### **CAUTION**

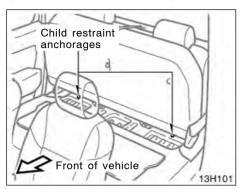
- Always make sure the shoulder belt is positioned across the center of child's shoulder. The belt should be kept away from child's neck, but not falling off child's shoulder. Otherwise, the child may be killed or seriously injured in case of sudden braking or a collision.
- Both high-positioned lap belts and loose-fitting belts could cause death or serious injuries due to sliding under the lap belt during a collision or other unintended event. Keep the lap belt positioned as low on a child's hips as possible.
- For child's safety, do not place the shoulder belt under child's arm.

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



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

# —Child restraint anchorages (on double-cab models)

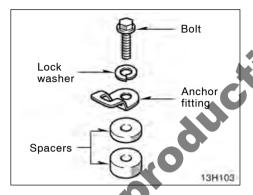


For easy installation of child restraints, your vehicle has two child restraint anchorages under the rear seat cushion.

When installing a child restraint, follow both the instructions here and those provided by the manufacturer of your child restraint.

### **!** CAUTION

WARNING: child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses or for attaching other items or equipment to the vehicle.

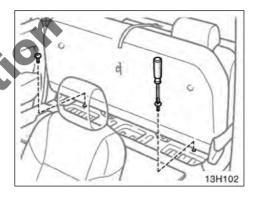


### CHILD RESTRAINT ANCHOR FITTING

You can purchase a child restraint anchor fitting package from your Toyota dealer.

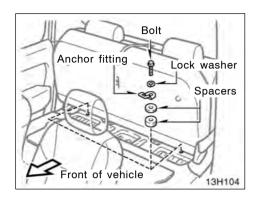
The anchor fitting package consists of:

- Bolt 5/16" 18 UNC × 30 mm (1.2 in.)
- Lock washer—1.6 mm (0.06 in.) thickness
- Anchor fitting—this conforms to ADR34/01.
- Spacers—5 mm (0.2 in.) and 10 mm (0.4 in.)



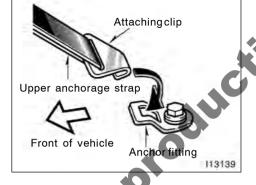
#### CHILD RESTRAINT ANCHORAGE

 Remove the plug immediately behind where the child restraint will be positioned on the rear seat.



Install a 5/16" 18 UNC × 30 mm (1.2 in.) bolt through the lock washer and anchor fitting. Tighten the bolt securely with the anchor fitting facing the front of the vehicle as shown.

Use a 5 mm (0.2 in.) or 10 mm (0.4 in.) spacer or both ones if necessary.



### ATTACHMENT OF THE ATTACHING CLIP

Attach the child restraint attaching clip to the child restraint anchor fitting. Make sure the clip is securely attached and tighten the upper anchorage strap.



### **A** CAUTION

- Make sure the seat belt is securely locked, 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.

# —Installation with 3-point type seat belt (ELR belt)

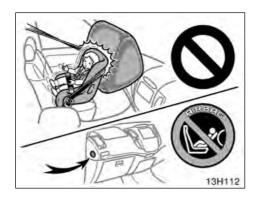


When installing a child restraint system, follow the instructions provided by its manufacturer.

Depending on the type of your child restraint system, you will need a locking clip to install a child restraint system properly. If your child restraint system does not

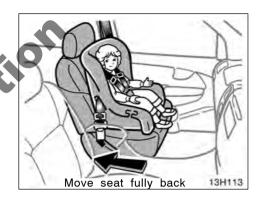
provide a locking clip, you can purchase one at your Toyota dealer. (See "—Child restraint system" on page 54.)



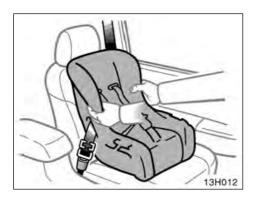


### **CAUTION**

• Extreme Hazard! Do not use a rearward facing child restraint on a seat protected by an airbag in front of it! This is because the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child. Vehicles with the front passenger airbag display a warning label on the passenger side instrument panel as shown above to remind you not to put a rear-facing child restraint system on the front passenger seat at any time.



- A forward-facing child restraint system should be allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible, because the front passenger airbag could inflate with considerable speed and force. Otherwise, the child may be killed or seriously injured.
- If child restraint system regulations exist in the country where you reside, please contact your Toyota dealer for the installation of the child restraint system in the front seat.



- 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.

 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.

# —Installation with 2-point type seat belt



### (A) BABY (INFANT) SEAT

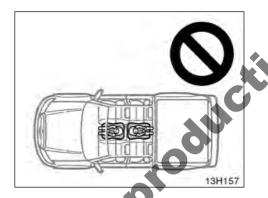
### / CAUTION

Do not install a baby (infant) seat in either the front center or rear center positions. These seat positions are not designed to hold a baby (infant) seat.



(B) CHILD (CONVERTIBLE) SEAT INSTALLATION

A child (convertible) seat must be used in forward-facing position only.



### **CAUTION**

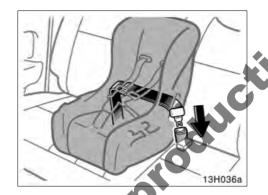
Vehicles with front bench seat:

Do not install a child (convertible) seat in the front center position. This seat position is not designed to hold a child (convertible) seat.

If used in the front center position, depending on its type, the child (convertible) seat may interfere with the proper usage of the driver's and front passenger's seat belts. It may also hamper your driving.

#### ● Double-cab models:

Do not install a rear-facing child (convertible) seat in the rear center position. This seat position is not designed to hold a rear-facing child (convertible) seat. Otherwise, the child or front seat occupant(s) may be killed or seriously injured in case of sudden braking or a collision.



### To install the child (convertible) seat:

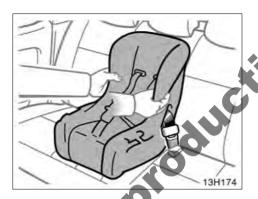
 Run the center lap belt through or around the child (convertible) seat following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the lap belt.

### (CAUTION

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

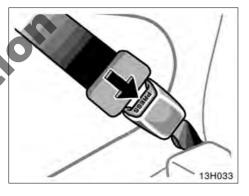


While pressing the child (convertible) seat firmly against the seat cushion and seatback, tighten the lap belt by pulling its free end to hold the child (convertible) seat securely.



### A CAUTION

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



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



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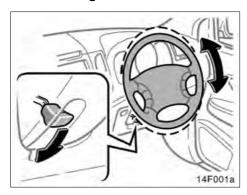
# SECTION 1-4

# OPERATION OF INSTRUMENTS AND CONTROLS

### Steering wheel and Mirrors

Tilt steering wheel	74
Outside rear view mirrors	74
Anti-glare inside rear view mirror	
Vanity mirror	77

### 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.

### **!** CAUTION

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

#### Outside rear view mirrors—

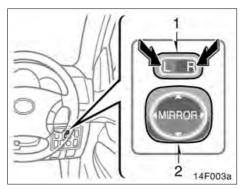


Adjust the mirror so that you can just see the side of your vehicle in the mirror.

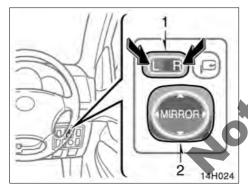
### A CAUTION

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

# —Power rear view mirror control (except for 2TR-FE engine\*)



Type A



Type B

#### **ADJUSTING MIRRORS**

To adjust a mirror, use the switches.

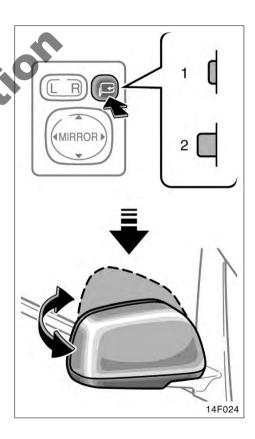
- Master switch—To select the mirror to be adjusted Push the switch at "L" (left) or "R" (right).
- Control switch—To move the mirror Push the switch in the desired direction.

The mirrors can be adjusted when the engine switch is in the "ACC" or "ON" position.

### NOTICE

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

\* If you are not sure of which model your vehicle is, see "Model code" on page vii in the beginning of this manual.



#### FOLDING MIRRORS (type B only)

To fold mirrors for parking in compact areas, push the mirror folding button.

The engine switch must be in the "ACC" or "ON" position.

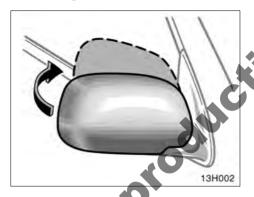
Position 1—To fold the mirrors Position 2—To return the mirrors back to their original positions



### **♠** CAUTION

- To avoid personal injury and any mirror malfunction, do not touch the mirror while it is moving.
- 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.

### -Folding rear view mirrors



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

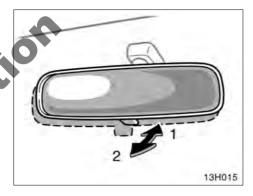
To fold the rear view mirror, push backward.



### A CAUTION

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

### Anti-glare inside rear view mirror



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

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

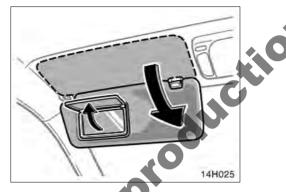
Remember that by reducing glare you also lose some rear view clarity.



### A CAUTION

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

### Vanity mirror



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

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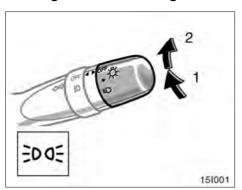
# SECTION 1-5

# OPERATION OF INSTRUMENTS AND CONTROLS

## Lights, Wipers and Defogger

Headlights and turn signals	30
Emergency flashers	31
Instrument cluster light control	
Front driving lights	32
Interior light	33
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Engine (ignition) switch light	33
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### Headlights and turn signals



#### **HEADLIGHTS**

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

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

On some models—The tail light indicator (green light) on the instrument panel will tell you that the tail lights are on.

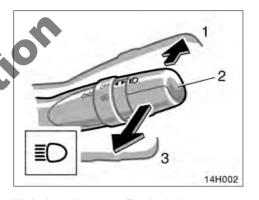
Position 2—Headlights and all of the above

#### 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 left on.

### **NOTICE**

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

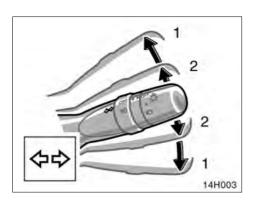


**High-Low beams**—For high beams, turn the headlights on and push the lever away from you (position 1). Pull the lever toward you (position 2) for low beams.

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.

The headlight flasher works even when the headlight switch is off.



#### **TURN SIGNALS**

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

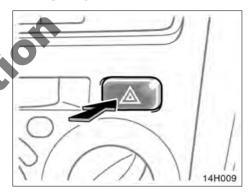
The engine switch must be in the "ON" position.

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 275.

### **Emergency flashers**



## To turn on the emergency flashers, push the switch.

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

Turn on the emergency flashers to warn other drivers if your vehicle must be stopped where it might be a traffic hazard.

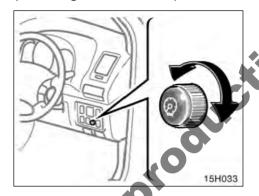
Always pull as far off the road as possible.

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

### NOTICE

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

# Instrument cluster light control (on SR grade models\*)

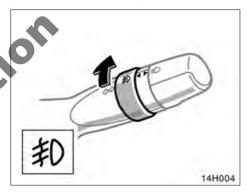


### To adjust the brightness of the instrument cluster light, turn the knob.

When the headlight switch is on, the brightness of the instrument cluster lights is reduced. However, turning the control knob clockwise (to the brightest setting) will prevent this.

t If you are not sure of which model your vehicle is, see "Model code" on page vii in the beginning of this manual.

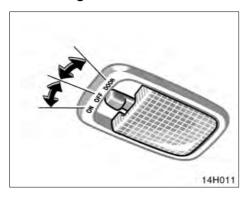
# Front driving lights (on some models)



To turn on the front driving lights, twist the band of the headlight/turn signal lever when the tail lights and/or headlights are turned on.

The front driving light indicator light on the instrument panel will tell you that the front driving lights are on.

### Interior light



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

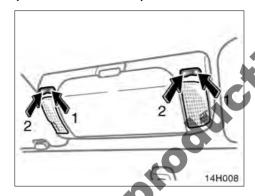
The interior light switch has the following positions:

"ON"—Keeps the light on all the time.

"OFF"—Turns the light off.

"DOOR"—Turns the light on when any door is opened.

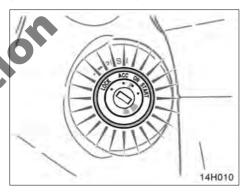
# Personal lights (on some models)



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

The lights operate separately with each outer switch.

# Engine (ignition) switch light (on some models)



### Type A-

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

The light remains on for about 7.5 seconds after all the doors are closed.

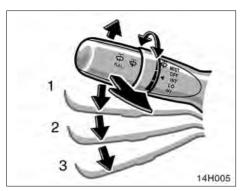
It goes off immediately when the engine switch is turned to the "ON" position or when all the doors are locked.

### Type B-

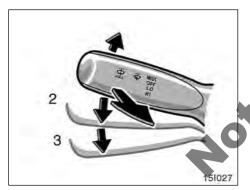
For easy access to the engine switch, the engine switch light comes on when driver's door is opened.

The light remains on for about 5 seconds after driver's door is closed.

# Windshield wipers and washer



Type A



Type B

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

The engine switch 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.

### Type A only-

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

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

# To spray washer fluid, pull the lever toward you.

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

For instructions on adding washer fluid, see "Adding washer fluid" on page 274.

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.

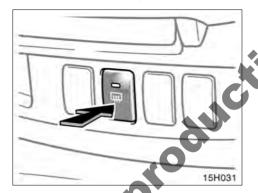
#### NOTICE

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 defogger (on some models)



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

The engine switch 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.

#### **NOTICE**

- When cleaning the inside of the rear window, be careful not to scratch or damage the heater wires or connectors.
- ◆ To prevent the battery from being discharged, turn the switch off when the engine is not running.



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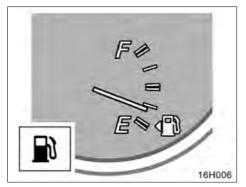
# SECTION 1-6

# OPERATION OF INSTRUMENTS AND CONTROLS

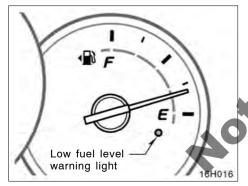
### Gauges, Meters and Service reminder indicators

Fuel gauge	88
Engine coolant temperature gauge	88
Tachometer	
Odometer and two trip meters	
Service reminder indicators and warning buzzers	91

### Fuel gauge



With tachometer



Without tachometer

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

Nearly full—Needle at "F"

Nearly empty-Needle at "E"

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

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

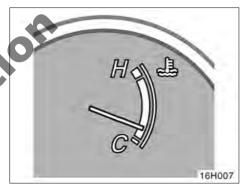
On inclines or curves, due to the movement of fuel in the tank, the fuel gauge needle may fluctuate or the low fuel level warning light may come on earlier than usual.

On some models-

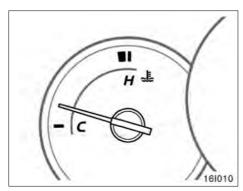
If the fuel tank is completely empty, the malfunction indicator lamp comes on. Fill the fuel tank immediately.

The indicator lamp goes off after driving several times. If the indicator lamp does not go off, contact your Toyota dealer as soon as possible.

# Engine coolant temperature gauge



With tachometer



Without tachometer

The gauge indicates the engine coolant temperature when the engine switch is on. The engine operating temperature will vary with changes in weather and engine load.

If the needle points to the red zone or higher, stop your vehicle and allow the engine to cool.

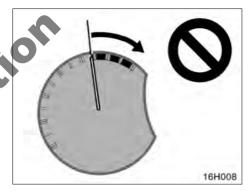
Your vehicle may overheat during severe operating conditions, such as:

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

### **NOTICE**

- ◆ Do not remove the thermostat in the engine cooling system as this may cause the engine to overheat. The thermostat is designed to control the flow of coolant to keep the temperature of the engine within the specified operating range.
- ◆ Do not continue driving with an overheated engine. See "If your vehicle overheats" on page 215.

# Tachometer (on some models)



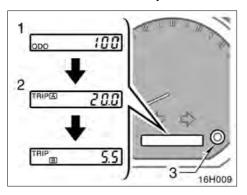
The tachometer indicates engine speed in thousands of rpm (revolutions per minute). Use it while driving to select correct shift points and to prevent engine lugging and over-revving.

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

#### **NOTICE**

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

### Odometer and two trip meters



## This meter displays the odometer and two trip meters.

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

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

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

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

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

### Service reminder indicators and warning buzzers

If th	e indicator or buzzer comes on	Do this.
(a)	<b>(</b> )	If parking brake is off, stop immediately and contact Toyota dealer.
(b)	(indicator and buzzer)	Fasten driver's seat belt.
(c)	PASSENGER	Fasten front passenger's seat belt.
(d)	= +	Stop immediately and contact Toyota dealer.
(e)	م <del>ي</del> ا	Stop and check.

If th	ne indicator or buzzer comes on	Do this.
(f)	<b>₩</b>	Take vehicle to Toyota dealer.
(g)	or 😜	Fill up tank.
(h)	(ABS)	Take vehicle to Toyota dealer.
(i)	<b>₽</b>	Close all doors
(j)	<b>%</b>	Take vehicle to Toyota dealer immediately.
(k)	T-BELT	Take vehicle to Toyota dealer.

If th	e indicator or buzzer comes on	Do this.
(1)	1::::1	Take vehicle to Toyota dealer. If flashing, drain water.*
(m)	A/T P	Shift four-wheel drive control out of "N".
(n)	A/T OIL TEMP	Stop and check.
(0)	Key reminder buzzer	Remove key.
(p)	Light reminder buzzer	Turn off the lights.

<sup>\*:</sup> For instruction on draining fuel filter water, see "Draining fuel filter water" on page 261.

### (a) Brake System Warning Light

This light comes on in the following cases when the engine switch 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 engine switch 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.

When vacuum is low (diesel engine)...

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

 The light does not come on even if the parking brake is applied when the engine switch is in the "ON" position.

Vehicles with anti-lock brake system-

 The light does not come on even if the engine switch is turned to the "ON" position with the parking brake released.

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

### **CAUTION**

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

## (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 engine switch is turned to "ON", the reminder light flashes if the driver's seat belt is not fastened.

The reminder light continues flashing until the driver fastens the seat belt.

If the vehicle speed rises above 15 km/h (9 mph) without the belt fastened, a buzzer sounds.

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

The light acts as a reminder to have the front passenger buckle up the seat belt.

Once the engine switch is turned to "ON", the reminder light flashes if a passenger sits in the front passenger seat and does not fasten the seat belt. Unless the front passenger fastens the belt, the light continues flashing.

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

#### (d) Charging System Warning Light

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

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

#### **NOTICE**

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

### (e) Low Engine Oil Pressure Warning Light

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

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

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

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

### NOTICE

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

### (f) Malfunction Indicator Lamp

Some models—

This lamp warns that there is a problem somewhere in the engine electrical system, electronic engine control system.

If it comes on while you are driving, have your vehicle checked/repaired by your Toyota dealer as soon as possible.

Others-

This lamp comes on in the following cases.

- There is a problem somewhere in your engine, automatic transmission electrical system or electronic throttle control system.
- b. The fuel tank is completely empty. (See "Fuel gauge" on page 88 for instructions.)

If it comes on while you are driving in case a, have your vehicle checked/repaired by your Toyota dealer as soon as possible.

If this lamp comes on and engine speed does not increase when the accelerator pedal is depressed, there may be a problem somewhere in the electronic throttle control system (gasoline engine) or electronic engine control system (diesel engine).

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 in the electronic throttle control system (gasoline engine) or electronic engine control system (diesel engine) is corrected during low speed driving, the system may not be recovered until the engine is stopped and the engine switch is turned to the "ACC" or "LOCK" position.



Gasoline engine:

Be especially careful to prevent erroneous pedal operation.

### Diesel engine only-

This light warns that the boost pressure in the turbocharger is abnormally high.

If it comes on while driving, slow down until the light goes out, and have your vehicle checked by your Toyota dealer as soon as possible.

### **NOTICE**

Never drive at high speed or race the engine even after the light goes out.

### (g) Low Fuel Level Warning Light

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

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

## (h) "ABS" Warning Light on some models)

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

When the "ABS" warning light is on, 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, but the brake system still operates conventionally.

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 engine switch is turned to the "ON" position, or remains on.
- The light comes on while you are driving.

### (i) Open Door Warning Light

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

### (j) SRS Warning Light

This indicator comes on when the engine switch is turned to the "ON" position. It goes off after about 6 seconds. This means the SRS airbags and seat belt pretensioners are operating properly.

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

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

- The light does not come on when the engine switch is turned to the "ON" position or remains on for more than 6 seconds.
- The light comes on while driving.

### (k) Timing Belt Replacement Warning Light (diesel engine)

This light will come on every time when the trip amount gets 150000 km in kilometer reading or 90000 miles in mile reading to indicate that the timing belt should be replaced. When it comes on, have the belt replaced immediately and the warning light reset by your Toyota dealer.

### **NOTICE**

Continued driving without having the belt replaced will result in a broken belt and engine damage.

# (I) Fuel System Warning Light (diesel engine)

The light has two modes:

When the light flashes, it warns that the amount of accumulated water in the fuel filter has reached the specified level.

In this case, drain the water immediately. (See page 261 for instructions for how to drain the water.)

When the light comes on, it warns that there may be a problem with the fuel system.

In this case, have your vehicle checked and the warning light reset by your Toyota dealer as soon as possible.

#### **NOTICE**

Never drive the vehicle with the warning light flashing. Continued driving with water accumulated in the fuel filter will damage the fuel injection pump.

# (m) Unengaged "Park" Warning Light (on some models with automatic transmission)

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



To restore the park function, shift the front drive control lever out of "N", or the vehicle can move.

#### (n) Automatic Transmission Fluid Temperature Warning Light (on some models with automatic transmission)

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

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

#### NOTICE

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

#### (o) Key Reminder Buzzer

This buzzer acts as a reminder to remove the key when you open the driver's door with the engine switch 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 engine switch.

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

- 1. Apply the parking brake.
- Open one of the doors. The open door warning light should come on.
- Close the door. The open door warning light should go off.
- 4. Turn the engine switch to "ON", but do not start the engine.
  All the service reminder indicators except the open door warning light should

come on. If equipped, the "ABS" warning light, the timing belt replacement warning light and the fuel system warning light go off after a few seconds. The SRS warning light goes off after about 6 seconds.

- Four-wheel drive models with automatic transmission only: Place the front drive control lever in "N" position and the selector lever in "P" position.
   The unengaged "Park" warning light should come on.
- Four-wheel drive models with automatic transmission only: Shift the front drive control lever out of "N".
   The unengaged "Park" warning light should go off.

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.

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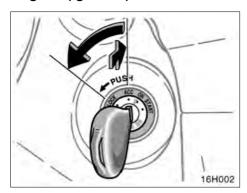
# <u>SECTION</u> **1**-7

# OPERATION OF INSTRUMENTS AND CONTROLS

## Engine (ignition) switch, Transmission and Parking brake

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Parking brake	
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### Engine (ignition) switch



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

For starting tips, see page 192.

"ON"—Engine on and all accessories on.

Diesel engine only: Before starting, glow plugs on and engine preheated.

This is the normal driving position.

"ACC"—Accessories such as the radio operate, but the engine is off.

If you leave the engine switch 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 engine switch 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.

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

When starting the engine, the engine switch 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.

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



For manual transmission:

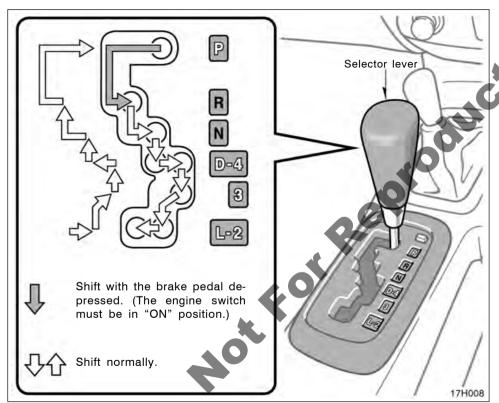
Never remove the key when the vehicle is moving, as this will lock the steering wheel and result in loss of steering control.

#### **NOTICE**

Do not leave the engine switch in the "ON" position if the engine is not running. The battery will discharge and the electronic ignition system (gasoline engine only) could be damaged.

#### **Automatic transmission**

#### ▶5-speed models



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

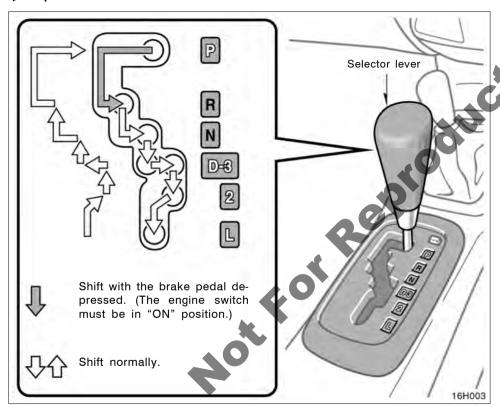
#### (a) Selector lever

On some models-

The shift position is displayed on the instrument cluster

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

#### ▶4-speed models



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

#### (a) Selector lever

On some models-

The shift position is displayed on the instrument cluster.

- **P:** Parking, engine starting and key removal position
- 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

#### (b) Normal driving

 Start the engine as instructed in "How to start the engine" on page 192. The transmission must be in "P" or "N".

When the front drive control lever is in "L4" (low-speed position, four-wheel drive), the driving pattern selector setting has no effect on gear shift timing. (See "Four-wheel drive system" on page 111 for information of the front drive control.)

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 or when the front drive control lever is in "L4" (low speed position, four-wheel drive), the transmission will not shift into the over-drive gear even in the "D" position. (See "Four-wheel drive system" on page 111 for information of the front drive control.)



Never put your foot on the accelerator pedal while shifting.

 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:

#### 5-speed models:

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

Two-wheel drive models

121 km/h (75 mph)

Four-wheel drive models

Front drive control lever

"H2" or "H4" 133 km/h (83 mph)

"L4" 51 km/h (32 mph)

Shift into the "2" position. The transmission will downshift to second gear when the vehicle speed drops down to or lower than the following speed, and stronger engine braking will be enabled.

Two-wheel drive models

82 km/h (51 mph)

Four-wheel drive models

Front drive control lever

"H2" or "H4" 90 km/h (56 mph) "L4" 35 km/h (22 mph)

Shift into the "L" position. The transmission will downshift to first gear when the vehicle speed drops down to or lower than the following speed, and maximum engine braking will be enabled.

Two-wheel drive models

35 km/h (22 mph)

Four-wheel drive models

Front drive control lever

"H2" or "H4" 38 km/h (24 mph

"L4" 14 km/h (9 mph)

Vehicles with cruise control—When the cruise control is being used, even if you downshift from "D" to "4", engine braking will not be enabled because the cruise control is not canceled.

For ways to decrease the vehicle speed, see "Cruise control" on page 114.



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

#### 4-speed models:

- 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 following speed, and stronger engine braking will be enabled

Two-wheel drive models

102 km/h (63 mph)

Four-wheel drive models

Front drive control lever

"H2" or "H4" 92 km/h (57 mph) "L4" 35 km/h (22 mph)

Shift into the "L" position. The transmission will downshift to first gear when the vehicle speed drops down to or lower than following speed, and maximum engine braking will be enabled.

Two-wheel drive models

49 km/h (30 mph)

Four-wheel drive models

Front drive control lever

"H2" or "H4" 57 km/h (35 mph) "L4" 22 km/h (14 mph) Vehicles with cruise control—When the cruise control is being used, even if you downshift from "D" to "3", engine braking will not be enabled because the cruise control is not canceled.

For ways to decrease the vehicle speed, see "Cruise control" on page 114.



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

## (d) Using "3", "2" and "L" positions (5-speed models)

The "3", "2" and "L" positions are used for strong engine braking as described previously.

With the selector lever in "3", "2" or "L" you can start the vehicle in motion as with the lever in "D".

With the selector lever in "3" and "2", the vehicle will start in first gear and automatically shift to third or second gear.

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

### NOTICE

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

km/h (mph)

Two-wheel drive models

<i>"3"</i>	(83)
<i>"2"</i> 91	
"1" 53	(33)

#### Four-wheel drive models

		Trans	fer	
<b>)</b> '	"H2" o	r "H4"		"L4"
"3"	147	(91)	<i>57</i>	(35)
"2"	101	(63)	39	(24)
"L"	58	(36)	23	(14)

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

## (e) Using the "2" and "L" positions (4-speed models)

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.

km/h (mph)

Two-wheel drive models

Four-wheel drive models

Trans r "H4"	fer	"L4"
		(25) (14)
	(64)	Transfer "H4" (64) 40 (35) 22

◆ 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, "3" position should be used in hill climbing or hard towing.

#### (f) Backing up

- 1. Bring the vehicle to a complete stop.
- 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.

#### (g) Parking

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

### **CAUTION**

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.



#### (h) Good driving practice

- If the transmission repeatedly shifts up and down between fourth (5-speed models) or third (4-speed models) gear and overdrive when climbing a gentle slope, shift the selector lever to the "4" (5-speed models) or "3" (4-speed models) 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 "4" (5-speed models) or "3" (4-speed models) position.

## **↑** CAUTION

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

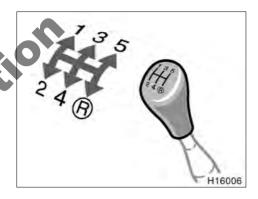
#### **NOTICE**

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

## (i) 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" button. For instructions, see "If you cannot shift automatic transmission selector lever" on page 233.

#### **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.

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 speed in each gear:

#### Two-wheel drive models

1GR-FE engine

gear	km/h	(mph)
1	49	(30)
2	91	(57)
3	130	(81)
4	180	(112)

2TR-FE engine

gear	km/h	(mph
1	43	(27)
2	81	(50)
3	116	(72)
4	166 (	103)

#### 1KD-FTV engine

gear	km/h	(mph)
1	35	(22)
2	64	(40)
3	104	(65)
4	150	(93)

#### Four-wheel drive models

1GR-FE engine

gear	km/h (i "H2" and "H4"		L4"
1	54 (34)	21	(13)
2	100 (62)	39	(24)
3	143 (89)	56	(35)
4	180 (112)	80	(50)

1KD-FTV engine

With 205R16C tires

gear		km/h (	mph)	
4	"H2" an	d "H4"	"!	L4"
1	38	(24)	15	(9)
2	71	(44)	28	(17)
3	114	(71)	45	(28)
4	164	(102)	64	(40)
ith 255/70	R15C tire	96		

With 255/70R15C tires

gear		km/h (	mph)	
	"H2" and	d "H4"	"	L4"
1	38	(24)	15	(9)
2	71	(44)	28	(17)
3	115	(71)	45	(28)
4	165	(103)	64	(40)

#### **NOTICE**

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

# Four-wheel drive system (on some models)— (a) Front drive control

#### Good driving practice

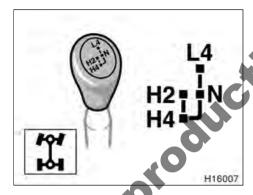
- If it is difficult to shift into reverse, put the transmission in neutral, release the clutch pedal momentarily, and then try again.
- When towing a trailer, in order to maintain engine braking efficiency, do not use fifth gear.



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

#### **NOTICE**

- Do not use any gears other than first gear when starting off and moving forward. Doing so may damage the clutch.
- ♦ Make sure the vehicle is completely stopped before shifting into reverse.



Use the front drive control lever to select the following transfer modes.

"H2" (high speed position, two-wheel drive): Lever at "H2"

Use this for normal driving on dry hardsurfaced roads. This position gives greater economy, quietest ride and least wear.

"H4" (high speed position, four-wheel drive): Lever at "H4"

Use this for driving only on tracks that permit the tires slide, like off-road, icy or snow-covered roads. This position provides greater traction than two-wheel drive.

"N" (neutral position): Lever at "N" No power is delivered to the wheels. The vehicle must be stopped.

"L4" (low speed position, four-wheel drive): Lever at "L4"

Use this for maximum power and traction. Use "L4" for climbing or descending steep hills, off-road driving, and hard pulling in sand, mud or deep snow.

The four-wheel drive indicator light comes on when the "H4", "N" or "L4" mode is selected.

See "(c) Shifting procedure" for further instructions.

### (b) A.D.D. (on some models)

The A.D.D. (automatic disconnecting differential) can be engaged or disengaged by the shifting operations described in "(c) Shifting procedure".

You should drive in four-wheel drive for at least 16 km (10 miles) each month. This will assure that the front drive components are lubricated.

## (c) Shifting procedure (with automatic transmission)

#### SHIFTING BETWEEN "H2" AND "H4"

To shift from "H2" to "H4", reduce your speed to less than 80 km/h (50 mph) and move the front drive control lever.

If you have trouble shifting in cold weather, reduce your speed or stop the vehicle and reshift.

## **CAUTION**

Never move the front drive control lever if wheels are slipping. Stop the slipping or spinning before shifting.

To shift from "H4" to "H2", simply move the front drive control lever.

This can be done at any vehicle speed.

If the indicator light does not go off when you shift the transfer into "H2", drive straight ahead while accelerating or decelerating, or drive in reverse.

#### SHIFTING BETWEEN "H4" AND "L4"

Stop the vehicle, put the transmission into "N" and move the front drive control lever.

## (c) Shifting procedure (with manual transmission)

#### SHIFTING BETWEEN "H2" AND "H4"

**To shift from "H2" to "H4"**, reduce your speed to less than 80 km/h (50 mph) and move the front drive control lever. You need not depress the clutch pedal.

If you have trouble shifting in cold weather, reduce your speed or stop the vehicle and reshift.

## **CAUTION**

Never move the front drive control lever if wheels are slipping. Stop the slipping or spinning before shifting.

To shift from "H4" to "H2", simply move the front drive control lever.

This can be done at any vehicle speed. You need not depress the clutch pedal.

If the indicator light does not go off when you shift the transfer into "H2", drive straight ahead while accelerating or decelerating, or drive in reverse.

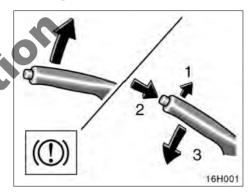
#### SHIFTING BETWEEN "H4" AND "L4"

To shift from "H4" to "L4", stop the vehicle or reduce your speed to less than 8 km/h (5 mph). With your foot off the accelerator pedal, depress the clutch pedal and move the front drive control lever.

To shift from "L4" to "H4", depress the clutch pedal and move the front drive control lever.

This can be done at any vehicle speed.

### Parking brake



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

To set: Pull up the lever. For better holding power, first depress the brake pedal and hold it while setting the parking brake.

To release: Pull up the lever slightly (1), press the lock release button (2), and lower (3).

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

## / CAUTION

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

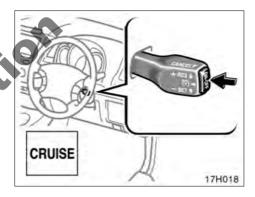
#### Cruise control (on some models)

The cruise control is designed to maintain a set cruising speed without requiring the driver to operate the accelerator. Cruising speed can be set to any speed above 40 km/h (25 mph).

Within the limits of the engine's capabilities, cruising speed can be maintained up or down grades. However, changes in vehicle speed may occur on steeper grades.

## A CAUTION

- To help maintain maximum control of your vehicle, do not use the cruise control when driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads.
- Avoid vehicle speed increases when driving downhill.
- Do not use the cruise control when towing a trailer. There is a possibility that the load of the trailer could affect the cruise control functionality, which may cause loss of control or an accident.



#### TURNING THE SYSTEM ON AND OFF

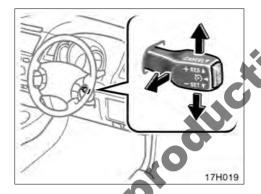
To turn the cruise control on, press the "ON-OFF" button. The "CRUISE" indicator light on the instrument panel will come on to indicate that the cruise control is operational. Pressing the "ON-OFF" button again turns the system off.

When the system is turned off, cruising speed must be reset when the cruise control is turned on again.



## (CAUTION

To avoid accidentally engaging the cruise control, turn the system off when it is not in use. Make sure the "CRUISE" indicator light is off.



#### SETTING THE CRUISING SPEED

Vehicles with automatic transmission—The transmission must be in "D" or "4" (5-speed automatic transmission) or "3" (4-speed automatic transmission) before you set the cruising speed.

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

If the speed is not satisfactory, tap the lever up for a faster speed, or tap it down for a lower speed. Each tap changes the set speed by 1.6 km/h (1.0 mph). You can now take your foot off the accelerator pedal.

If you need acceleration—for example, when passing—depress the accelerator pedal enough for the vehicle to exceed the set speed. When you release it, the vehicle will return to the speed set prior to the acceleration.

#### CANCELING THE CRUISE CONTROL

The cruise control may be temporarily canceled by the driver or by the system itself under certain circumstances. Temporary cancellation allows the set cruising speed to remain in memory.

The cruise control can be temporarily canceled by doing the following:

- Pulling the lever in the "CANCEL" direction and releasing it
- Depressing the brake pedal
- Depressing the clutch pedal

Under certain circumstances, the cruise control is temporarily canceled. When vehicle speed falls below 40 km/h (25 mph).

When vehicle speed drops 16 km/h (10 mph) below the set speed, the cruise control is canceled and the set speed is erased from memory.

The "CRUISE" indicator light remains on to indicate that the system is still in operation.

To turn the cruise control off, press the "ON-OFF" button. Make sure the "CRUISE" indicator light is off.

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

#### RESUMING THE CRUISE CONTROL

If the cruise control is temporarily canceled, the cruising speed can be resumed by pushing the lever up in the "+RES" direction.

Vehicle speed must be above 40 km/h (25 mph).

#### RESETTING TO A FASTER SPEED

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

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

#### RESETTING TO A SLOWER SPEED

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

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

Vehicles with automatic transmission—Even if you downshift the transmission from "D" to "4" (5-speed automatic transmission) or "3" (4-speed automatic transmission) with the cruise control on, engine braking will not be applied because the cruise control is not canceled. To decrease the vehicle speed, reset to a lower speed with the cruise control lever or depress the brake pedal. If you use the brake pedal, cruise control is canceled.

#### CRUISE CONTROL FAILURE WARNING

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

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

- The indicator light does not come on.
- The indicator light flashes again.
- The indicator light goes out after it comes on.

If this is the case, contact your Toyota dealer and have your vehicle inspected.

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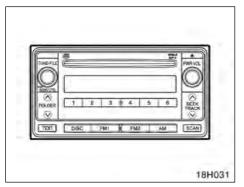
# SECTION 1-8

# OPERATION OF INSTRUMENTS AND CONTROLS

### Audio system

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Audio system operating hints	141

#### Reference



Type 1: AM·FM radio/compact disc player/ MP3·WMA player (with compact disc changer controller)



Type 2: AM·FM radio/cassette player/compact disc player with changer/MP3 player

## 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 engine switch is in the "ACC" or "ON" position.

#### TURNING THE SYSTEM ON AND OFF

Push the "PWR·VOL" knob to turn the audio system on and off.

Push the "AM", "FM", "FM1", "FM2", "TAPE" or "DISC" button to turn on that function without pushing the "PWR·VOL" knob.

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

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

#### SWITCHING BETWEEN FUNCTIONS

Push the "AM", "FM", "FM1", "FM2", "TAPE" or "DISC" button 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.





The audio system with ID number\* 12881 utilizes SRS FOCUS® and SRS TruBass® audio enhancement technologies, under license from SRS Labs, Inc., in all modes except AM radio mode.

FOCUS, TruBass, SRS and (•) symbols are trademarks of SRS Labs, Inc.
FOCUS and TruBass technologies are incorporated under ligense from SRS Labs. Inc.

the audio ID number is shown above the upper right corner of the display.

#### Tone

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

#### Balance

A good balance of the left and right stereo channels and of the front and rear sound levels is also important.

Keep in mind that if you are listening to a stereo recording or broadcast, changing the right/left balance will increase the volume of one group of sounds while decreasing the volume of another.

#### YOUR RADIO ANTENNA

To lower a manual antenna, carefully push it down.

#### **NOTICE**

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

#### YOUR CASSETTE PLAYER (type 2)

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 (type 1)

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

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

## YOUR COMPACT DISC PLAYER WITH CHANGER (type 2)

When you insert a disc, push the "LOAD" button and gently push the disc in with the label side up. The compact disc player will play from track 1 to the end of the disc. Then it will play from track 1 of the next disc.

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



#### **NOTICE**

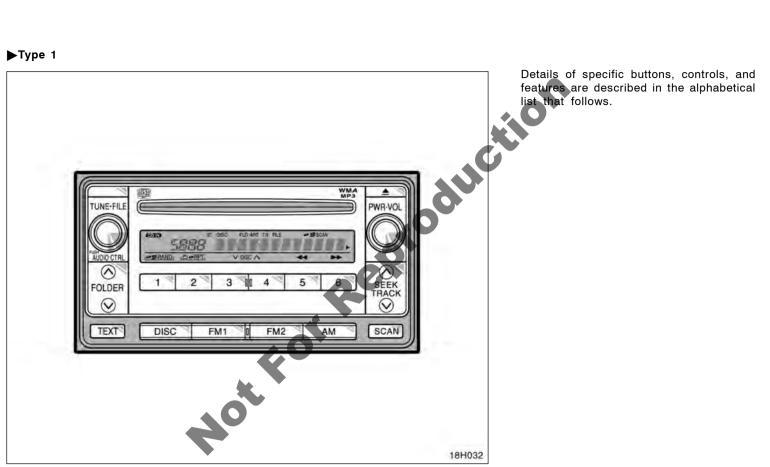
- ◆ Do not stack up two discs for insertion, or it will cause damage to the compact disc player. Insert only one compact disc into the slot at a time.
- Never try to disassemble or oil any part of the compact disc player. Do not insert anything other than compact discs into the slot.

#### YOUR MP3/WMA PLAYER

MP3/WMA files specifications or media formats registering their specifications which your MP3/WMA player can operate are limited. For details, see page 144.

Reproduction Action

### ▶Type 1



#### 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·FILE" 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 preset 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 the "AM", "FM1" or "FM2" button.)

#### (Eject button)

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

### **◄/▶** (Reverse/Fast-forward buttons)

Push and hold "▶▶" button (preset button 6) or "◄◄" button (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 CTRL (Tone and sound balance controls)

Each time you push the "AUDIO CTRL" 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 R7 to F7.

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

## Switching over the Speed Automatic Sound Levelizer (ASL) level

ASL: The Automatic Sound Levelizer can be turned on by turning the knob. In addition, turning the knob allows you to select from LOW, MID, and HIGH volume and tone settings. The ASL system automatically adjusts volume and tone in accordance with the driving speed. This helps ensure an optimal listening experience even if noise levels rise while driving.

#### ∨ DISC ∧

With compact disc changer only-

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

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

#### DISC (Compact disc)

Push the "DISC" button to play a compact disc.

When the audio system is set to compact disc operation, the display shows the track 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 the 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 the separate unit is open. Close the compact disc changer lid.

If "NO MUSIC" appears on the display, it indicates that a 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 exist, take your vehicle to your Toyota dealer.

#### 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.

#### FOLDER (Folder up/down)

To skip up or down to a different folder: Push the " $\land$ " or " $\lor$ " side of the "FOLD-ER" button 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 the "V" side of the button until you hear a beep.

When playing a disc featuring both audio data (CD-DA) and MP3/WMA files, audio data (CD-DA) is played.

#### PWR·VOL (Power and Volume)

Push the "PWR·VOL" knob to turn the audio system on and off. Turn the "PWR·VOL" knob 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 disc in the magazine in random order.

Random playing for the tracks on a disc: Quickly push and release the "RAND" button (preset button 1). "L RAND" 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— Random playing for all the tracks in the magazine:

Push and hold the "RAND" button (preset button 1) until you hear a beep.
"

"

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

#### MP3/WMA Player

There are two random playback features— You can either listen to all the files on the compact disc in random order, or listen to the files in a single folder in random or der.

Random playing for the files in a folder? Quickly push and release the "RAND" button (preset button 1). "L RAND," will appear on the display.

Random playing for all the files on the compact disc:

Push and hold the "RAND" button (preset button 1) until you hear a beep.

"RAND" will appear on the display and the player will play all the files on the disc in random order. To turn off the random playback feature, push this button again.

#### RPT (Repeat)

#### 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 the "RPT" button (preset button 2) while the track is playing. "\_\_\_RPT\_" will appear on the display. When the track ends, it will automatically replay. To turn off the repeat feature, push this button again.

With compact disc changer only-

Repeating a disc:

Push and hold the "RPT" button (preset button 2) until you hear a beep. "

"RPT" will appear on the display. The player will repeat all the tracks on the disc you are listening to. When the disc ends, the player will automatically go back to the first track on the disc and replay. To turn off the repeat feature, push this button again.

#### MP3/WMA Player

There are two repeat features—You can either repeat a single file or an entire folder.

Repeating a file:

Quickly push and release the "RPT" button (preset button 2) while the file is playing. "\_\_\_\_RPT\_\_" will appear on the display. When the file ends, it will repeat automatically. To turn off the repeat feature, push this button again.

Repeating a folder:

Push and hold the "RPT" button (preset button 2) until you hear a beep. "I RPT" will appear on the display. The player will repeat all the files in the folder. When the final file in the folder ends, the folder will repeat from the beginning. 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.

Scanning 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.

Scanning 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 and hold 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 scanned all the tracks on the disc, it will stop scanning.

#### MP3/WMA Player

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

Scanning the files in a folder:

Quickly push and release the "SCAN" button. "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 the "SCAN" button again. After all the files in the folder have been scanned in one pass, normal play resumes.

Scanning the first file of all the folders: Push and hold the "SCAN" button 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" button again. After all the folders have been scanned in one pass, normal play resumes.

#### SEEK/TRACK (Seeking/Tracking 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 the "\" or "\" 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 the "\" or "\" 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 "\" side of the button once.

#### MP3/WMA Player

To file up or down to a different file: Push the "\" or "\" side of the "SEEK/TRACK" button 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, quickly push the "\" side of the button once.

To fast forward or reverse the disc: If you want to fast forward or reverse the disc, push and hold the " $\wedge$ " or " $\vee$ " side of the "SEEK/TRACK" button 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" button while the compact disc is playing. The display changes in the order from the elapsed time to disc title to track title, then back to the elapsed time.

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

If the entire disc or track title does not appear on the display, push and hold the button until you hear a beep. The rest of the title will appear.

#### 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" button 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 to track title to artist name, then back to the elapsed time.

If this button is pushed while an 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 the button until you hear a beep. The rest of the text data will appear.

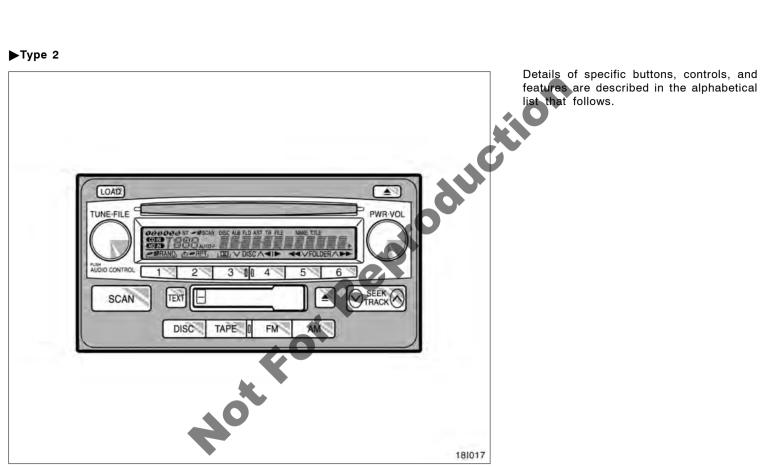
## TUNE-FILE (Tuning and File up/down) Radio

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.

### ▶Type 2



#### 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 "FM".)

### (Eject button)

## Cassette tape

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

#### Compact disc

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

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

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

After you turn the ignition to "LOCK", you will be able to eject one compact disc only or all the discs loaded in the changer, but you will not be able to reinsert it or them.

### **∢I** (Program)

Push "\[ \bar{\colored} \bar{\colored} \bar{\colored} \bar{\colored} \bar{\colored} \bar{\colored} \] to select the other side of a cassette tape. The display indicates which side is currently selected ("\( \bar{\colored} \bar{\col

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)

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.

#### $\Delta M$

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

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

#### **AUDIO CONTROL**

#### Manual tone adjustment function-

This knob is used to adjust the tone manually.

For low-pitch tone adjustment, push "AUDIO CONTROL" 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 "AUDIO CONTROL" 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 "AUDIQ CONTROL" 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 "AUDIO CONTROL" 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".

#### Sound field adjustment—

To adjust the sound field, push "AUDIO CONTROL" until "EQ" appears on the display. Then turn the knob to select "COMPACT", "SEDAN" or "MINIVAN".

#### DISC

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

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

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

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

If "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 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 "NO DATA DISC" appears on the display, it indicates that a disc with no mp3 data has been inserted. Remove the disc from the player and insert a mp3 data disc.

### DISC VA

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> □□ B NR\*

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

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

### FΜ

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

# 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 "\" side of the button until you hear a beep.

To switch between audio data (CD-DA) and MP3 files: Push and hold "\" side of the button when playing a disc with audio data (CD-DA) and MP3 files such as CD-EXTRA and MIXED-MODE CD, both types can be played only by switching between MP3 files and audio data (CD-DA).

When playing a disc featuring both audio data (CD-DA) and MP3 files, audio data (CD-DA) is played first.

### LOAD

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

The engine switch must be in the "ACC" or "ON" position.

Loading one compact disc only-

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

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

<sup>\*:</sup> Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double D symbol □□ are trademarks of Dolby Laboratories Licensing Corporation.

Loading multiple compact discs-

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

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

# PWR-VOL (Power and Volume)

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 all the compact discs in the magazine in random of der, 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 this button again.

Random playing for all the tracks in the magazine:

Push and hold "RAND" until you hear a beep "PRAND" 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 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 in a folder: Quickly push and release "RAND".

"L RAND," will appear on the display.

To randomly play all the files on the compact disc:

Push and hold "RAND" until you hear a beep. "RAND" 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)

# Cassette Player

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

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

# **Compact Disc Player**

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

Repeating a track:

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

Repeating a disc:

## MP3 Player

There are two repeat features—You can either replay a file or a whole folder.

Repeating a file:

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

Repeating a folder: Push and hold "RPT" until you hear a

beep. " RPT " 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 "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.

In FM1 (FM2) mode, when the preset scan reaches CH6 of FM1 (FM2), it switches to CH1 of FM2 (FM1) and continues the preset scan.

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.

When the end of the band is reached, it will automatically scan from the lower end of the band.

# **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 for 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. After all the tracks on the disc have been scanned in one pass, normal play resumes.

Scanning for the first tracks 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. After all the discs have
been scanned in one pass, normal play
resumes.

## MP3 Player

There are two scan features—You can either scan the files in a folder on a specific disc 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. After all the files in the folder have been scanned in one pass, normal play resumes.

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. After all the folders have been scanned in one pass, normal play resumes.

## SEEK (Seeking)

### Radio

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

To seek a station, quickly push and release the " $\wedge$ " or " $\vee$ " under the "SEEK". Do this again to find another station.

# Cassette Player

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

You can skip up to nine tracks at a time. Push the up or down side of the button. "FF 1" or "REW 1" will appear on the display.

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

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

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

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

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

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

# ST (Stereo reception) display

Your radio automatically changes to stereo reception when a stereo broadcast is received. "ST" appears on the display. If the signal becomes weak, the radio reduces the amount of channel separation to prevent the weak signal from creating noise. If the signal becomes extremely weak, the radio switches from stereo to mono reception.

### **TAPE**

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

# **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 Player

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

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

If this button is pushed while a MP3 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.

# TRACK (Track up/down)

# **Compact Disc Player**

To skip up or down to a different track: Push either side of the "TRACK" several times 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 "V" of the button once, 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.

# MP3 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 "\" side of the button once, 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.

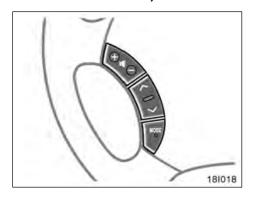
# TUNE-FILE (Tuning and File up/down) Radio

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

# MP3 Player

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

# Audio remote controls (steering switches —on some models)



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

"MODE" switch: Use this switch to change the mode. If a tape or compact disc is not inserted, the "TAPE" or "CD" mode is skipped. When you push the switch with the audio system turned off, the audio system turns on. When you push and hold the switch until you hear a beep with the audio system turned on, the audio system turns off.

" if " switches: Use this switches to adjust the volume. Push "+" to increase the volume and "-" to decrease the volume. The volume continues to increase or decrease while the switch is being pressed.

# (a) When the radio mode is selected "A" or "V" switch: Push this switch for seek tuning or to select a station.

- switch briefly. Do this again to select the next preset station.
- To seek a station, push and hold the switch until you hear a beep. Do this again to find the next station. If you push the switch on either side of the " $\vee$ " or " $\wedge$ " during the seek mode, seeking will be canceled.
- To step up or down the frequency, push and hold the switch even after you hear a beep. When you release from the switch, the radio will begin seeking up or down for a station. Do this again to find the next station.

# (b) When the "CD" mode is selected Compact disc player

"\" or "\" switch: Use this switch to • To select a preset station, push the skip up or down to a different track in either direction.

> Quickly push and release the " $\wedge$ " or " $\vee$ " side of the switch until the track you want to listen to is set. If you want to return to the beginning of the current track, push the "V" side of the switch once, quickly.

With compact disc changer only-

Push and hold the " $\wedge$ " or " $\vee$ " side of the switch until the disc you want to listen to is set.

# MP3/WMA player

"A" or "V" switch: Use this switch to select a desired file or disc.

To select a desired file: Quickly push and release the " $\land$ " or " $\lor$ " side of the switch until the file you want to listen to is set. If you want to return to the beginning of the current file, push the " $\lor$ " side of the switch once, quickly.

To select a desired disc: Push and hold the " $\wedge$ " or " $\vee$ " side of the switch until the disc you want to listen to is set.

# **CAUTION**

Operate the switches with due care while you are driving to avoid accidents.

# Audio system operating hints

### **NOTICE**

To ensure correct audio system operations:

- ◆ Be careful not to spill beverages over the audio system.
- ◆ Do not put anything other than a cassette tape or 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

FM broadcasts have a range of about 40 km or 25 miles. When driving away from a station you may have to fine-tune your radio and turn up the volume as the station gets weaker. Because FM uses a line-of-sight signal, tall buildings or hills may sometimes block reception. These are all normal characteristics of FM reception and do not indicate any problem with the radio itself.

# CARING FOR YOUR CASSETTE PLAYER AND TAPES

For the best performance for your cassette player and tapes:

Clean the tape head and other parts regularly.

 A dirty tape head or tape path can decrease sound quality and tangle your cassette tapes. The easiest way to clean them is by using a cleaning tape. (A wet type is recommended.)



Use high-quality cassettes.

- Low-quality cassette tapes can cause many problems, including poor sound, inconsistent playing speed, and constant auto-reversing. They can also get stuck or tangled in the cassette player.
- Do not use a cassette if it has been damaged or tangled or if its label is peeling off.
- Do not leave a cassette in the player if you are not listening to it, especially if it is not 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

- Your compact disc player is intended for use with 12 cm (4.7 in.) discs only.
- Extremely high temperatures can keep your compact disc player from working.
   On hot days, use the air conditioning to cool the vehicle interior before you listen to a disc.
- Bumpy roads or other vibrations may make your compact disc player skip.
- If moisture gets into your compact disc player, the player may not play even though it appears to be working. Remove the disc from the player and wait until it dries.

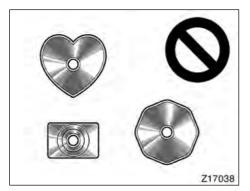


Compact disc players use an invisible laser beam which could cause hazardous radiation exposure if directed outside the unit. Be sure to operate the player correctly.

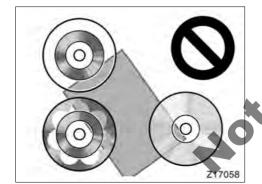


 Use only compact discs marked as shown above. The following products may not be playable on your compact disc player.

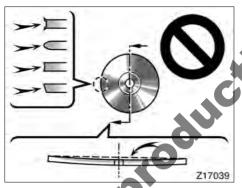
Copy-protected CD CD-R (CD-Recordable) CD-RW (CD-Re-Writable) CD-ROM



Special shaped discs



Transparent/translucent discs



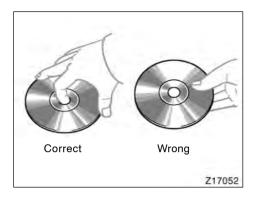
Low quality discs



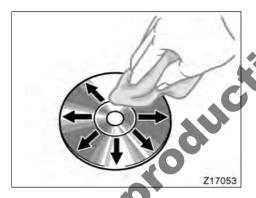
Labeled discs

# 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 disc.
- ◆ This system is not designed for use of Dual Disc. Do not use Dual Disc because it may cause damage to the player or changer.



- 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.



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 (MPEG Audio Layer 3) and WMA (Windows Media Audio) are audio compression standards.
- The MP3/WMA player can play MP3 and WMA files on CD-ROM, CD-R and CD-RW discs.

The unit can play disc recordings compatible with ISO 9660 level 1 and level 2 and with the Romeo and Joliet file system.

- When naming an MP3 or WMA file, add the appropriate file extension (.mp3 or .wma).
- The MP3/WMA player plays back files with .mp3 or .wma file extensions as MP3 or WMA files. To prevent noise and playback errors, use the appropriate file extensions.
- Multi-session compatible CDs can also be played.
- MP3 files are compatible with the ID3 Tag Ver. 1.0, Ver. 1.1, Ver. 2.2 and Ver. 2.3 formats. The unit cannot display disc title, track and artist name in other formats.

- WMA files can contain a WMA tag that is used in the same way as an ID3 tag. WMA tags carry information such as track title, artist name.
- The emphasis function is available only when playing MP3/WMA files recorded at 32, 44.1 and 48 kHz. (The system can play MP3 files with sampling frequencies of 16, 22.05, and 24 kHz. However, the emphasis function is not available for files recorded at these frequencies.)
- The sound quality of MP3/WMA files generally improves with higher bit rates. In order to achieve a reasonable level of sound quality, discs recorded with a bit rate of at least 128 kbps are recommended.

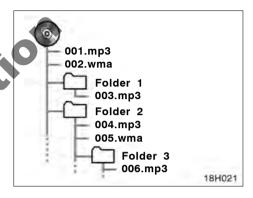
# Playable bit rates

MP3 files:

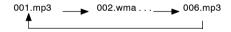
MPEG1 LAYER3—64 to 320 kbps MPEG2 LSF LAYER3—64 to 160 kbps WMA files:

Ver7, 8 CBR—48 to 192 kbps Ver9 CBR—48 to 320 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.
- M3u playlists are not compatible with the audio player.
- MP3i (MP3 interactive) and MP3PRO formats are not compatible with the audio player.
- The MP3 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/WMA files in folders up to 8 levels deep can be played. However, the start of playback may be delayed when using discs containing numerous levels of folders. For this reason, we recommend creating discs with no more than two levels of folders.



 The play order of the compact disc with the structure shown on the left is as follows:



- It is possible to play up to 192 folders or 255 files on one disc.
- 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 discs to be played on a conventional CD player) cannot be played.
- It may not be possible to play 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.
- It may not be possible to play discs recorded on a personal computer depending on the application settings and the environment. Record with the correct format. (For details, contact the appropriate application malfunctions of the applications.)
- CD-R/CD-RW discs may be damaged by direct exposure to sunlight, high temperatures or other storage conditions. The unit may be unable to play some damaged discs.

- Titles and other text information recorded on CD-R/CD-RW discs 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, playback will begin more slowly than with 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 using the DDCD (Double Density CD) system.

### **TERMS**

# Packet write-

This is a general term that describes the process of writing data on-demand to CD-R, etc., in the same way that data is written to floppy or hard discs.

## Bit rate—

Bit rate refers to data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. 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 on one disc.

### CD-DA-

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

# ID3 Tag-

This is a method of embedding track-related information in a MP3 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 tag editing functions. Although the tags are restricted to the number of characters, the information can be viewed when the track is played back.

# WMA Tag—

WMA files can contain a WMA tag that is used in the same way as an ID3 tag. WMA tags carry information such as track title, artist name.

#### ISO 9660 format—

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

### Level 1:

The file name is in 8.3 format. (8 character file names, with a 3 character file extension. File names must be composed of one-byte capital letters and numbers. The "\_" symbol may also be included.)

## Level 2:

The file name can have up to 31 characters (including the separation mark "." and file extension). Each folder must contain fewer than 8 hierarchies.

## Extended formats

### Joliet:

File names can include up to 64 characters.

# Romeo:

File names can include up to 128 characters.

#### m3u-

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

# МР3—

MP3 is an audio compression standard determined by a working group (MPEG) of the ISO (International Standards Organization). MP3 compresses audio data to about 1/10 the size of that on conventional discs.

## WMA-

WMA (Windows Media Audio) is an audio compression format developed by Microsoft. It compresses files into a size smaller than that of MP3 files. The decoding format for WMA files are Ver7, 8, and 9.

Aot For Reproduction

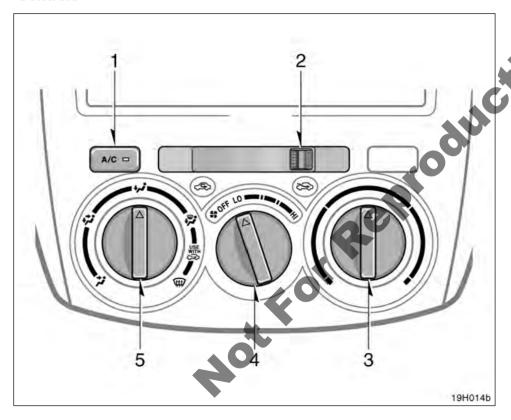
# <u>SECTION</u> **1**-9

# OPERATION OF INSTRUMENTS AND CONTROLS

# Air conditioning system

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# **Controls**



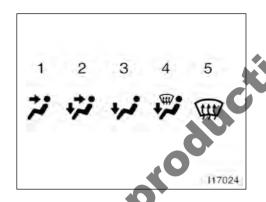
- 1. "A/C" button (on some models)
- 2. Air intake selector
- 3. Temperature selector
- 4. Fan speed selector
- 5. Air flow selector

## Fan speed selector

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

# Temperature selector

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



# Air flow selector

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

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

3. Floor—Air flows mainly from the floor yents.

Use with the air intake selector positioned in Fresh.

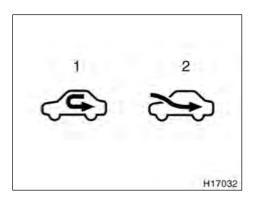
 Floor/Windshield—Air flows mainly from the floor vents and windshield vents.

Use with the air intake selector positioned in Fresh.

Windshield—Air flows mainly from the windshield vents.

Use with the air intake selector positioned in Fresh.

For details about air flow selector settings, see "Air flow selector settings" on page 153.



# Air intake selector

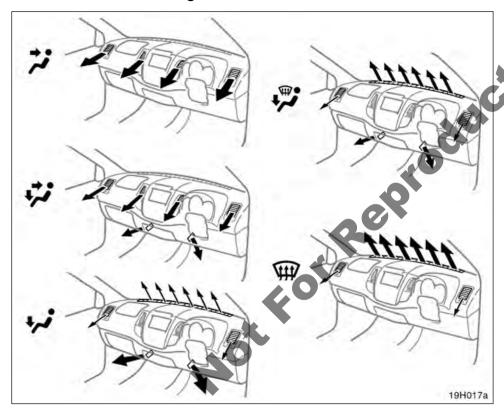
Move the selector lever to select the air source.

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

# "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 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).
- Keep the area under the front seats clear to allow air to circulate throughout the vehicle.
- On cold days, set the fan speed to high for a minute to help clear the intake ducts of snow or moisture. This can reduce the amount of fogging on the windows.
- When driving on dusty roads, close all windows. If dust thrown up by the vehicle is still drawn into the vehicle after closing the windows, it is recommended that the air intake be set to FRESH and the fan speed to any setting except "OFF".

 If following another vehicle on a dusty road, or driving in windy and dusty conditions, it is recommended that the air intake be temporarily set to RECIR-CULATE, which will close off the outside passage and prevent outside air and dust from entering the vehicle interior.

# CAUTION

To prevent the windshield from fogging up, do not select the windshield air outlets during cool air operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield can cause the outer surface of the windshield to fog up, blocking your vision.

# **NOTICE**

To prevent battery discharge, do not leave the air conditioning system on longer than necessary when the engine is stopped.

## Heating

For best results, set controls to:

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

- For quick heating, select recirculated air for a few minutes. To keep the windows from fogging, select fresh after the vehicle interior has been warmed.
- Press the "A/C" button on for dehumidified heating.
- Choose floor/windshield air flow to heat the vehicle interior while defrosting or defogging the windshield.

# Air conditioning

For best results, set controls to:

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

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

### Ventilation

For best results, set controls to:

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

Air flow—PANEL

Air conditioning—OFF

# Defogging

The inside of the windshield For best results, set controls to:

The outside of the windshield For best results, set controls to:

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

 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.

# **Defrosting**

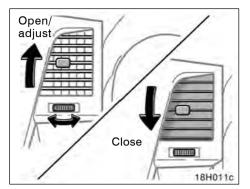
The outside of the windshield For best results, set controls to:

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

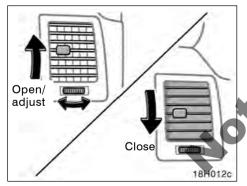
 To heat the vehicle interior while defrosting the windshield, choose floor/ windshield air flow



# Instrument panel vents

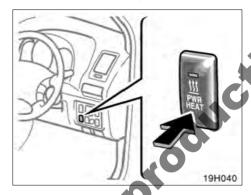


Center vents



Side vents

# Power heater switch (on some models)

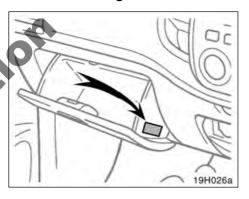


To turn on the power heater, push the switch. To turn off the power heater, push the switch once again.

Use the power heater switch to adjust the heating effect in extremely cold conditions.

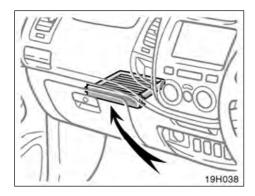
If you do not turn the power heater switch to off, the engine speed is increased whenever the engine is started.

# Air conditioning filter—



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

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

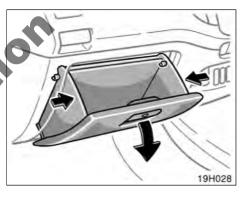


The air conditioning filter is behind the glove box.

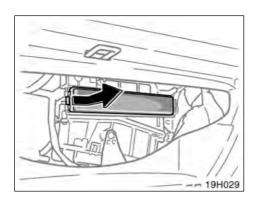
# —Checking and replacing the air conditioning filter

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.

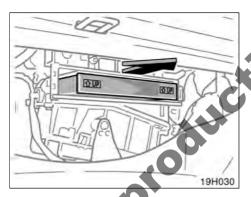
To maintain the air conditioning efficiency, inspect and replace the air conditioning filter according to the maintenance schedule. (For scheduled maintenance information, please refer to the "Warranty and Service Booklet".)



- 1. Turn the engine switch to the "LOCK" position.
- 2. Open the glove box and push in each side of the glove box to release the stoppers.

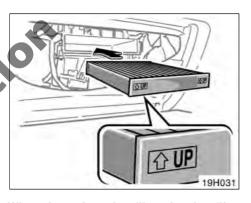


3. Remove the filter cover as shown in the illustration.



4. Pull the filter out of the filter outlet. 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.

# 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.

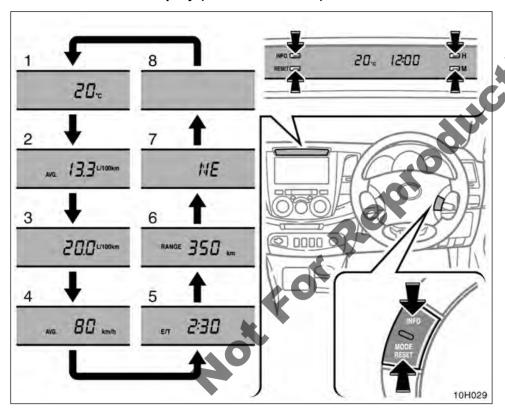
# **SECTION 1-10**

# OPERATION OF INSTRUMENTS AND CONTROLS

# Other equipment

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# Multi-information display (on some models)



The following information is displayed on the multi-information display when you push the "INFO." button (on the multi-information display) or "INFO" button (on the right side of the steering pad of some models) with the engine switch turned on.

Each time you push the "INFO." or "INFO" button, the display changes to the next display setting.

- 1. Outside temperature
- 2. Average fuel consumption
- 3. Instantaneous fuel consumption
- 4. Average vehicle speed
- 5. Driving time
- 6. Driving range
- 7. Compass
- 8. Off

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

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

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

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

# **CAUTION**

Operate the switches with due care while you are driving to avoid accidents.

# OUTSIDE TEMPERATURE DISPLAY

The display indicates between the range of  $-40^{\circ}$ C ( $-40^{\circ}$ F) and  $50^{\circ}$ C ( $122^{\circ}$ F).

If an abnormality exists in the connection of the outside air temperature sensor, "—°C" will appear on the display. If "—°C" appears, contact your Toyota dealer.

In the following situations, the correct outside temperature may not be displayed, or the display may take longer than normal to change.

- When stopped, or driving at low speeds (less than 20 km/h [12 mph])
- When the outside temperature has changed suddenly (at the entrance/exit of a garage or tunnel etc.)

# AVERAGE FUEL CONSUMPTION ("AVG. L/100 km" or "AVG. km/l")

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

To reset the calculations, push and hold the "RESET" button (on the multi-information display) or "MODE RESET" button (on the right side of the steering pad) for more than 1 second.

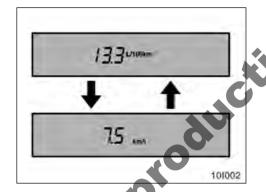
# INSTANTANEOUS FUEL CONSUMPTION ("L/100 km" or "km/l")

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

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

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

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



# MILEAGE/FUEL CONSUMPTION DISPLAY Only the display for fuel consumption rate (L/100 km) and mileage (km/l) may be interchanged using the following

 Get access to the average fuel consumption or instantaneous fuel consumption display.

procedure:

- 2. Hold down the "INFO." or "INFO" button until the unit flashes.
- 3. Push the "RESET" or "MODE RESET" button to change the unit.
- 4. Push the "INFO." or "INFO" button.

# AVERAGE VEHICLE SPEED ("AVG. km/h")

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

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

# DRIVING TIME ("E/T")

The elapsed time after the engine switch is turned on is displayed.

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

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



# DRIVING RANGE ("RANGE km")

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

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

Every time you refuel the vehicle, the calculation is reset. However, when only a small amount of fuel is added to the tank, the display may not be reset.

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

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

### COMPASS

The compass indicates the direction in which the vehicle is heading.

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

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

- The vehicle is stopped immediately after turning. The compass does not adjust while the vehicle is stopped.
- The engine switch is turned off immediately after turning.

- The vehicle is on an inclined surface.
- The vehicle is in a place where the earth's magnetic field is subject to interference by artificial magnetic fields (underground parking, under a steel tower, between buildings, roof parking, near a crossing, near a large vehicle, etc.).
- The vehicle is magnetized. (There is a magnet or a metal object on or near the multi-information display.)
- The battery has been disconnected.

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

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

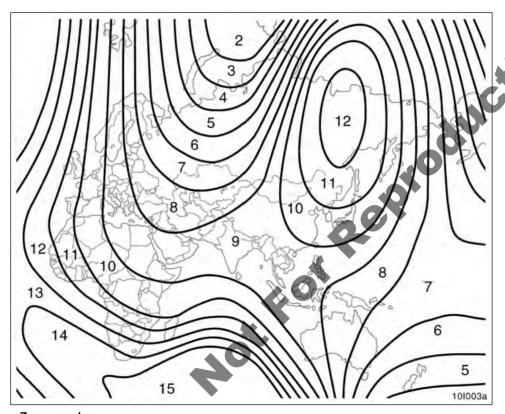
# **NOTICE**

Do not put magnets or a metal object near the multi-information display. Doing so may cause malfunction of the compass sensor.

# Calibrating the compass (deviation calibration)

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

To adjust for this deviation, stop the vehicle and push the "INFO." or "INFO" button for a few seconds until the number (1-15) appears on the clock. Then push the "H" or "M" button, referring to the following map to select the number of the zone where the vehicle is.

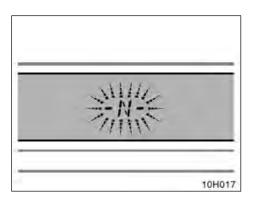


After calibration, leave the system for 6 seconds or push the "INFO." or "INFO" button. The calibration is finished.

# A CAUTION

Operate the switches with due care while you are driving to avoid accidents.

Zone number



# Calibrating the compass (circling calibration)

Sometimes the direction display on the compass may flash. In this case, the compass needs to be calibrated.

## To calibrate the compass:

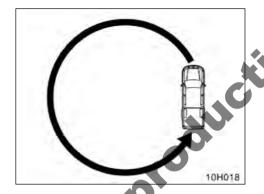
 Stop the vehicle in a safe place. Push and hold the "INFO." or "INFO" button for a few seconds.

Number (1-15) appears on the clock.

✓

2. Push the "RESET" or "MODE RESET" button.

"-N-" appears on the display.



If no button is pushed for 6 seconds, the display will automatically return to the flashing direction display. In this case, return to step 1 and retry.

# 3. Drive the vehicle slowly in a circle within 2 minutes.

After the circling calibration is completed correctly, the direction will appear on the display.

Pushing the "RESET" or "MODE RESET" button again before finishing circling calibration will return to the display with the number (1–15) shown on the clock. In this case, return to step 2 and retry.

Before finishing circling calibration, when pushing the "INFO." or "INFO" button or performing no circling calibration within about 2 minutes after pushing the "RESET" or "MODE RESET" button, the display will return to the flashing direction display. In this case, return to step 1 and retry.

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

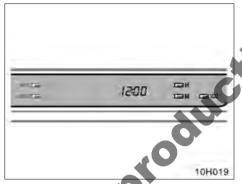
Perform circling calibration just after you have purchased your Toyota. Then perform circling calibration whenever the battery has been removed, replaced or disconnected.

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

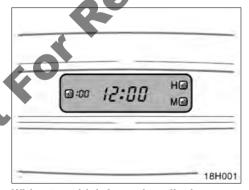
# / CAUTION

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

# Clock



With multi-information display



Without multi-information display

To set the hour: Push the "H" button.
To set the minutes: Push the "M" button.

The time can also be set by pushing the "H" or "M" button continuously.

The engine switch must be in the "ACC" or "ON" position.

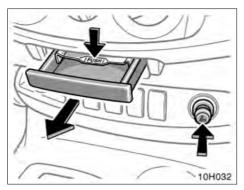
If quick adjustment to a full hour is desired, push the ":00" button.

For example, if the ":00" button is depressed when the time is between 1:01—1:29, the time will change to 1:00. If the time is between 1:30—1:59, the time will change to 2:00.

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

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

# Cigarette lighter and ashtrays



Cigarette lighter and front ashtray

### **CIGARETTE LIGHTER**

To use the cigarette lighter, press it in. After it finishes heating up, it automatically pops out ready for use.

If the engine is not running, the engine switch must be in the "ACC" position.

Do not hold the cigarette lighter pressed in.

Use a Toyota genuine cigarette lighter or equivalent for replacement.

### FRONT ASHTRAY

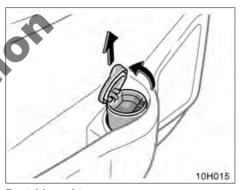
To use the ashtray, pull it out.

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

To remove the ashtray, press down on the lock spring plate and pull out.



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



Portable ashtray

# PORTABLE ASHTRAY (on some models) To use the ashtray, open the lid.

The ashtray should be used in the bottle holders of the rear seat.

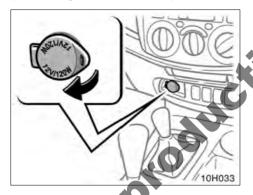
When finished with your cigarette, thoroughly extinguish it in the ashtray to prevent other cigarette butts from catching fire. After using the ashtray, close the lid completely.

To remove the ashtray, pull it out of a bottle holder.

# / CAUTION

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

# Power outlet (on SR grade models\*)



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

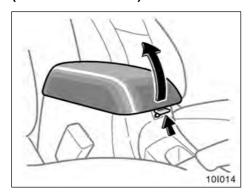
The engine switch must be in the "ACC" or "ON" position for the power outlet to be used.

## **NOTICE**

- to prevent the fuse from being blown, do not use the electricity over the total vehicle capacity of 12V/120W.
- ◆ To prevent the battery from being discharged, do not use the power outlet longer than necessary when the engine is not running.
- ♦ Close the power outlet lid when the power outlet is not in use. Inserting anything other than an appropriate plug that fits the outlet, or allowing any liquid to get into the outlet may cause electrical failure or short circuits.

\*: If you are not sure of which model your vehicle is, see "Model code" on page vii in the beginning of this manual.

## Rear console box (on some models)



To use the rear console box, open as shown in the illustration.

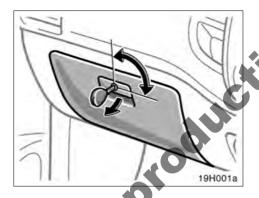
### **CAUTION**

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

### **NOTICE**

Take care when placing sharp-edged objects in the rear console box, as they may scratch or damage the inner surface of the compartment.

### Glove box



To use the glove box:

Open by pulling the lever.

Lock by inserting the master key and turning it clockwise.

Unlock by inserting the master key and turning it counterclockwise.

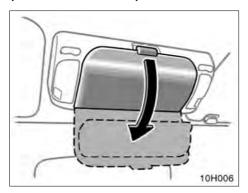
### CAUTION

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

### **NOTICE**

Take care when placing sharp-edged objects in the glove box, as they may scratch or damage the inner surface of the compartment.

## Auxiliary box (on some models)



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

### / CAUTION

- To reduce the chance of injury in case of an accident or a sudden stop, always keep the auxiliary box closed while driving.
- As this box is designed for holding light objects such as eyeglasses, do not place any heavy objects in it. Heavy objects may cause the box to open and the contents to fly out resulting in injuries.

### NOTICE

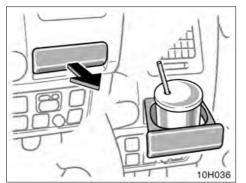
- ♦ In hot weather, the interior of the vehicle becomes very hot. Do not leave anything flammable or deformable such as a lighter, glasses, etc. inside.
- Take care when placing sharpedged objects in the auxiliary box, as they may scratch or damage the inner surface of the compartment.

### Cup holders

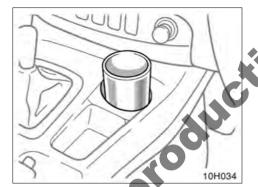
The cup holder is designed for holding cups or drink-cans securely. Your vehicle is equipped with several types of cup holders. To use them, observe the following instructions.

### (CAUTION

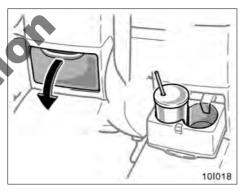
- Type A: Do not put bottles in the cup holder while driving. Doing so may block the driver's view.
- Type B, C and D: Do not put bottles in the cup holders while driving. Doing so may obstruct use of other functions.
- Do not place anything else other than cups or drink-cans in the cup holder, as such items may be thrown about in the compartment and possibly injure people in the vehicle during a sudden braking or in an accident. If possible, cover hot drinks to prevent burns.
- Type A and E: To reduce the chance of injury in case of an accident or a sudden stop while driving, keep the cup holder closed when it is not in use.



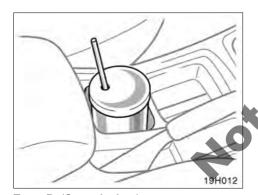
Type A (Instrument panel)



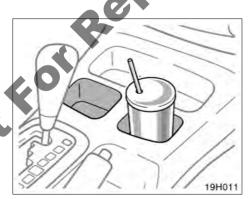
Type C (Console box)



Type E (Rear console box)



Type B (Console box)



Type D (Console box)

### **Bottle holders**



The bottle holders are designed to hold bottles securely.

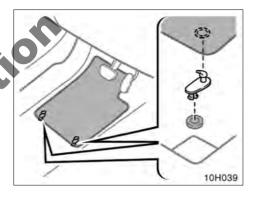
### **CAUTION**

Do not attempt to use the holder for any other purposes for which it was intended. Inappropriately sized or shaped objects may be thrown about in the compartment and possibly injure people in the vehicle during a sudden braking or an accident.

### **NOTICE**

When using the bottle holder, put a cap with the bottle. Otherwise, the liquid will spill over when opening or closing the door.

### Floor mat



### Use a floor mat of the correct size.

If the vehicle carpet and floor mat have 2 holes, then they are designed for use with locking clips. Attach the floor mat to the vehicle carpet using the clips. Lock the clips into the holes in the vehicle carpet.



### / CAUTION

Observe the following precautions. Failure to do so may result in the floor mat slipping and interfering with the movement of the pedals during driving, resulting in an accident.

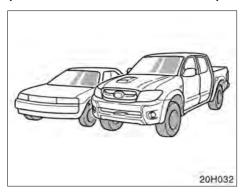
- Make sure the floor mat is properly placed on the vehicle carpet and the correct side faces upward.
- Do not place floor mats on top of existing mats.

# SECTION 2

# INFORMATION BEFORE DRIVING YOUR TOYOTA

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## Off-road vehicle precautions (on four-wheel drive models)



This vehicle has higher ground clearance and narrower tread in relation to the height of its center of gravity to make it capable of performing in a wide ... variety of off-road applications. Specifical design characteristics give it a higher center of gravity than ordinary passenger cars. This vehicle design feature causes this type of vehicle to be more likely to rollover. And, it has a significantly higher rollover rate than other types of vehicles. An advantage of the higher ground clearance is a better view of the road allowing you to anticipate problems. It is not designed for cornering at the same speeds as ordinary passenger cars any more than low-slung sports cars designed to perform satisfactorily under off-road conditions. Therefore, sharp turns at excessive speeds may cause rollover.

### / CAUTION

Always observe the following precautions to minimize the risk of death, serious injury or damage to the vehicle:

- In a rollover crash, an unbelted person has a significantly higher risk of death or serious injury than a person wearing a seat belt. Therefore, the driver and all passengers should fasten their seat belts whenever the vehicle is moving.
- Avoid sharp turns or abrupt maneuvers, if at all possible. Failure to operate the vehicle correctly may result in loss of control or vehicle rollover causing death or serious injury.
- Avoid loading any items on the roof that will raise the vehicle's center of gravity.

- Always slow down in gusty crosswinds. Because of its profile and higher center of gravity, your vehicle is more sensitive to side winds than an ordinary passenger car. Slowing down will allow you to have better control.
- When driving off-road or in rugged terrain, do not drive at excessive speeds, jump, make sharp turns, strike objects, etc. This may cause loss of control or vehicle rollover causing death or serious injury. You are also risking expensive damage to your vehicle's suspension and chassis.
- Do not drive horizontally across steep slopes. Driving straight up or straight down is preferred. Your vehicle (or any similar off-road vehicle) can tip over sideways much more easily than forward or backward.

### Break-in period

Drive gently and avoid high speeds.

Your vehicle does not need an elaborate break-in. But following a few simple tips for the first 1000 km (600 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

Selecting the proper fuel is essential for satisfactory engine performance.

Engine damage caused by use of improper fuels is not covered under Toyota's new vehicle warranty.

#### NOTICE

- ◆ Do not use improper fuels. If improper fuels are used the engine will be damaged.
- ◆ Do not use leaded gasoline on vehicles with three-way catalytic converter. Use of leaded gasoline will cause the three-way catalytic converter to lose its effectiveness and the emission control system to function improperly, and will damage the engine. Also, this can increase maintenance costs.

#### **FUEL TYPE**

### Gasoline engine— Use only unleaded gasoline.

To help prevent gas station mix-ups, your vehicle 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.

## Diesel engine—Use only diesel fuel. OCTANE/CETANE NUMBER

### 1GR-FE engine-

Select Research Octane Number 91 or higher. For improved vehicle performance, the use of premium unleaded gasoline with a Research Octane Number of 95 or higher is recommended.

### 2TR-FE engine-

Select Research Octane Number 91 or higher.

### 1KD-FTV engine—

Select cetane number 48 or higher.

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

### If your engine knocks...

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

However, 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.

### FUEL TANK CAPACITY

76 L (20.1 gal., 16.7 lmp. gal.)

### Fuel pump shut off system

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

### / CAUTION

Inspect the ground under the vehicle before restarting the engine. If you find that fuel has leaked onto the ground, the fuel system has been damaged and 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.

## Three-way catalytic converters (gasoline engine)

The three-way catalytic converters are emission control devices installed in the exhaust system.

The purpose is to reduce pollutants in the exhaust gas.

### CAUTION

- Keep people and combustible materials away from the exhaust pipe while the engine is unning. The exhaust gas is very hot.
- Do not idle or park your vehicle over anything that might burn easily such as grass, leaves, paper or rags.

### **NOTICE**

- A large amount of unburned gases flowing into the three-way catalytic converter may cause it to overheat and create a fire hazard. To prevent this and other damage, observe the following precautions:
- ♦ Use only unleaded gasoline.
- ◆ Do not drive with an extremely low fuel level; running out of fuel could cause the engine to misfire, creating an excessive load on the threeway catalytic converter.
- ◆ Do not allow the engine to run at idle speed for more than 20 minutes.
- ◆ Avoid racing the engine.
- ♦ Manual transmission: Do not pushstart or pull-start your vehicle.
- ◆ Do not turn off the engine switch while the vehicle is moving.

- ♦ Keep your engine in good running order. Malfunctions in the engine electrical system, electronic 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, vour Tovota dealer knows your vehicle and its three-way catalytic converter system very well.
- ♦ 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 Tovota Maintenance Schedule. For scheduled maintenance information. refer to the "Warranty and Service Booklet".

### Catalytic converter (diesel engine)

The catalytic converter is an emission control device installed in the exhaust system.

The purpose is to reduce pollutants in the exhaust das.

### **♠** CAUTION

- Keep people and combustible materials away from the exhaust pipe while the engine is running. The exhaust gas is very hot.
- Do not idle or park your vehicle over anything that might burn easily such as grass, leaves, paper or rags.

### NOTICE

- A large amount of unburned gases flowing into the catalytic converter may cause it to overheat and create a fire hazard. To prevent this and other damage, observe the following precautions:
- ♦ Use only diesel fuel.
- ♦ 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 catalvtic converter.
- ♦ Do not allow the engine to run at idle speed for more than 20 minutes.
- ♦ Manual transmission: Do not pushstart or pull-start your vehicle.
- ♦ Do not turn off the engine switch while the vehicle is moving.

- ♦ Keep your engine in good running order. Malfunctions in the engine electrical system or fuel system could cause an extremely high 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 catalytic converter system very well.
- ◆ To ensure that the 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 "Warranty and Service Booklet".

### **Engine exhaust cautions**

### / CAUTION

- Exhaust gases include harmful carbon monoxide (CO) that is colorless and odorless. Inhaling exhaust gases may lead to death or a serious health hazard.
- The exhaust should be checked occasionally. If there is a hole or crack caused by corrosion, damage to a joint or abnormal exhaust noise, be sure to have the vehicle inspected and repaired by your Toyota dealer. Failure to do so may allow exhaust gases to enter the vehicle, resulting in death or a serious health hazard.
- If the vehicle is in a poorly ventilated area, turn the engine off. In a closed area, such as a garage, exhaust gases may collect and enter the vehicle. This may lead to death or a serious health hazard.

- 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 quarter windows closed while driving. An open or unsealed rear window and quarter windows may cause exhaust gases to be drawn into the vehicle.
- To allow proper operation of your vehicle's ventilation system, keep the inlet grilles in front of the windshield clear of snow, leaves, or other obstructions.
- If the smell of exhaust is noticed inside the vehicle, open the windows. Large amounts of exhaust in the vehicle can cause driver drowsiness and an accident, resulting in death or a serious health hazard. Have the vehicle inspected by your Toyota dealer immediately.

- Do not leave the engine running in an area with snow build-up, or where it is snowing. If snowbanks build up around the vehicle while the engine is running, exhaust gases may collect and enter the vehicle. This may lead to death or a serious health hazard.
- When taking a nap in the vehicle, always turn the engine off. Otherwise, you may accidentally move the selector lever or the shift lever or depress the accelerator pedal, which could cause an accident or fire due to engine overheating. Additionally, if the vehicle is parked in a poorly ventilated area, exhaust gases may collect and enter the vehicle, leading to death or a serious health hazard.
- Toyota does not recommend occupying the rear cargo area when it is fitted with a slide-in camper, camper shell or other type cover while the engine is running. This caution applies to both driving and stopped or parked situations with the engine running. Particular care should be taken to prevent exhaust gases from entering camper bodies, trailers or other enclosures on or around your vehicle. If exhaust fumes are detected, open all windows and thoroughly ventilate the area.

## Facts about engine oil consumption

### **FUNCTIONS OF ENGINE OIL**

Engine oil has the primary functions of lubricating and cooling the inside of the engine, and plays a major role in maintaining the engine in proper working order.

### **ENGINE OIL CONSUMPTION**

It is normal that an engine should consume some engine oil during normal engine operation. The causes of oil consumption in a normal engine are as follows.

• Oil is used to lubricate pistons, piston rings and cylinders. A thin film of oil is left on the cylinder wall when a piston moves downwards in the cylinder. High negative pressure generated when the vehicle is decelerating sucks some of this oil into the combustion chamber. This oil as well as some part of the oil film left on the cylinder wall is burned by the high temperature combustion gases during the combustion process.  Oil is also used to lubricate the stems of the intake valves. Some of this oil is sucked into the combustion chamber together with the intake air and is burned along with the fuel. High temperature exhaust gases also burn the oil used to lubricate the exhaust valve stems.

The amount of engine oil consumed depends on the viscosity of the oil, the quality of the oil and the conditions the vehicle is driven under.

More oil is consumed by high-speed driving and frequent acceleration and deceleration.

A new engine consumes more oil, since its pistons, piston rings and cylinder walls have not become conditioned. **Oil consumption:** Max. 1.0 L per 1000 km (1.1 qt./600 miles, 0.9 lmp. qt./600 miles)

When judging the amount of oil consumption, note that the oil may become diluted and make it difficult to judge the true level accurately.

As an example, if a vehicle is used for repeated short trips, and consumes a normal amount of oil, the dipstick may not show any drop in the oil level at all, even after 1000 km (600 miles) or more. This is because the oil is gradually becoming diluted with fuel or moisture, making it appear that the oil level has not changed.

The diluting ingredients evaporate out when the vehicle is then driven at high speeds, as on an expressway, making it appear that oil is excessively consumed after driving at high speeds.

## IMPORTANCE OF ENGINE OIL LEVEL CHECK

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

#### NOTICE

Failure to check the oil level regularly could lead to serious engine trouble due to insufficient oil.

For detailed information on oil level check, see "Checking the engine oil level" on page 256.

### 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 (on some models)

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

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

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 vel hicle is stopped.
- At the end of the anti-lock brake system activation, the brake pedal may move a little forward.



### **♠** CAUTION

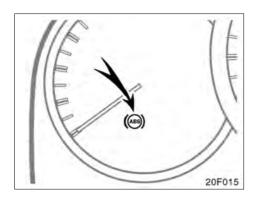
Do not overestimate the anti-lock brake system: Although the anti-lock brake system assists in providing vehicle control, it is still important to drive with all due care and maintain a moderate speed and safe distance from the vehicle in front of you, because there are limits to the vehicle stability and effectiveness of steering wheel operation even with the 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 vou. 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 ioints on the road.
- Driving on roads where the road surface is pitted or has other differences in surface height.

Install all 4 tires of specified size at appropriate pressure: The anti-lock brake system detects vehicle speeds using the speed sensors for respective wheels' turning speeds. The use of tires other than specified may fail to detect the accurate turning speed resulting in a longer stopping distance.



### "ABS" warning light

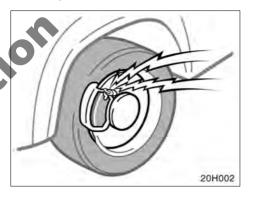
The light comes on when the engine switch is turned to the "ON" position. If the anti-lock brake system works properly, the light turns off after a few seconds. Thereafter, if the system malfunctions, the light comes on again.

When the "ABS" warning light is on, 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, but the brake system still operates conventionally.

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 engine switch is turned to the "ON" position, or remains on.
- The light comes on while you are driving.

### Brake pad wear indicators



The brake pad wear 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 nearest Toyota dealer immediately.

Avoid continuous driving with the warning noise.

Continuous driving without replacing the brake pads will cause expensive rotor damage and increasing brake pedal effort to get the same stopping distance.

### Luggage stowage precautions

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

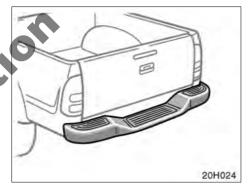
- Put cargo and luggage in the rear deck when at all possible. Be sure all items are secured in place.
- Be careful to keep the vehicle balanced.
   Locating the weight as far forward as possible helps maintain balance.
- For better fuel economy, do not carry unneeded weight.



- Extra-cab and double-cab models:
   To prevent cargo and luggage from sliding forward during braking, do not stack anything behind the front seats higher than the seatbacks.

   Keep cargo and luggage low, as close to the floor as possible.
- Never allow anyone to ride in the rear deck area other than on the seats. 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 death or serious bodily injury, in the event of sudden braking or a collision.
- Do not drive with objects left on top of the instrument panel. They may interfere with the driver's field of view. Or they may move during sharp vehicle acceleration or turning, and impair the driver's control of the vehicle. In an accident they may injure the vehicle occupants.

## Rear step bumper (on some models)



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

### **↑** CAUTION

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



## Limited-slip differential (on some models)

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

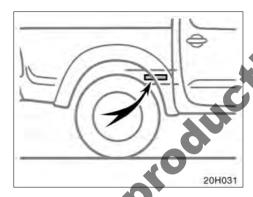


Do not start or run the engine while your vehicle is supported by a jack. The vehicle could be driven off the jack and could pose a danger or result in death or serious injury.

### **NOTICE**

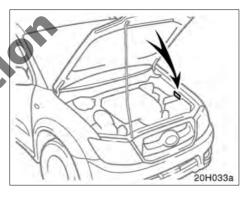
Use only a spare tire of the same size, construction and load capacity as the original tires on your Toyota because damage to the limited-slip differential could possibly occur with another tire type.

# Your Toyota's identification— Wehicle identification number



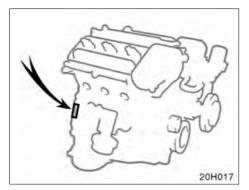
The vehicle identification number (VIN) is the legal identifier for your vehicle. This number is stamped on the rear right frame as shown in the illustration.

This is the primary identification number for your Toyota. It is used in registering the ownership of your vehicle.

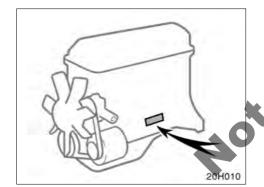


The vehicle identification number (VIN) is also on the manufacturer's plate (shown in the illustration).

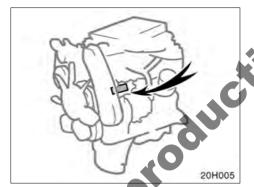
### -Engine number



1GR-FE engine



2TR-FE engine



1KD-FTV engine

The engine number is stamped on the engine block as shown.

### Suspension and chassis



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

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# $\underline{sect}$ ion $m{3}$

### **STARTING AND DRIVING**

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### Before starting the engine

- Check the area around the vehicle before entering it.
- Adjust seat position, seatback angle, seat height, head restraint height and steering wheel angle.
- Adjust the inside and outside rear view mirrors.
- 4. Lock all doors.
- 5. Fasten seat belts.

## How to start the engine— (a) Before cranking

- 1. Apply the parking brake firmly.
- 2. Turn off unnecessary lights and accessories.
- 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.

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.

 Automatic transmission only: Depress the brake pedal and hold it to the floor until driving off.

## (b) Starting the engine (gasoline 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 engine switch to "START". Release the key when the engine starts.
- After the engine runs stably, you are ready to drive.

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

### If the engine stalls...

Simply restart it, using the correct procedure given in normal starting.

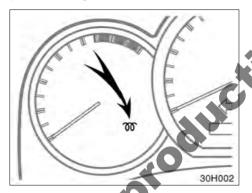
### If the engine will not start...

See "If your vehicle will not start" on page 210.

#### **NOTICE**

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

## (b) Starting the engine (diesel engine)



Before starting the engine, be sure to follow the instructions in  $\mu(a)$  Before cranking".

### Normal starting procedure (engine cold)

- Turn the engine switch to "ON" and verify that the engine preheating indicator light has come on. Keep the engine switch in the "ON" position until the light goes off.
- With your foot off the accelerator pedal, crank the engine by turning the engine switch to "START". Release the key when the engine starts.
- After the engine runs stably, you are ready to drive.

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

### If the engine is warm...

If the engine does not start, try the above "Normal starting procedure".

### If the engine stalls...

Simply restart it, using the correct procedure given above, depending on the engine temperature.

### If the engine will not start...

See "If your vehicle will not start" on page 210.



#### NOTICE

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

# Precautions for turning off an engine with turbocharger (diesel engine)

After high-speed or extended driving, etc., requiring a heavy engine load, the engine should be allowed to idle, as shown in the chart, before turning it off.

## Driving condition and required idling time

Normal city driving Idling time—Not necessary

High-speed driving
About 80 km/h (50 mph)
Idling time—About 20 seconds
About 100 km/h (62 mph)
Idling time—About 1 minute

Steep mountain slopes or continued driving above 100 km/h (62 mph)
Idling time—About 2 minutes

### NOTICE

Do not turn the engine off immediately after a heavy load has been placed on the engine in order to prevent engine damage.

### Pre-trip safety check

It is a good idea to do a safety check before starting out on a trip. A few minutes of checking can help ensure safe and pleasant driving. Just a basic familiarity with your vehicle is required and a careful eye! Or, if you would like, your Toyota dealer will be pleased to make this check for you at a nominal cost.

### A CAUTION

If you make this check in an enclosed garage, make sure there is adequate ventilation. Engine exhaust is poisonous.

#### BEFORE STARTING THE ENGINE

#### Outside the vehicle

**Tires (spare included).** Check the pressure with a gauge and look carefully for cuts, damage, or excessive wear.

Wheel nuts. Make sure no nuts are missing or loose.

**Fluid leaks.** After the vehicle has been parked for a while, check underneath for leaking fuel, oil, water, or fluid. (Water dripping from the air conditioning after use is normal.)

**Lights.** Make sure the headlights, stop lights, tail lights, turn signals and other lights are all working. Check the headlight aim.

### Inside the vehicle

Jack and wheel nut wrench. Make sure you have your jack and wheel nut wrench.

**Seat belts.** Check that the buckles lock securely. Make sure the belts are not worn or frayed.

**Instruments and controls.** Especially make sure the service reminder indicators, instrument lights, and defroster are working.

**Brakes.** Make sure the pedal has enough clearance.

### In the engine compartment

**Spare fuses.** Make sure you have spare fuses. They should cover all the amperage ratings designated on the fuse box lid.

Coolant level. Make sure the coolant level is correct. (See page 259 for instructions.)

Battery and cables. All the battery cells should be filled to the proper level with distilled water. Look for corroded or loose terminals and a cracked case. Check the cables for good condition and connections.

Wiring, Look for damaged, loose, or disconnected wires.

Fuel lines. Check the lines for leaks or loose connections.

#### AFTER STARTING THE ENGINE

**Exhaust system.** Listen for any leakage. Have any leaks fixed immediately. (See "Engine exhaust cautions" on page 181.)

**Engine oil level.** Stop the engine and check the dipstick with the vehicle parked on level ground. (See page 256 for instructions.)

#### WHILE DRIVING

**Instruments.** Make sure the speedometer and gauges are working.

**Brakes.** In a safe place, check that the brakes do not pull to one side when applied.

**Anything unusual?** Look for loose parts and leaks. Listen for abnormal noises.

If everything looks O.K., set your mind at ease and enjoy your trip!

## 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.
- Four-wheel drive models—Toyota recommends not using four-wheel drive on dry hard-surfaced roads, because four-wheel driving will cause unnecessary noise and wear, and poor fuel economy.
- Four-wheel drive models—In cold temperatures, noise may occur when driving in two-wheel drive before the transfer is warmed up. Therefore, first drive in four-wheel drive until the transfer is warmed up.

### / CAUTION

- Before driving off, make sure 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 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.

### Driving in the rain

### Driving on a slippery road surface

Drive carefully when it is raining, because visibility will be reduced, the windows may become fogged-up, and the road will be slippery.

- Drive carefully when it starts to rain because the road surface will be especially slippery.
- Refrain from high speeds when driving on an expressway in the rain, because there may be a layer of water between the tires and the road surface, preventing the steering and brakes from operating properly.

### CAUTION

- Sudden braking, acceleration and steering when driving on a slippery road surface may cause tire slippage and reduce your ability to control the vehicle, resulting in an accident.
- Sudden changes in engine speed, such as sudden engine braking, may cause the vehicle to skid, resulting in an accident.
- After driving through a puddle, lightly depress the brake pedal to make sure that the brakes are functioning properly. Wet brake pads may prevent the brakes from functioning properly. If the brakes on only one side are wet and not functioning properly, steering control may be affected, resulting in an accident.

### When encountering flooded roads

Do not drive on a road that has flooded after heavy rain etc. Doing so may cause serious damage to the vehicle.

#### **NOTICE**

Driving on a flooded road may cause the engine to stall as well as cause serious vehicle malfunctions such as shorts in electrical components and engine damage from water immersion. In the event that you drive on a flooded road and the vehicle is flooded, be sure to have your Toyota dealer check brake function, changes in quantity and quality of oil and fluid used for the engine, transmission, transfer (four-wheel drive models). differentials, etc. and lubricant condition for the propeller shaft (fourwheel drive models), bearings and suspension joints (where possible) and the function of all joints and bearings.

## Off-road driving precautions (on four-wheel drive models)

### / CAUTION

Always observe the following precautions to minimize the risk of death or serious injury or damage to your vehicle:

- Drive carefully when off the road.
   Do not take unnecessary risks by driving in dangerous places.
- Do not grip the steering wheel spokes when driving off-road. A bad bump could jerk the wheel and injure your hands. Keep both hands and especially your thumbs on the outside of the rim.
- Always check your brakes for effectiveness immediately after driving in sand, mud, water or snow.

- After driving through tall grass, mud, rock, sand, rivers, etc., check that there is no grass, bush, paper, rags, stone, sand, etc. adhering or trapped on the underbody. Clear off any such matter from the underbody. If the vehicle is used with these materials trapped or adhering to the underbody, a breakdown or fire could occur.
- In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Therefore, the driver and all passengers should fasten their seat belts whenever the vehicle is moving.
- When driving off-road or in rugged terrain, do not drive at excessive speeds, jump, make sharp turns, strike objects, etc. This may cause loss of control or vehicle rollover causing death or serious injury. You are also risking expensive damage to your vehicle's suspension and chassis.

#### **NOTICE**

- ♦ If driving through water, such as when crossing shallow streams, first check the depth of the water and the bottom of the river bed for firmness. Drive slowly and avoid deep water.
- ◆ Take all necessary safety measures to ensure that water damage to the engine or other components does not occur.
- ♦ Water entering the engine air intake will cause severe engine damage.
- ♦ Water entering the automatic transmission will cause deterioration in shift quality, locking up of your transmission accompanied by vibration, and ultimately damage.
- Water can wash the grease from wheel bearings, causing rusting and premature failure, and may also enter the differentials, transmission and transfer case, reducing the gear oil's lubricating qualities.

- Sand and mud that has accumulated in brake drum and around brake discs may affect braking efficiency and may damage brake system components.
- ◆ Always perform a maintenance inspection after each day of off-road driving that has taken you through rough terrain, sand, mud, or water. (See page 244.)

### Winter driving tips

Make sure your coolant is properly protected against freezing.

Only use "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology. (Coolant with long-life hybrid organic acid technology is a combination of low phosphates and organic acids.)

See "Checking the engine coolant level" on page 259 for details of coolant type selection.

"Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water. This coolant provides protection down to about -35°C (-31°F).

### **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. An explanation of how to visually inspect the battery is given on page 270. 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 pages 257 and 258 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 front wheels. Do not use the parking brake, or snow or water accumulated in and around the parking brake mechanism may freeze, making it hard to release.

## Keep ice and snow from accumulating under the fenders.

Ice and snow built up under your fenders can make steering difficult. During bad winter driving, stop and check under the fenders occasionally.

# Depending on where you are driving, we recommend you carry some emergency equipment.

Some of the things you might put in the vehicle are tire chains, window scraper, bag of sand or salt, flares, small shovel, jumper cables, etc.

### Trailer towing

Your vehicle is designed primarily as a passenger-and-load-carrying vehicle. Towing a trailer will have an adverse effect on handling, performance, braking, durability and driving economy (fuel consumption, etc.). Your safety and satisfaction depend on the proper use of correct equipment and cautious driving habits. For your safety and the safety of others, you must not overload your vehicle or trailer. Ask your local Toyota dealer for further details before towing, as there are additional legal requirements in some countries.

For towing purposes, we recommend use of the following parts:

- When towing a caravan trailer etc., use a distributing hitch.
- When the total trailer weight is greater than the vehicle weight, use a sway control device.

### **NOTICE**

When towing a trailer, be sure to consult your Toyota dealer for further information on additional requirements such as a towing kit, etc.

#### WEIGHT LIMITS

Before towing, make sure the total trailer weight, gross vehicle weight, gross axle weight and trailer tongue load are all within the limits.

The total trailer weight and tongue load can be measured with platform scales found at a public weigh bridge, building supply company, trucking company, junk yard, etc.

### CAUTION

- The total trailer weight (trailer weight plus its cargo load) must not exceed 2250 kg (4960 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 death or serious injuries.

 The combination of the gross trailer weight added to the total weight of the vehicle, occupants and vehicle cargo must never exceed a total of the following.

Single-cab models
Two-wheel drive models
5030 kg (11089 lb.)
Four-wheel drive models
1GR-FE engine
5000 kg (11023 lb.)
1KD-FTV engine
5085 kg (11210 lb.)

Extra-cab models
1GR-FE engine
Two-wheel drive models
4990 kg (11001 lb.)
Four-wheel drive models
4980 kg (10979 lb.)
1KD-FTV engine
4960 kg (10935 lb.)

Double-cab models
Two-wheel drive models
4960 kg (10935 lb.)
Four-wheel drive models
1GR-FE engine
5060 kg (11155 lb.)
1KD-FTV engine
5030 kg (11089 lb.)

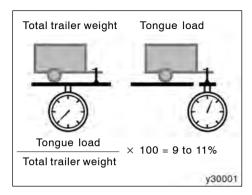
Exceeding the maximum weight of the trailer, the vehicle, or the vehicle and trailer combination, can cause an accident resulting in death or serious injuries. • The load on either the front or rear axle resulting from distribution of the gross vehicle weight on both axles must not exceed the followina. Two-wheel drive models Single-cab models Front 1145 kg (2524 1750 kg (3858 lb.) Rear Extra-cab models 1GR-FE engine Front 1200 kg (2646 lb.) 1750 kg (3858 lb.) Rear 1KD-FTV engine 1200 kg (2646 lb.) Front Rear 1725 kg (3803 lb.) Double-cab models Front 1200 kg (2646 lb.)

1750 kg (3858 lb.)

Rear

Four-wheel drive models Single-cab and double-cab models Fronh "% (0'ka "f2-) ( lb") Rear 1600 kg (3527 lb.) Extra-cab models 1GR-FE engine Fronh (0'kg 'f2-) (1b') Rear 1600 kg (3527 lb.) 1KD-FTV engine SR grade models\* Fronh (0 kg f2-) (1b") Rear 1600 kg (3527 lb.) DLX grade models\* Fronh (0'kg 'f2-) (1b") Rear 1600 kg (3527 lb.)

\*: If you are not sure of which model your vehicle is, see "Model code" on page vii in the beginning of this manual.



- 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 load of 225 kg (496 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 which is recommended by the hitch manufacturer and conforms to the total trailer weight requirement.
- Follow the directions supplied by the hitch manufacturer, and bolt the hitch securely to the vehicle. Lubricate the hitch ball with a light coat of grease.
- Toyota recommends removing the tongue whenever you are not towing a trailer to reduce the possibility of additional damage caused if your vehicle is struck from behind.
- If removing the hitch assembly, seal any mounting holes in the vehicle body to prevent entry of pollutants such as exhaust fumes, dirt, water, etc.

### NOTICE

Do not use axle-mounted hitches as they can cause damage to the axle housing, wheel bearings, wheels or tires.

#### **BRAKES AND SAFETY CHAINS**

- Toyota recommends trailers with brakes that conform to any applicable state aw.
- Safety chains must always be used between the towing vehicle and the trailer. Leave sufficient slack in the chains for turns. The chains should cross under the trailer tongue to prevent the tongue from dropping to the ground in case it becomes damaged or the trailer separates from the vehicle. For correct safety chains procedures, follow the hitch or trailer manufacturer's recommendations.

### CAUTION

- If the total trailer weight exceeds 750 kg (1654 lb.), trailer brakes are required.
- Never tap into your vehicle's hydraulic system as it would lower its braking effectiveness.
- Never tow a trailer without using safety chains 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 Section 7-2 and Section 8 for instructions.
- The trailer tires should be inflated to the pressure recommended by the trailer manufacturer in respect to the total trailer weight.

#### TRAILER LIGHTS

Trailer lights must comply with federal and state regulations. See your local recreational vehicle dealer or rental agency for the correct type of wiring and relays for your trailer. Check for correct operation of the turn signals and stop lights each time you hitch up. Direct splicing may damage your vehicle's electrical system and cause a malfunction of your lights.

### BREAK-IN SCHEDULE

Toyota recommends that you do not tow a trailer with a new vehicle or a vehicle with any new power train component (engine, transmission, differential, wheel bearing, etc.) for the first 800 km (500 miles) of driving.

#### MAINTENANCE

- If you tow a trailer, your vehicle will require more frequent maintenance due to the additional load. For this information, please refer to the scheduled maintenance information in the "Warranty and Service Booklet".
- Retighten all fixing bolts of the towing ball and bracket after approximately 1000 km (600 miles) of trailer driving.

### PRE-TOWING SAFETY CHECK

- Check that your vehicle remains level when a loaded or unloaded trailer is hitched. Do not drive if the vehicle has an abnormal nose-up or nose-down condition, and check for improper tongue load, overload, worn suspension or other possible causes.
- Make sure the trailer cargo is securely loaded so that it cannot shift.
- Check that your rear view mirrors conform to any applicable state law. If not, install the rear view mirrors required for towing purpose.

#### TRAILER TOWING TIPS

When towing a trailer, your vehicle will handle differently than when not towing. The three main causes of vehicle-trailer accidents are driver error, excessive speed and improper trailer loading. Keep these in mind when towing:

- Before starting out, check operation of the lights and all vehicle-trailer connections. After driving a short distance, stop and recheck the lights and connections. Before actually towing a trailer, practice turning, stopping and backing with a trailer in an area away from traffic until you learn the feel.
- 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 10 km/h (6 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. If it is necessary to reduce speed, brake slowly. 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 and electrical charging performance, do not use fifth gear (manual transmission) or "D" (automatic transmission).

- 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 215.
- 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 keep them applied.
- Have someone place wheel blocks under both the vehicle and trailer wheels
- 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.

## CAUTION

- Observe the legal maximum speeds for trailer towing.
- 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 page 261 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.

- Keep the automatic transmission selector lever into "D" when engine braking is not required. Driving with the selector lever in "4" (5-speed automatic transmission) or "3" (4-speed automatic transmission) will reduce the fuel economy. (For details, see "Automatic transmission" on page 103.)
- Accelerate slowly and smoothly.
   Avoid jackrabbit starts. Get into high gear as quickly as possible.
- Avoid long engine idling. If you have a long wait and you are not in traffic, it is better to turn off the engine and start again later.
- Avoid engine lugging or over-revving. Use a gear position suitable for the road on which you are travelling.
- Avoid continuous speeding up and slowing down. Stop-and-go driving wastes fuel.

- Avoid unnecessary stopping and braking. Maintain a steady pace. Try to time the traffic signals so you only need to stop as little as possible or take advantage of through streets to avoid traffic lights. Keep a proper distance from other vehicles to avoid sudden braking. This will also reduce wear on your brakes.
- Avoid heavy traffic or traffic jams whenever possible.
- Do not rest your foot on the clutch or brake pedal. This causes premature wear, overheating and poor fuel economy.
- Maintain a moderate speed on highways. The faster you drive, the greater the fuel consumption. By reducing your speed, you will cut down on fuel consumption.
- Keep the front wheels in proper alignment. Avoid hitting the curb and slow down on rough roads. Improper alignment not only causes faster tire wear but also puts an extra load on the engine, which, in turn, wastes fuel.

- Keep the bottom of your vehicle free from mud, etc. This not only lessens weight but also helps prevent corrosion.
- Keep your vehicle tuned-up and in top shape. A dirty air cleaner, carburetor out of adjustment, 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. (See page 244.)

## A CAUTION

Never turn off the engine to coast down hills. Your power steering and brake booster will not function without the engine running. Also, the emission control system operates properly only when the engine is running.

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# SECTION 4

## IN CASE OF AN EMERGENCY

If your vehicle will not start
If your engine stalls while driving
If you cannot increase engine speed
If your vehicle overheats
If you have a flat tire 21
If your vehicle becomes stuck
If your vehicle needs to be towed
If you cannot shift automatic transmission selector lever 23 $$
If you lose your keys

# If your vehicle will not start— (a) Simple checks

Before making these checks, make sure you have followed the correct starting procedure given in "How to start the engine" on page 192 and that you have sufficient fuel. Also check whether the other keys will start the engine. If they work, your key may be broken. Have the key checked at your Toyota dealer. If none of your keys work, there may be a malfunction in the immobilizer system. Call your Toyota dealer. (See "Keys" on page 10.)

# If the engine is not turning over or is turning over too slowly—

- 1. Check that the battery terminals are tight and clean.
- 2. If the battery terminals are O.K., switch on the interior light.
- If the light is out, dim or goes out when the starter is cranked, the battery is discharged. You may try jump starting. See "(d) Jump starting" for further instructions.

If the light is O.K., but the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop.

### NOTICE

Manual transmission: Do not pull— or push—start the vehicle. It may damage the vehicle or cause a collision when the engine starts. On vehicles with three—way catalytic converters, also the three—way catalytic converters may overheat and become a fire hazard.

# If the engine turns over at its normal speed but will not start—

### Gasoline-powered vehicles

- The engine may be flooded because of repeated cranking. See "(b) Starting a flooded engine (gasoline engine)" for further instructions.
- If the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop.

### Diesel-powered vehicles

- If you are starting the engine that has died from an empty tank, you may have needed to bleed the fuel system before cranking the engine. See "(c) Bleeding the fuel system (diesel engine)" for further instructions.
- If the fuel system is O.K., but the engine still will not start, it needs adjustment or repair. Call a Toyota dealer or qualified repair shop for assistance.

# (b) Starting a flooded engine (gasoline engine)

If the engine will not start, your engine may be flooded because of repeated cranking.

If this happens, turn the engine switch to "START" with the accelerator pedal fully depressed. Keep the key and accelerator pedal in these positions for 15 seconds and release them. Then try starting the engine with your foot off the accelerator pedal.

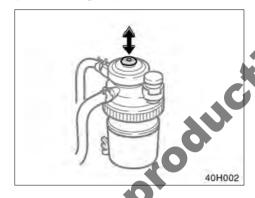
If the engine does not start after 15 seconds of cranking, release the key, wait a few minutes and try again.

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

### NOTICE

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

# (c) Bleeding the fuel system (diesel engine)



If you run out of fuel and the engine dies, the engine may not restart after refueling. In such case, operate the priming pump until you feel more resistance.

### (d) 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.

Vehicles with automatic transmission—The engine cannot be started by push-starting.

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

# **CAUTION**

 Batteries contain sulfuric acid which is poisonous and corrosive.
 Wear protective safety glasses when jump starting, and avoid spilling acid on your skin, clothing, or vehicle.

- If you should accidentally get acid on yourself or in your eyes, remove any contaminated clothing and flush the affected area with water immediately. Then get immediate medical attention. If possible, continue to apply water with a sponge or cloth while en route to the medical office.
- The gas normally produced by a battery will explode if a flame or spark is brought near. Use only standardized jumper cables and do not smoke or light a match while jump starting.

### **NOTICE**

The battery used for boosting must be 12 V. Do not jump start unless you are sure that the booster battery is correct.

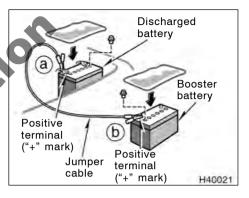
#### JUMP STARTING PROCEDURE

 If the booster battery is installed in another vehicle, make sure the vehicles are not touching. Turn off all unnecessary lights and accessories.

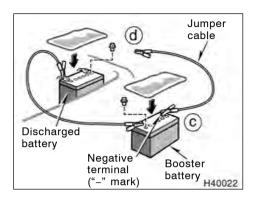
When boosting, use the battery of matching or higher quality. Any other battery may be difficult to jump start with.

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.)
- 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.

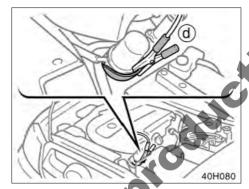


- Make the cable connections in the order a, b, c, d.
  - a. Connect the clamp of the positive (red) jumper cable to the positive (+) terminal on the discharged battery.
  - b. Connect the clamp at the other end of the positive (red) jumper cable to the positive (+) terminal on the booster battery.

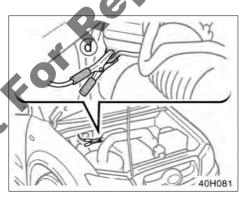


- c. Connect the clamp of the negative (black) jumper cable to the negative (-) terminal on the booster battery.
- d. Connect the clamp at the other end of the negative (black) jumper cable to a solid, stationary, unpainted, metallic point of the vehicle with the discharged battery.

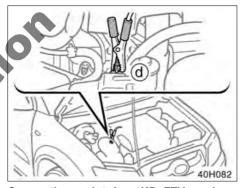
The recommended connecting points are shown in the following illustrations:



Connecting point for IGR-FE engine



Connecting point for 2TR-FE engine



Connecting point for 1KD-FTV engine

Do not connect the cable to or near any part that moves when the engine is cranked.

# **A** CAUTION

When making the connections, to avoid death or 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.

- Diesel-powered vehicles only:
   Charge the discharged battery with jumper cable 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.
- Start your engine in the normal way. After starting, run it at about 2000 rpm for several minutes with the accelerator pedal lightly depressed.
- Carefully disconnect the cables in the exact reverse order; the negative cable and then the positive cable.
- Carefully dispose of the battery cover cloths—they may now contain sulfuric acid.
- 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.

# If your engine stalls while driving

If your engine stalls while driving...

- 1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
- 2. Turn on your emergency flashers.
- 3. Try starting the engine again.

If the engine will not start, see "If your vehicle will not start" on page 210.



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 (gasoline engine) or electronic engine control system (diesel engine).

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 Toyota checked by your Toyota dealer as soon as possible.

Even if the abnormality in the electronic throttle control system (gasoline engine) or electronic engine control system (diesel engine) is corrected during low speed driving, the system may not be recovered until the engine is stopped and the engine switch is turned to "ACC" or "LOCK" position.

## **CAUTION**

Gasoline engine:

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.
- 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.

# **A** CAUTION

To help avoid personal injury, keep the hood closed until there is no steam. Escaping steam or coolant is a sign of very high pressure.  Visually check to see if the engine drive belt (fan belt) is broken or loose.
 Look for obvious coolant leaks from the radiator, hoses, and under the vehicle.
 However, note that water draining from the air conditioning is normal if it has been used.

## / CAUTION

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

- If the engine drive belt is broken or the coolant is leaking, stop the engine immediately. Call a Toyota dealer for assistance.
- If the engine drive belt is O.K. and there are no obvious leaks, you may help the engine cool down more quickly by running it at about 1500 rpm for a few minutes with the accelerator pedal lightly depressed.

 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 260.

# / CAUTION

Do not attempt to remove the radiator cap when the engine and radiator are hot. Serious injury could result from scalding hot fluid and steam blown out under pressure.

7. After the engine coolant temperature has cooled to normal, again check the coolant level in the reservoir. If necessary, bring it up to half full again. Serious coolant loss indicates a leak in the system. You should have it checked as soon as possible at your Toyota dealer.

### If you have a flat tire—

- Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place well away from the traffic. Avoid stopping on the center divider of a highway. Park on a level spot with firm ground.
- 2. Stop the engine and turn on your emergency flashers.
- Firmly 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.

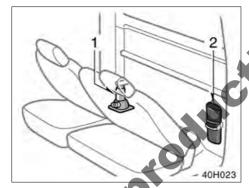
## / CAUTION

When jacking, be sure to observe the following to reduce the possibility of death or serious injury:

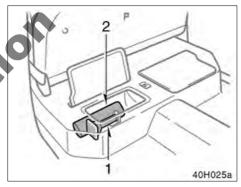
- Follow jacking instructions.
- Do not put any part of your body under the vehicle supported by the jack. Otherwise, death or serious injury may occur.
- Do not start or run the engine while your vehicle is supported by the jack.
- Stop the vehicle on a level firm ground, firmly set the parking brake 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 death or serious injury.

# —Required tools and spare tire

- Never get under the vehicle when the vehicle is supported by the jack alone.
- Use the jack only for lifting your vehicle during wheel changing.
- Do not raise the vehicle with someone in the vehicle.
- When raising the vehicle, do not place any objects on top of or underneath the jack.
- Raise the vehicle only high enough to remove and change the tire.



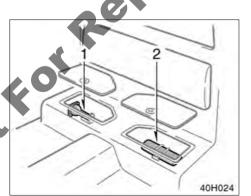
Single-cab models



Double-cab models

#### **NOTICE**

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

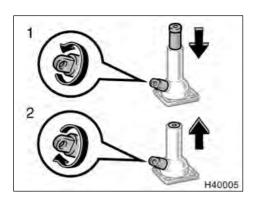


Extra-cab models

- 1. Get the required tools and spare tire.
  - 1. Jack
  - 2. 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.

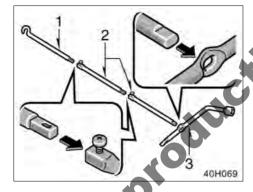
When storing the jack, put it in place and secure to prevent it from flying forward during a collision or sudden braking.



Turn the jack joint by hand.

To remove: Turn the joint in direction 1 until the jack is free.

To store: Turn the joint in direction 2 until the jack is firmly secured to prevent it flying forward during a collision or sudden braking.

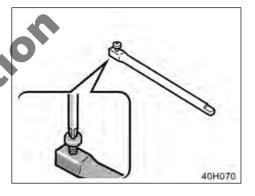


To remove the spare tire:

- Put a wheel nut wrench, jack handle extensions and jack handle end together as shown in the illustration.
  - 1 Jack handle end
  - 2 Jack handle extensions
  - 3 Wheel nut wrench



Make sure they are each securely fixed with screws.

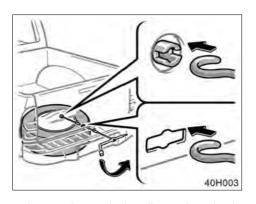


When connecting a jack handle extension with jack handle end, use a Phillips-head screwdriver or your hand to tighten the bolts on the joints as shown in the illustration.

Make sure that the hollow faces to the bolt on any joint when you tighten the bolts

### **NOTICE**

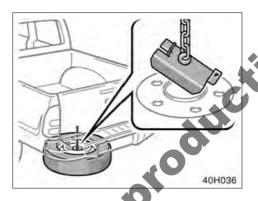
Tighten all joints securely. Otherwise, the extension may come off and it may damage the paint or vehicle body.



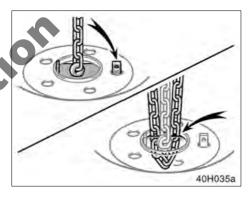
Insert the jack handle end with the extensions into the lowering screw through the access hole and turn it counterclockwise by pushing it to the front lightly.

### NOTICE

To protect the paint, place several sheets of paper over the paintwork.



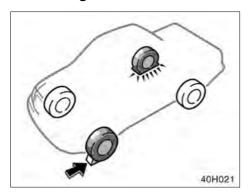
3. After the tire is lowered completely to the ground, remove the holding bracket as shown in the illustration.



When storing the spare tire, put it in place with the outer side of the wheel facing up and hook the holding bracket as shown in the illustration. After the tire goes half way up, check that the suspended chain is able to enter the tire hole, for proper storage. Then secure the tire, taking care that the tire goes straight up without catching on the chain of any other part, to prevent it from flying during a collision or sudden braking.

Check the tire from the side to see that the tire is stored horizontally.

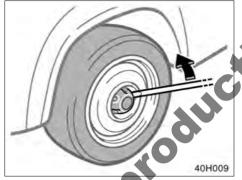
### -Blocking the wheel



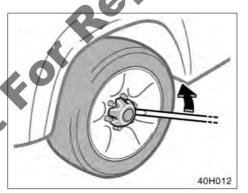
2. Block the wheel diagonally opposite the flat tire to keep the vehicle from rolling when it is jacked up.

When blocking the wheel, place a wheel block in front of one of the front wheels or behind one of the rear wheels.

## Removing wheel ornament (except two-wheel drive models with aluminum wheels)



Type A



Type B

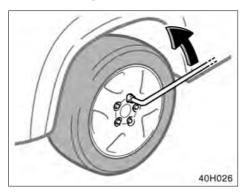
### 3. Remove the wheel ornament.

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.

### -Loosening wheel nuts



#### 4. Loosen all the wheel nuts.

Always loosen the wheel nuts before raising the vehicle.

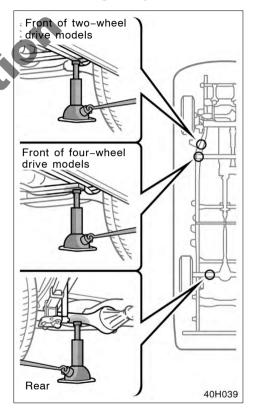
Turn the wheel nuts counterclockwise to loosen. To get maximum leverage, fit the wrench to the nut so that the handle is on the right side, as shown above. Grab the wrench near the end of the handle and pull up on the handle. Be careful that the wrench does not slip off the nut.

Do not remove the nuts yet—just unscrew them about one-half turn.

## / CAUTION

Never use oil or grease on the bolts or nuts. The nuts may loosen and the wheels may fall off, which could cause serious accident.

### —Positioning the jack



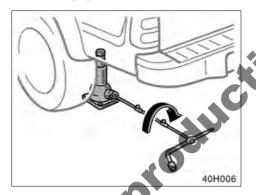
# 5. Position the jack at the correct jack points as shown.

Two-wheel drive models
Front—Under the side rail
Rear—Under the rear axle housing

Four-wheel drive models
Front—Under the cross member
Rear—Under the rear axle housing

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

### -Raising your vehicle



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

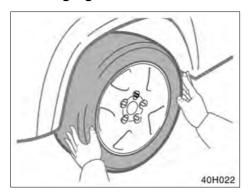
Remember you will need more ground clearance when putting on the spare tire than when removing the flat tire.

To raise the vehicle, insert the jack handle end into the jack (it is a loose fit) and turn it clockwise with the wheel nut wrench, making sure the wheel nut wrench remains firmly fitted onto the jack handle extension. As the jack touches the vehicle and begins to lift, double-check that it is properly positioned.

## / CAUTION

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

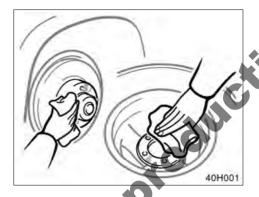
### -Changing wheels



# 7. Remove the wheel nuts and change tires.

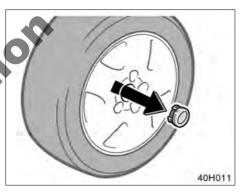
Lift the flat tire straight off and put it aside.

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.

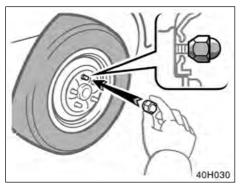
## —Removing wheel ornament (on two-wheel drive models with aluminum wheels)



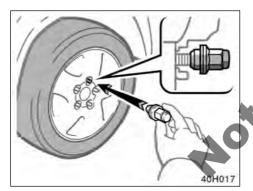
#### 8. Remove the wheel ornament.

Before stowing the flat tire, remove the wheel ornament by pushing from the reverse side.

### -Reinstalling wheel nuts



Steel wheel



Aluminum wheel

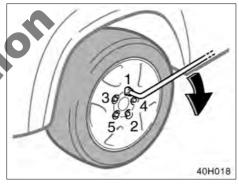
# 9. Reinstall all the wheel nuts finger tight.

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.

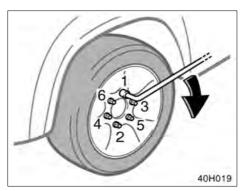


Never use oil or grease on the bolts or nuts. Doing so may lead to overtightening the nuts and damaging the bolts. The nuts may loosen and the wheels may fall off, which could cause serious accident. If there is oil or grease on any bolt or nut, clean it.

### -Lowering your vehicle



Two-wheel drive models



Four-wheel drive models

# 10. Lower the vehicle completely and tighten the wheel nuts.

Turn the jack handle end with the extensions counterclockwise to lower the vehicle, making sure the handle remains firmly fitted onto the jack handle extension.

Use only the wheel nut wrench and turn it clockwise to tighten the nuts. Do not use other tools or any additional leverage other than your hands, such as a hammer, pipe or your foot. Make sure the wrench is securely engaged over the nut.

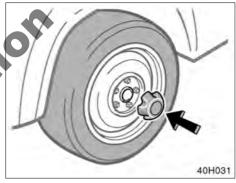
Tighten each nut a little at a time in the order shown. Repeat the process until all the nuts are tight.

## **CAUTION**

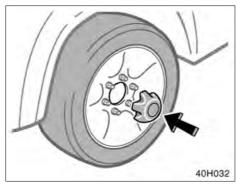
 When lowering the vehicle, make sure all portions of your body and all other persons around will not be injured as the vehicle is lowered to the ground.

- Two-wheel drive models: Have the wheel nuts tightened by torque wrench to 121 N·m (12.3 kgf·m, 89 ft·lbf) for aluminum wheel and 152 N·m (15.5 kgf·m, 112 ft·lbf) for steel wheel, as soon as possible after changing wheels. Otherwise, the nuts may loosen and the wheels may fall off, which could cause serious accident.
- Four-wheel drive models: Have the wheel nuts tightened by torque wrench to 105 N·m (10.7 kgf·m, 77.4 ft·lbf), as soon as possible after changing wheels. Otherwise, the nuts may loosen and the wheels may fall off, which could cause serious accident.

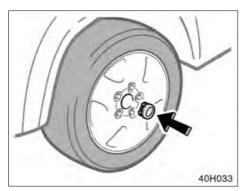
# —Reinstalling wheel ornament



Type A



Type B



Type C

#### 11. Reinstall the wheel ornament.

Type A and B-

Put the wheel ornament into position. And press hand firmly on one side of wheel ornament and then firmly tap the other side around the edge of wheel ornament with the heel of your hand to snap into place.

Type C-

Push the wheel ornament into the center hole.



- Take due care in handling the ornament to avoid unexpected personal injury.
- Do not attach a heavily damaged plastic wheel ornament. It may fly off the wheel and cause accidents while the vehicle is moving.

## -After changing wheels

### Check the air pressure of the repaced tire.

Adjust the air pressure to the specification designated on page 290. 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.

# 13. Restore all the tools, jack and flat tire securely.

As soon after changing wheels as possible, tighten the wheel nuts to the torque specified on page 290 with a torque wrench. Have a technician repair the flat tire and replace the spare tire with it.

This is the same procedure for changing or rotating your tires.

## / CAUTION

Before driving, make sure all the tools, jack and flat tire are securely in place in their storage location to reduce the possibility of death or serious injury during a collision or sudden braking.

# If your vehicle becomes stuck

If your vehicle becomes stuck in snow, mud, sand, etc., then you may attempt to rock the vehicle free by moving it forward and backward.

## A CAUTION

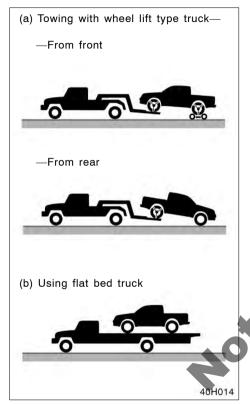
Do not attempt to rock the vehicle free by moving it forward and backward if people or objects are anywhere near the vehicle. During the rocking operation the vehicle may suddenly move forward or backward as it becomes unstuck, causing injury to nearby people or damage to objects.

#### NOTICE

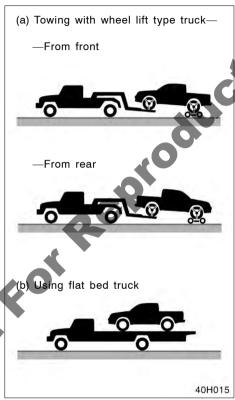
If you rock your vehicle, observe the following precautions to prevent damage to the transmission and other parts.

- ◆ 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—



Two-wheel drive models



Four-wheel drive models

If towing is necessary, we recommend you to have it done by your Toyota dealer or a commercial tow truck service. In consultation with them, have your vehicle towed using either (a) or (b).

Only when you cannot receive a towing service from a Toyota dealer or commercial tow truck service, tow your vehicle carefully in accordance with the instructions given in "—Emergency towing" on page 230.

Proper equipment will help ensure that your vehicle is not damaged while being towed. Commercial operators are generally aware of the state/provincial and local laws pertaining to towing.

Your vehicle can be damaged if it is towed incorrectly. Although most operators know the correct procedure, it is possible to make a mistake. To avoid damage to your vehicle, make sure the following precautions are observed. If necessary, show this page to the tow truck driver.

#### **TOWING PRECAUTIONS:**

Use a safety chain system for all towing, and abide by the state/provincial and local laws. The wheels and axle on the ground must be in good condition. If they are damaged, use a towing dolly.

#### Two-wheel drive models-

# (a) Towing with wheel lift type truck From front—

Manual transmission:

We recommend using a towing dolly under the rear wheels. If you do not use a towing dolly, release the parking brake and put the transmission in neutral.

• Automatic transmission:

Use a towing dolly under the rear wheels.

### **NOTICE**

Never tow a vehicle with an automatic transmission from the front with the rear wheels on the ground, as this may cause serious damage to the transmission.

#### From rear—

Place the engine switch in the "ACC" position.

### **NOTICE**

- ♦ When lifting wheels, take care to ensure adequate ground clearance for towing at the opposite end of the raised vehicle. Otherwise, the bumper and/or underbody of the towed vehicle will be damaged during towing.
- ◆ Do not tow with the key removed or the engine switch 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.
- (b) Using flat bed truck

#### Four-wheel drive models-

- (a) Towing with wheel lift type truck From front—
- Manual transmission:

We recommend using a towing dolly under the rear wheels. If you do not use a towing dolly, release the parking brake, put the transmission in neutral and set the transfer in "H2".

Automatic transmission:

Use a towing dolly under the rear wheels.

### **NOTICE**

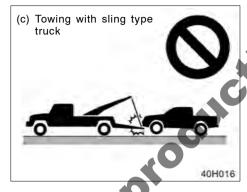
Never tow a vehicle with an automatic transmission from the front with the rear wheels on the ground, as this may cause serious damage to the transmission.

#### From rear-

Use a towing dolly under the front wheels.

#### **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.
- Never tow a vehicle from the rear with the front wheels on the ground, as this may cause serious damage to the differential.
- (b) Using flat bed truck



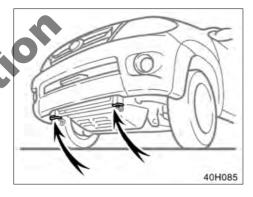
All models—

(c) Towing with sling type truck

### NOTICE

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

### —Emergency towing



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

If towing service is not available in an emergency, your vehicle may be temporarily towed by a cable or chain secured to one of the emergency towing eyelets under the front of the vehicle.

Use extreme caution when towing the vehicle.

#### **NOTICE**

Only use specified towing eyelet; otherwise vour vehicle may be damaaed.

A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speeds. Also, the wheels, axles, drive train, steering and brakes must all be in good condition.



## **♠** CAUTION

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

### NOTICE

- ♦ Do not use the front eyelets other than emergency towing eyelets. They are not designed for towing.
- ♦ Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing eyelet provided.

Before towing, release the parking brake, put the transmission in neutral (manual) or "N" (automatic) and set the transfer in "H2" mode (four-wheel drive models). The engine switch must be in "ACC" (engine off) or "ON" (engine running).



If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.

# —Emergency towing eyelet precautions

- Before emergency towing, check that the eyelet is not broken or damage and that the installation bolts are not loose.
- Fasten the towing cable or chain securely to the eyelet.
- Do not jerk the eyelet. Apply steady and even force.
- To avoid damaging the eyelet, do not pull from the side or at a vertical angle. Always pull straight ahead.

## (CAUTION

If the emergency towing eyelet is used to get out when your vehicle becomes stuck in mud, sand or other condition from which the vehicle cannot be driven out under its own power, make sure to observe the precautions mentioned below. Otherwise, excessive stress will be put on the eyelet and the towing cable or chain may break, causing serious injury or damage.

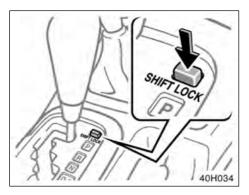
- If the towing vehicle can hardly move, do not forcibly continue the towing. Contact your Toyota dealer or a commercial tow truck service for assistance.
- Tow the vehicle as straight ahead as possible.
- Keep away from the vehicle during towing.

# —Tips for towing a stuck vehicle

The following methods are effective to use when your vehicle is stuck in the mud, sand or other condition from which the vehicle cannot be driven out under its own power. Use extreme caution when towing the vehicle. In addition, keep away from the vehicles and towing cable or chain when towing.

- Remove the sand and soil in the front and the back of the tires.
- Place stones or wood under the tires.

# If you cannot shift automatic transmission selector lever



If you cannot move the selector lever out of the "P" position to other positions even though the brake pedal is depressed, use the "SHIFT LOCK" button as follows:

- Turn the engine switch to the "LOCK" position. Make sure the parking brake is applied.
- Push the "SHIFT LOCK" button. You can move out of the "P" position only while pushing the button.
- 3. Shift into the "N" position
- 4. Start the engine. For your safety, keep the brake pedal depressed.

Be sure to have the system checked by your Toyota dealer as soon as possible.

### If you lose your keys

You can purchase a new key at your Toyota dealer if you can give them the key number and master key.

Even if you lose only one key, contact your Toyota dealer to make a new key. If you lose all your master keys, you cannot make new keys; the whole engine immobilizer system must be replaced.

See the suggestion given in "Keys" on page 10.

Wireless remote control key-

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.

Aot For Reproduction

# SECTION **5**

# CORROSION PREVENTION AND APPEARANCE CARE

	Protecting your Toyota from corrosion	
	Washing and waxing your Toyota	237
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# Protecting your Toyota from corrosion

Toyota, through the 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" on page 237 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 show, 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.

## / CAUTION

- 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.
- Rinse off loose dirt with a hose. Remove any mud or road salt from the underside of the vehicle or the wheel wells.
- Wash with a mild car-wash soap, mixed according to the manufacturer's instructions. Use a soft cotton mitt and keep it wet by dipping it frequently into the wash water. Do not rub hard—let the soap and water remove the dirt.

Plastic wheel ornaments: The plastic wheel ornaments are damaged easily by organic substances. If any organic substances 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.

#### NOTICE

- ◆ Do not use corrosive chemicalbased cleaners on your wheels. (Example: hydrofluoric acid)
- ◆ Do not use steam cleaners or the chemicals therein to clean your wheels.
- ◆ Do not use scouring pads, wire brushes, or coarse abrasives to clean your wheels.
- ◆ Do not use alcohol, solvents, gasoline, or other non-neutral detergents, because they may alter the wheel's appearance and resistance to corrosion.

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 it is retracted before driving 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.

Wax the vehicle again when water does not bead but remains on the surface in large patches.

#### Touch-up paint

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

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



### Cleaning the interior

## / CAUTION

Do not splash or spill liquid in the vehicle. Doing so may cause electrical components etc. to malfunction or catch fire.

#### **NOTICE**

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 vehicle carpet (or floor mat) and cause a malfunction; and it may cause body corrosion.

### Vinyl interior

The vinyl upholstery may be easily cleaned with a mild soap or detergent and water.

First vacuum over the upholstery to remove loose dirt. Then, using a sponge or soft cloth, apply the soap solution to the vinyl. After allowing it to soak in for a few minutes to loosen the dirt, remove the dirt and wipe off the soap with a clean damp cloth. If all the dirt do not come off, repeat the procedure. Commercial foaming-type vinyl cleaners are also available which work well. Follow the manufacturer's instructions.

### NOTICE

Do not use solvent, thinner, gasoline or window cleaner on the interior.

#### Carpets

Use a good foam-type shampoo to clean the carpets.

Begin by vacuuming thoroughly to remove as much dirt as possible. Several types of foam cleaners are available; some are in aerosol cans and others are powders or liquids which you mix with water to produce a foam. To shampoo the carpets, use a sponge or brush to apply the foam. Rub in overlapping circles.

Do not apply water—the best results are obtained by keeping the carpet as dry as possible. Read the shampoo instructions and follow them closely.

#### Seat belts

The seat belts may be cleaned with mild soap and water or with lukewarm water.

Use a cloth or sponge. As you are cleaning, check the belts for excessive wear, fraying, or cuts.

#### **NOTICE**

- ◆ Do not use dye or bleach on the belts—it may weaken them.
- ◆ Do not use the belts until they become dry.

#### Windows

Use a cloth dampened with lukewarm water to gently wipe the window clean. Wipe the window in strokes running parallel to the heater wires.

#### **NOTICE**

- ◆ Do not use glass cleaner to clean the inside of the rear window, as this may cause damage to the rear window defogger heater wires.
- When cleaning the inside of the rear window, be careful not to scratch or damage the heater wires.

Air conditioning control panel, audio system, instrument panel, console panel, and switches

Use a soft damp cloth for cleaning.

Soak a clean soft cloth in water or lukewarm water then lightly wipe off dirt.

#### **NOTICE**

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

#### Leather interior

The leather upholstery may be cleaned with neutral detergent for wool.

Remove dirt using a soft cloth dampened with 5% solution of neutral detergent for wool. Then thoroughly wipe off all traces of detergent with a clean damp cloth.

After cleaning or whenever any part of the leather gets wet, dry with a soft clean cloth. Allow the leather to dry in a ventilated shaded area.

#### **NOTICE**

- If a stain should fail to come out with a neutral detergent, apply a cleaner that does not contain an organic solvent.
- Never use organic substances such as benzine, alcohol or gasoline, or alkaline or acid solutions for cleaning the leather as these could cause discoloring.
- Use of a nylon brush or synthetic fiber cloth, etc. may scratch the fine grained surface of the leather.

- Mildew may develop on soiled leather upholstery. Be especially careful to avoid oil spots. Try to keep your upholstery always clean.
- ◆ Long exposure to direct sunlight may cause the leather surface to harden and shrink. Keep your vehicle in a shaded area, especially in the summer.
- ◆ The interior of your vehicle is apt to heat up on hot summer days, so avoid placing on the upholstery items made of vinyl or plastic or containing wax as these tend to stick to leather when warm.
- Improper cleaning of the leather upholstery could result in discoloration or staining.

If you have any questions about the cleaning of your Toyota, your local Toyota dealer will be pleased to answer them.

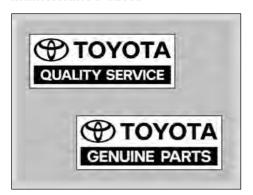


# SECTION 6

# **MAINTENANCE REQUIREMENTS**

	Maintenance facts
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#### Maintenance facts



#### Regular maintenance is essential.

We urge you to protect your new vehicle by having your Toyota serviced according to the maintenance schedule given on the following pages. Regular maintenance will aid:

- Good fuel economy
- Long vehicle life
- Driving enjoyment
- Safety
- Reliability
- Warranty coverage
- Compliance with government regulations

Your Toyota has been designed for economical driving and economical maintenance. Many formerly required maintenance items are no longer required or are not required as often. To make sure your vehicle runs at peak efficiency, follow the maintenance schedule.

For full details of your maintenance schedule, read the separate "Warranty and Service Booklet".

#### Where to go for service?

It makes good sense to take your vehicle to your local Toyota dealer for service.

Toyota technicians are well-trained specialists. And they are receiving 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. Doesn't that seem like the best way?

Your Toyota dealer has invested a lot of money in special Toyota tools and service equipment. It helps do the job better and at less cost.

Your Toyota dealer's service department will perform all of the scheduled maintenance on your vehicle—reliably and economically.

#### 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 on page 252.

Note, however, that some maintenance tasks require special tools and skills. These are best performed by qualified technicians. Even if you are an experienced do-it-yourself mechanic, we recommend that repairs and maintenance be conducted by your Toyota dealer who will keep a record of maintenance on your Toyota. This record could be helpful should you ever require Warranty Service.

The service interval for scheduled maintenance is determined by the odometer reading or time interval, whichever comes first, shown in the schedule.

Rubber hoses (for cooling and heater system, brake system and fuel system) should be inspected by a qualified technician in accordance with the Toyota maintenance schedule.

They are particularly important maintenance items. Have any deteriorated or damaged hoses replaced immediately. Note that rubber hoses will deteriorate with age, resulting in swelling, chafing or cracks.

# 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.

# / CAUTION

Do not continue driving with the vehicle unchecked. It could result in serious vehicle damage and possibly personal injury.

# SECTION 7-1

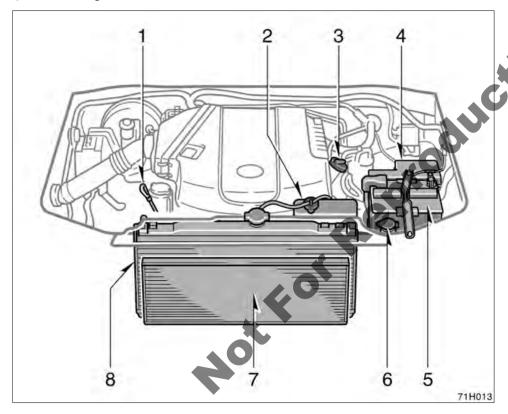
## DO-IT-YOURSELF MAINTENANCE

#### Introduction

Engine compartment overview	
Fuse locations	25 <sup>-</sup>
Do-it-vourself service precaution	ons 250

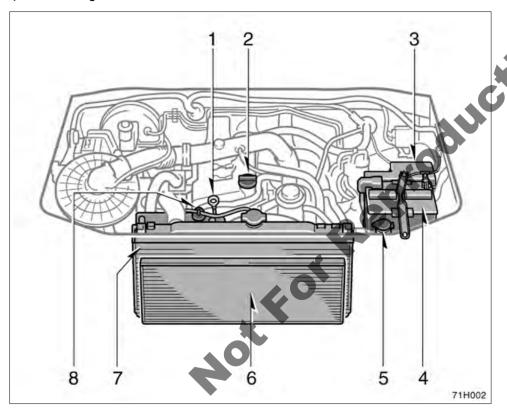
## Engine compartment overview

## ▶1GR-FE engine



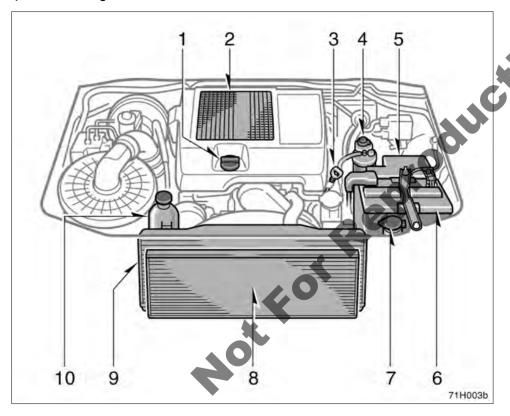
- 1. Engine oil level dipstick
- 2. Engine coolant reservoir
- 3. Engine oil filler cap
- 4. Fuse block
- 5. Battery
- 6. Windshield washer fluid tank
- 7. Condenser
- 8. Radiator

#### ▶2TR-FE engine



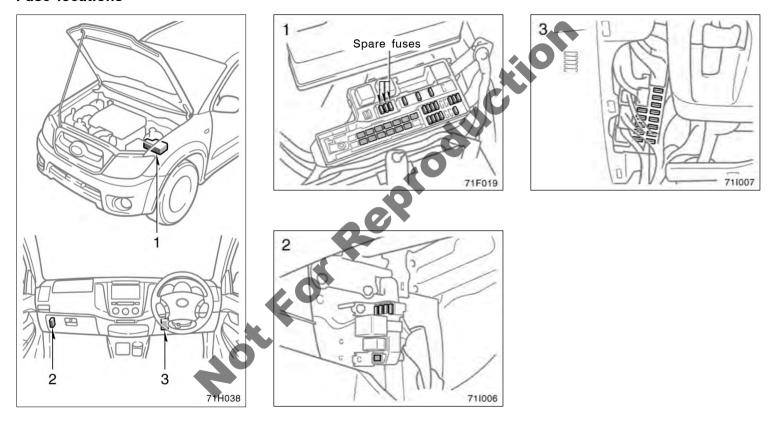
- 1. Engine oil level dipstick
- 2. Engine oil filler cap
- 3. Fuse block
- 4. Battery
- 5. Windshield washer fluid tank
- 6. Condenser
- 7. Radiator
- 8. Engine coolant reservoir

#### ▶1KD-FTV engine



- 1. Engine oil filler cap
- 2. Intercooler
- 3. Engine oil level dipstick
- 4. Fuel filter
- 5. Fuse block
- 6. Battery
- 7. Windshield washer fluid tank
- 8. Condenser
- 9. Radiator
- 10. Engine coolant reservoir

## **Fuse locations**



# Do-it-yourself service precautions

If you perform maintenance by yourself, be sure to follow the correct procedure given in this section.

You should be aware that improper or incomplete servicing may result in operating problems.

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.

Utmost care should be taken when working on your vehicle to prevent accidental injury. Here are a few precautions that you should be especially careful to observe:

## **CAUTION**

- When the engine is running, keep hands, clothing, and tools away from the moving fan and engine drive belts. (Removing rings, watches, and ties is advisable.)
- Right after driving, the engine compartment—the engine, radiator, exhaust manifold, power steering fluid reservoir and spark plug boots, etc.—will be not. 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.
- 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 and clutch 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**

- 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.
- ♦ If you spill some of the coolant, be sure to wash it off with water to prevent it from damaging the parts or paint.
- Do not allow dirt or anything else to fall through the spark plug holes.
- Do not pry the outer electrode of a spark plug against the center electrode.

- ♦ Use only spark plugs of the specified type. Using other types will cause engine damage, loss of performance or radio noise.
- ◆ Do not overfill automatic transmission fluid, transfer oil, and power steering fluid—the transmission, transfer and power steering could be damaged.
- ♦ If you spill brake and clutch fluid, be sure to wash it off with water to prevent it from damaging the parts or paint.
- ◆ 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.

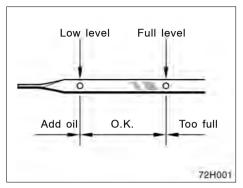
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## DO-IT-YOURSELF MAINTENANCE

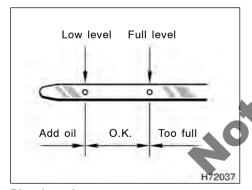
## **Engine and Chassis**

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#### Checking the engine oil level



Gasoline engine



Diesel engine

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

- 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.
- Pull the dipstick out, hold a rag under the end and wipe it clean.
- Reinsert the dipstick—push it in as far as it will go, or the reading will not be correct.
- Pull the dipstick out and look at the oil level while holding a rag under the end.

# CAUTION

Be careful not to touch the hot exhaust manifold.

#### **NOTICE**

Be careful not to drop 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:

Gasoline engine

1.5 L (1.6 qt., 1.3 lmp. qt.)

Diesel engine

1.6 L (1.7 qt., 1.4 lmp. qt.)

For the engine oil capacity, see "Service specifications" on page 285.

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**

#### Gasoline engine-

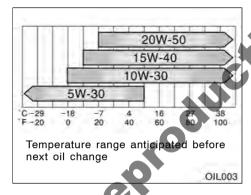
"Toyota Genuine Motor Oil" is used in your Toyota vehicle. Use Toyota approved "Toyota Genuine Motor Oil" or equivalent to satisfy the following grade and viscosity.

#### Oil grade:

20W-50 and 15W-40—
API grade SL or SM multigrade engine oil

10W-30 and 5W-30—
API grade SL "Energy-Conserving",
SM "Energy-Conserving" or ILSAC
multigrade engine oil

#### Recommended viscosity (SAE):



If you use SAE 10W-30 or a higher viscosity engine oil in extremely low temperatures, the engine may become difficult to start, so SAE 5W-30 engine oil is recommended.



API service symbol



**ILSAC** certification mark

#### Oil identification marks

Either or both API registered marks are added to some oil containers to help you select the oil you should use.

The API Service Symbol is located anywhere on the outside of the container.

The top portion of the label shows the oil quality by API (American Petroleum Institute) designations such as SM. The center portion of the label shows the SAE viscosity grade such as SAE 10W-30.

"Energy-Conserving" shown in the lower portion, indicates that the oil has fuel-saving capabilities.

The ILSAC (International Lubricant Standardization and Approval Committee) Certification Mark is displayed on the front of the container.

#### Diesel engine-

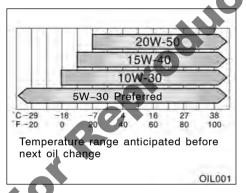
"Toyota Genuine Motor Oil" is used in your Toyota vehicle. Use Toyota approved "Toyota Genuine Motor Oil" or equivalent to satisfy the following grade and viscosity.

For Australia, Singapore and New Zealand—

Oil grade:

G-DLD-1, API CF-4 or API CF or ACEA B1

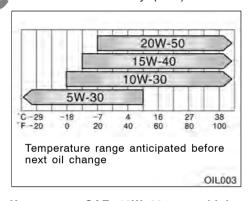
Recommended viscosity (SAE):



SAE 5W-30 is the best choice for your vehicle, for good fuel economy and good starting in cold weather.

If you use SAE 10W-30 or a higher viscosity engine oil in extremely low temperatures, the engine may become difficult to start, so SAE 5W-30 engine oil is recommended.

For other countries—
Oil grade:
G-DLD-1, API CF-4 or API CF
(You may also use API CE or CD)
Recommended viscosity (SAE):



If you use SAE 10W-30 or a higher viscosity engine oil in extremely low temperatures, the engine may become difficult to start, so SAE 5W-30 engine oil is recommended.



DLD logo mark

The Global DLD-1 logo mark, attached on some oil containers to help in selecting the oil you should use, indicates that the oil meets the guidelines recommended by the following associations:

- ACEA (Association des Constructeurs Européens d'Automobiles)
- AAM (Alliance of Automobile Manufacturers)
- EMA (Engine Manufacturers Association)
- JAMA (Japan Automobile Manufacturers Association)



To ensure excellent lubrication performance for your engine, Toyota recommends the use of "Toyota Genuine Motor Oil", which has been specifically tested and approved for all Toyota engines.

Please contact your Toyota dealer for further details about "Toyota Genuine Motor Oil". Other Motor oils of matching quality can be also used.

# 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 "F" and "L" lines on the reservoir. If the level is low, add the coolant. (For the coolant type, see "Coolant type selection" described below.)

The coolant level in the reservoir will vary with engine temperature. However, if the level is on or below the "L" line, add coolant. Bring the level up to the "F" line.

If the coolant level drops within a short time after replenishing, there may be a leak in the system. Visually check the radiator, hoses, radiator cap and drain cock and water pump.

If you can find no leak, have your Toyota dealer test the cap pressure and check for leaks in the cooling system.

## **CAUTION**

To prevent burning yourself, do not remove the radiator cap when the engine is hot.

#### Coolant type selection

Use of improper coolants may damage your engine cooling system.

Only use "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology. (Coolant with long-life hybrid organic acid technology is a combination of low phosphates and organic acids.)

"Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water. This coolant provides protection down to about -35°C (-31°F).

#### **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, condenser and intercooler

If any of the above parts are extremely dirty or you are not sure of their condition, take your vehicle to a Toyota dealer.

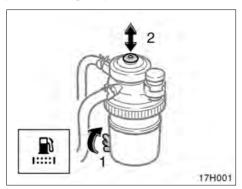


To prevent burning yourself, be careful not to touch the radiator, condenser or intercooler when the engine is hot.

#### NOTICE

To prevent damage to the radiator, condenser or intercooler, do not perform the work by yourself.

# Draining fuel filter water (diesel engine)



When the fuel system warning light flashes, the water in the fuel filter must be drained immediately.

Place a small tray under the drain plug or drain hose to catch the water.

- Turn the drain plug about 2—2-1/2 turns, as shown above. (Loosening more than this will cause water oozing from around the drain plug.)
- Operate the priming pump until fuel begins to run out.

After draining, retighten the drain plug. Do not use a tool.

# Checking tire inflation pressure

Keep your tire inflation pressures at the proper level.

The recommended cold tire inflation pressures and tire sizes are given on page 290.

You should check the tire inflation pressure every two weeks, or at least once a month. And do not forget the spare!

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.

The following instructions for checking tire inflation pressure should be observed:

- The pressure should be checked only when the tires are cold. If your vehicle has been parked for at least 3 hours and has not been driven for more than 1.5 km or 1 mile since, you will get an accurate cold tire inflation pressure reading.
- Always use a tire pressure gauge.
   The appearance of a tire can be misleading. Besides, tire inflation pressures that are even just a few pounds off can degrade ride and handling.
- Do not bleed or reduce tire inflation pressure after driving. It is normal for the tire inflation pressure to be higher after driving.
- 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.

## **CAUTION**

Keep your tires properly inflated. Otherwise, the following conditions may occur and cause an accident resulting in death or serious injuries.

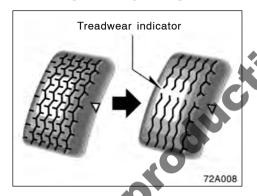
Low tire pressure (underinflation)—

- Excessive wear
- Uneven wear
- Poor handling
- Possibility of blowouts from an overheated tire
- Poor sealing of the tire bead
- Wheel deformation and/or tire separation
- A greater possibility of tire damage from road hazards

High tire pressure (overinflation)—

- Poor handling
- Excessive wear
- Uneven wear
- A greater possibility of tire damage from road hazards

#### Checking and replacing tires



#### CHECKING YOUR TIRES

Check the tire's tread for treadwear indicators. If the indicators show, replace the tires. The location of treadwear 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 treadwear 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 load capacity as the originally installed tires. Also, on four-wheel drive models, all the tires must be the same brand and have the same tread patterns.

Using any other size or type of tire may seriously affect handling, ride, speedometer/odometer calibration, ground clearance, and clearance between the body and tires or snow chains.

# / CAUTION

Observe the following instructions. Otherwise, an accident may occur resulting in death or serious injuries.

- Do not mix radial, bias belted, or bias-ply tires on your vehicle, as this may cause dangerous handling characteristics resulting in loss of control.
- Do not use tires other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control.
- Four-wheel drive models:
   Do not use tires of different brands, sizes, construction or tread patterns, as this may cause dangerous handling characteristics resulting in loss of control.

Never use second-hand tires on your Toyota.

Using tires whose previous history is unknown is a risk.

Toyota recommends all four tires, or at least both front or rear tires be replaced at a time as a set.

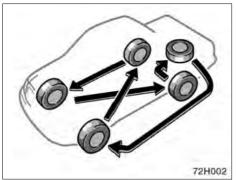
See "If you have a flat tire" on page 216 for tire change procedure.

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



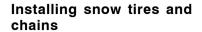
With a spare tire of the same wheel type as the installed tires



To equalize tire wear and help extend tire life. Toyota recommends that you rotate your tires approximately every 10000 km (6000 miles). 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 216 for tire change procedure.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire inflation pressure, improper wheel alignment, out-ofbalance wheels, or severe braking.



WHEN TO USE SNOW TIRES OR CHAINS

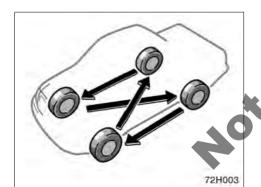
Snow tires or chains are recommended when driving on snow or ice.

On wet or dry roads, conventional tires provide better traction than snow tires.

#### **SNOW TIRE SELECTION**

If you need snow tires, select tires of the same size, construction and load capacity as the originally installed tires. Also, on four-wheel drive models, all the tires must be the same brand and have the same tread patterns.

Do not use tires other than those mentioned above. Do not install studded tires without first checking local regulations for possible restrictions.



With a spare tire of different wheel type from the installed tires 264

## /i CAUTION

Observe the following instructions. Otherwise, an accident may occur resulting in death or serious injuries.

- Do not use snow tires other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control.
- Four-wheel drive models:
   Do not use snow tires of different brands, sizes, construction or tread patterns, as this may cause dangerous handling characteristics resulting in loss of control.

#### SNOW TIRE INSTALLATION

Snow tires should be installed on all wheels.

Installing snow tires on the rear wheels only can lead to an excessive difference in road grip capability between the front and rear tires which could cause loss of vehicle control.

When storing removed tires, you should store them in a cool dry place.

Mark the direction of rotation and be sure to install them in the same direction when replacing.

# CAUTION

- Do not drive with the snow tires incorrectly inflated.
- Observe permissible maximum speed for your snow tires and the legal speed limit.

#### TIRE CHAIN SELECTION

Use the tire chains of correct size.

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 rear tires as tightly as possible. Do not use tire chains on the front tires. Retighten chains after driving 0.5—1.0 km (1/4—1/2 mile).

When installing chains on your tires, carefully follow the instructions of the chain manufacturer.

If wheel covers are used, they will be scratched by the chain band, so remove the covers before putting on the chains.

# / CAUTION

- Do not exceed 50 km/h (30 mph) or the chain manufacturer's recommended speed limit, whichever is lower.
- Drive carefully avoiding bumps, holes, and sharp turns, which may cause the vehicle to bounce.
- Avoid sharp turns or locked-wheel braking as use of chains may adversely affect vehicle handling.
- When driving with chains installed, be sure to drive carefully. Slow down before entering the curves to avoid losing control of the vehicle. Otherwise an accident may occur.

#### Replacing wheels

#### WHEN TO REPLACE YOUR WHEELS

If you have wheel damage such as bending, cracks or heavy corrosion, the wheel should be replaced.

If you fail to replace a damaged wheel, the tire may slip off the wheel or cause loss of handling control.

#### WHEEL SELECTION

When replacing wheels, care should be taken to ensure that the wheels are replaced by ones with the same load capacity, diameter, rim width, and offset.

Correct replacement wheels are available at your Toyota dealer.

A wheel of a different size or type may adversely affect handling, wheel and bearing life, brake cooling, speedometer/odometer calibration, stopping ability, headlight aim, bumper height, vehicle ground clearance, and tire or snow chain clearance to the body and chassis.

Replacement with used wheels is not recommended as they may have been subjected to rough treatment or high mileage and could fail without warning. Also, bent wheels which have been straightened may have structural damage and therefore should not be used. Never use an inner tube in a leaking wheel which is designed for a tubeless tire.

# / CAUTION

Observe the following instructions. Otherwise, an accident may occur resulting in death or serious injuries.

- Do not use wheels other than the manufacturer's recommended size, as this may cause dangerous handling characteristics resulting in loss of control.
- Four-wheel drive models:
   Do not use wheels of different brands, sizes and types, as this may cause dangerous handling characteristics resulting in loss of control.

#### Aluminum wheel precautions

- When installing aluminum wheels, check that the wheel nuts are tight after driving your vehicle the first 1600 km (1000 miles).
- If you have rotated, repaired, or changed your tires, check that the wheel nuts are still tight after driving 1600 km (1000 miles).
- When using tire chains, be careful not to damage the aluminum wheels.
- Use only 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	
Battery recharging precautions	272
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# Checking battery condition— —Precautions

# **CAUTION**

#### **BATTERY PRECAUTIONS**

The battery produces flammable and explosive hydrogen gas.

- Do not cause a spark from the battery with tools.
- Do not smoke or light a match near the battery.

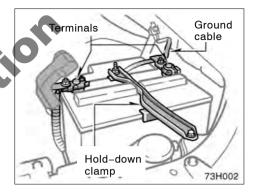
The electrolyte contains poisonous and corrosive sulfuric acid.

- Avoid contact with eyes, skin or clothes.
- Never ingest electrolyte.
- Wear protective safety glasses when working near the battery.
- Keep children away from the battery.

#### **EMERGENCY MEASURES**

- If electrolyte gets in your eyes, flush your eyes with clean water immediately and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while en route to the medical office.
- If electrolyte gets on your skin, thoroughly wash the contact area. If you feel pain or burning, get medical attention immediately.
- If electrolyte gets on your clothes, there is a possibility of its soaking through to your skin, so immediately take off the exposed clothing and follow the procedure above, if necessary.
- If you accidentally swallow electrolyte, drink a large quantity of water or milk. Follow with milk of magnesia, beaten raw egg or vegetable oil. Then go immediately for emergency help.

### —Checking battery exterior



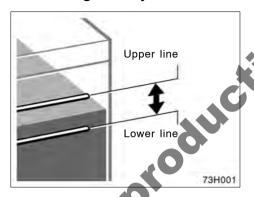
Check the battery for corroded or loose terminal connections, cracks, or loose hold-down clamp.

- a. If the battery is corroded, wash it off with a solution of warm water and baking soda. Coat the outside of the terminals with grease to prevent further corrosion.
- b. If the terminal connections are loose, tighten their clamp nuts—but do not overtighten.
- c. Tighten the hold-down clamp only enough to keep the battery firmly in place. Overtightening may damage the battery case.

#### **NOTICE**

- ◆ Be sure the engine and all accessories are off before performing maintenance.
- ♦ When checking the battery, remove the ground cable from the negative terminal ("-" mark) first and reinstall it last.
- ◆ Be careful not to cause a short circuit with tools.
- ◆ Take care no solution gets into the battery when washing it.

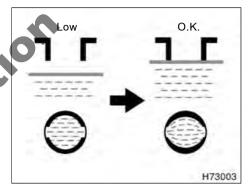
#### -Checking battery fluid



# CHECKING BY FLUID LEVEL LINES The fluid (electrolyte) level must be between the upper and lower lines.

When checking the fluid level, look at all six cells, not just one or two.

If the level is lower than the lower line, add distilled water. (See "ADDING DISTILLED WATER".)



#### ADDING DISTILLED WATER

- 1. Remove the vent plugs.
- Add distilled water to cells needing fluid.

If the side of your battery is covered, check the water level by looking down directly above the cell as illustrated above.

3. Retighten the vent plugs securely.

#### NOTICE

Do not overfill the cells. Excess electrolyte could squirt out of the battery during heavy charging, causing corrosion or damage.

# Battery recharging precautions

During recharging, the battery is producing hydrogen gas.

Therefore, before recharging:

- 1. Remove the vent plugs.
- If recharging with the battery installed on the vehicle, be sure to disconnect the ground cable.
- Be sure the power switch on the recharger is off when connecting the charger cables to the battery and when disconnecting them.

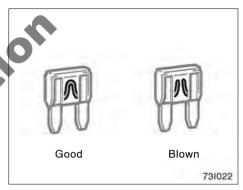
# **CAUTION**

- Always charge the battery in an unconfined area. Do not charge the battery in a garage or closed room where there is not sufficient ventilation.
- Be sure to remove the vent plugs before recharging.

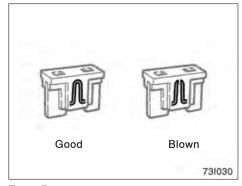
#### NOTICE

Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.

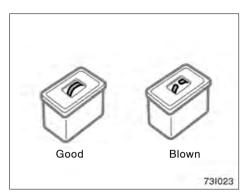
## Checking and replacing fuses



Type A

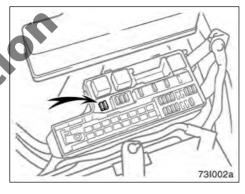


Type B



Good Blown
73F066

Type E



Type C

Good Blown

Good Blown
731026a

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 251 for locations of the fuses.

Type D

Type F

# Turn the engine 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 page 291 for the functions controlled by each circuit.

Type A and B fuses can be pulled out by the pull-out tool. The location of the pullout 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 "RAD", "CIG", or "PWR OUT" 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.

# CAUTION

Never use a fuse with a higher amperage rating, or any other object, in place of a fuse. This may cause extensive damage and possibly a fire.

#### Adding washer fluid

If any washer does not work, the washer tank may be empty. Add washer fluid.

Mowever, 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 engine switch and light switch are off. Use bulbs with the wattage ratings given in the table.

The high mounted stoplight consists of a number of LEDs. If any of the LEDs burn out, take your vehicle to your Toyota dealer to have the light replaced.



- To prevent burning yourself, do not replace the light bulbs while they are hot.
- Halogen bulbs have pressurized gas inside and require special handling. They can burst or shatter if scratched or dropped. Hold a bulb only by its plastic or metal case. Do not touch the glass part of a bulb with bare hands.

#### NOTICE

Only use a bulb of the listed type.

The inside of the lens of exterior lights such as headlights may temporarily fog up when the lens becomes wet in the rain or in a car wash. This is not a problem because the fogging is caused by the temperature difference between the outside and inside of the lens, just like the windshield 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.

Light bulbs	W	Type
Headlights	60/55	Α
Front driving lights	51	В
Parking lights	5	Е
Front turn signal lights	21	D
Side turn signal lights	5	F
Rear turn signal lights	21	С
Stop/tail lights	21/5	С
Back-up lights	21	С
License plate lights	5	Е
Interior light	8	G
Personal lights	8	С

A: H4 halogen bulbs

B: HB4 halogen bulbs

C: Single end bulbs (clear)

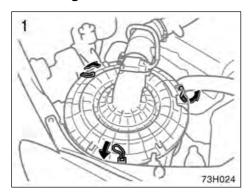
D: Single end bulbs (amber)

E: Wedge base bulbs (clear)

F: Wedge base bulbs (amber)

G: Double end bulbs

#### -Headlights

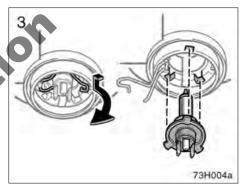


Open the hood.
 For easy access to the right-hand headlight (except for the 1GR-FE engine): Release the clips of the air cleaner filter cover, and remove both the cover and filter.



2. Unplug the connector. Remove the rubber cover.

If the connector is tight, wiggle it.



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.

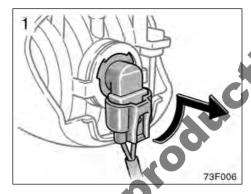
# 4 73H005a

#### Install the rubber cover as shown, and fit it securely on the boss. Plug in the connector.

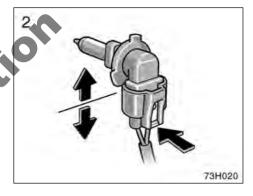
Make sure the rubber cover fits securely on the connector and the headlight body. Aiming is not necessary after replacing

the bulb. When aiming adjustment is necessary, contact your Toyota dealer.

# —Front driving lights (on some models)



1. Turn the bulb base counterclockwise to the front of the vehicle as shown.



2. Pull the bulb out of the bulb base. If the connector is tight, wiggle it.

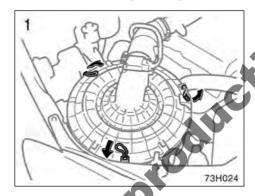
# 3

# 3. Install the bulb base by turning it clockwise to the front of the vehicle.

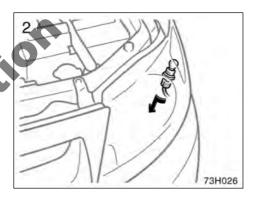
73F008

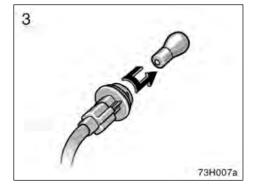
Aiming is not necessary after replacing the bulb. When aiming adjustment is necessary, contact your Toyota dealer.

#### -Front turn signal lights



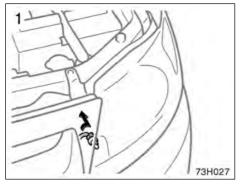
For easy access to the right-hand front turn signal light (except for the 1GR-FE engine): Release the clips of the air cleaner filter cover, and remove both the cover and filter.

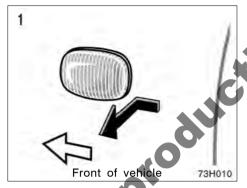


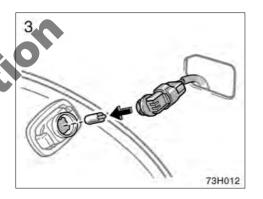


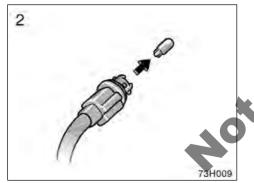
## —Parking lights





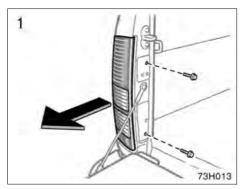




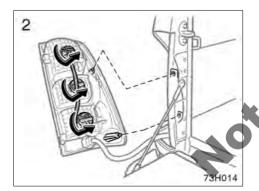




# —Rear turn signal, stop/tail and back-up lights



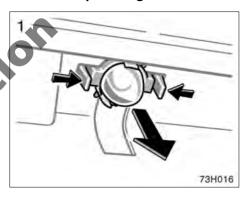
Use a Phillips-head screwdriver.

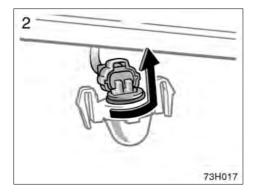


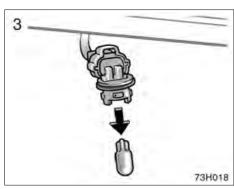
3 a b c c 73H015

- a: Stop/tail light
- b: Rear turn signal light
- c: Back-up light

### -License plate lights







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# SECTION 8

## **SPECIFICATIONS**

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#### **Dimensions**

Overall length	mm	(in.)	5130	(202.0)*1
			5255	(206.9)*2
Overall width	mm	(in.)	1760	(69.3)*3
			1835	(72.2)*4
Overall height	mm	(in.)	1680	(66.1)*5*7
			1695	(66.7)*5*8
			1795	(70.7)*6*7
			1810	(71.3)*6*8
Wheelbase	mm	(in.)	3085	(121.5)
Front tread	mm	(in.)	1510	(59.4)*3
			1540	(60.6)*4
Rear tread	mm	(in.)	1510	(59.4)*3
			1540	(60.6)*4

- \*1: Without rear step bumper
- \*2: With rear step bumper
- \*3: Without over fender
- \*4: With over fender
- \*5: Two-wheel drive models
- \*6: Four-wheel drive models
- \*<sup>7</sup>: Single-cab and extra-cab mod**els**
- \*8: Double-cab models

#### **Engine**

#### Model: 1GR-FE, 2TR-FE and 1KD-FTV Type:

- 1GR-FE engine 6 cylinder V type, 4 cycle, gasoline
- 2TR-FE engine
- 4 cylinder in line, 4 cycle, gasoline
- 1KD-FTV engine
  4 cylinder in line, 4 cycle
- 4 cylinder in line, 4 cycle, diesel (with turbocharger)

#### Bore and stroke, mm (in.)

1KD-FTV engine

#### Displacement, cm3 (cu. in.):

1GR-FE engine	3956 (241.4)
2TR-FE engine	2694 (164.4)
1KD-FTV engine	2982 (182.0)

#### Fuel

#### Fuel type:

1GR-FE engine-

Unleaded gasoline Research Octane Number 91 or higher. For improved vehicle performance, the use of premium unleaded gasoline with a Research Octane Number of 95 or higher is recommended.

#### 2TR-FE engine-

Unleaded gasoline Research Octane Number 91 or higher

1KD-FTV engine—

Diesel fuel, cetane number 48 or higher

Fuel tank capacity, L (gal., Imp. gal.): 76.0 (20.1, 16.7)

#### Service specifications

#### **ENGINE**

Valve clearance (engine cold), mm (in.):

1GR-FE engine
Intake 0.15—0.25 (0.006—0.010)
Exhaust 0.29—0.39 (0.011—0.015)

2TR-FE engine
Automatic adjustment

1KD-FTV engine
Intake 0.20—0.30 (0.008—0.012)
Exhaust 0.35—0.45 (0.014—0.018)

Spark plug type:

1GR-FE engine
DENSO K20HR-U11
NGK LFR6C11

2TR-FE engine DENSO K20HR-U11

Spark plug gap, mm (in.): 1.1 (0.043)

#### **ENGINE LUBRICATION**

Without filter

Oil capacity (drain and refill),
L (qt., Imp. qt.):

1GR-FE engine

With filter

Without filter

With filter

With filter

Without filter

Without filter

Without filter

Without filter

Without filter

1KD-FTV engine

With filter

With filter

With filter

6.9 (7.3, 6.1)

"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.

6.6 (7.0, 5.8)

#### Oil grade:

Gasoline engine

20W-50 and 15W-40— API grade SL or SM multigrade engine oil

10W-30 and 5W-30—
API grade SL "Energy-Conserving",
SM "Energy-Conserving" or ILSAC
multigrade engine oil

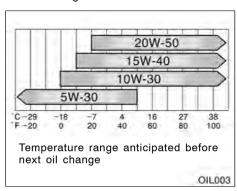
#### Diesel engine

For Australia, Singapore and New Zealand— G-DLD-1, API CF-4 or API CF or

ACEA B1

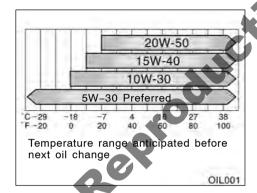
For other countries—
G-DLD-1, API CF-4 or API CF
(You may also use API CE or CD)

#### Recommended oil viscosity (SAE): Gasoline engine

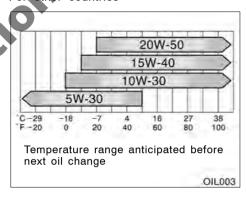


#### Diesel engine

For Australia, Singapore and New Zealand—



For other countries—



Please contact your Toyota dealer for further details.

#### **COOLING SYSTEM**

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

1GR-FE engine

With manual transmission

With heater 8.5 (9.0, 7.5)

Without heater 7.7 (8.1, 6.8)

With automatic transmission

With heater 9.8 (10.4, 8.6) Without heater 9.0 (9.5, 7.9)

2TR-FE engine

With manual transmission

With heater 7.8 (8.2, 6.9) Without heater 7.0 (7.4, 6.2)

With automatic transmission

With heater 8.1 (8.6, 7.1)

Without heater 7.3 (7.7, 6.4)

1KD-FTV engine

With manual transmission

With heater 9.8 (10.4, 8.6) Without heater 9.0 (9.5, 7.9)

With automatic transmission

With heater 11.1 (11.7, 9.8) Without heater 10.3 (10.9, 9.1)

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, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology. (Coolant with long-life hybrid organic acid technology is a combination of low phosphates and organic acids.)

Do not use plain water alone.

Please contact your Toyota dealer for further details.

#### **BATTERY**

Specific gravity reading at 20°C (68°F):

1.250 1.290 Fully charged 1.160 1.200 Half charged

1.060—1.100 Discharged

Charging rates:

Quick charge 15 A max. Slow charge 5 A max.

#### **CLUTCH**

Pedal free play, mm (in.): 5—15 (0.2—0.6)

Fluid type:

SAE J1703 or FMVSS No.116 DOT 3

#### MANUAL TRANSMISSION

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

1GR-FE and 1KD-FTV engines

Two-wheel drive models

2.6 (2.7, 2.3)

Four-wheel drive models

2.2 (2.3, 1.9)

2TR-FE engine 2.6 (2.7, 2.3)

Oil type:

Gear oil API GL-4 or GL-5

Recommended oil viscosity:

SAE 75W-90

#### **AUTOMATIC TRANSMISSION**

5-speed models-

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

Up to 10.4 (11.0, 9.2)

The fluid capacity is the quantity of reference. If replacement is necessary, contact your Toyota dealer.

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 "Warranty and Service Booklet". When changing automatic transmission fluid, use only "Toyota Genuine ATF WS" to aid in assuring maximum transmission performance.

Notice: Using automatic transmission fluid other than "Toyota Genuine ATF WS" may cause deterioration in shift quality, locking up of your transmission accompanied by vibration, and ultimately damage the automatic transmission of your vehicle.

Please contact your Toyota dealer for further details.

4-speed models-

Fluid capacity (drain and refill), L (qt., Imp. qt.): Up to 2.0 (2.1, 1.8)

Fluid type:

Toyota Genuine ATF Type T-IV Change automatic transmission fluid

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 "Warranty and Service Booklet". When changing automatic transmission fluid, use only "Toyota Genuine ATF Type T-IV" to aid in assuring optimum transmission performance.

Notice: Using automatic transmission fluid other than "Toyota Genuine ATF Type T-IV" may cause deterioration in shift quality, locking up of your transmission accompanied by vibration, and ultimately damage the automatic transmission of your vehicle.

Please contact your Toyota dealer for further details.

#### TRANSFER

Oil capacity, L (qt., Imp. qt.): 10 (1.1, 0.9)

Oil type:

Ğear oil API GL-4 or GL-5

Recommended oil viscosity: SAE 75W-90

#### DIFFERENTIAL

Oil capacity, L (qt., Imp. qt.):
Two-wheel drive models
3,2 (3,4, 2,8)

Four-wheel drive models

our-wheel drive models
Front
With A.D.D. 1.7 (1.8, 1.5)
Without A.D.D. 1.5 (1.6, 1.3)
Rear 3.4 (3.6, 3.0)

Oil type:

With limited-slip differential Hypoid gear oil LSD API GL-5

Without limited-slip differential Hypoid gear oil API GL-5

Recommended oil viscosity: With A.D.D.

SAE 75W-90 Without A.D.D. Above -18°C (0°F)

SAE 90 Below -18°C (0°F)

SAE 80W or 80W-90

#### CHASSIS LUBRICATION

Propeller shafts:

#### Spiders

Lithium base chassis grease, NLGI No.2

#### Slide yoke

Molybdenum-disulfide lithium base chassis grease, NLGI No.2 or lithium base chassis grease, NLGI No.2

#### **BRAKES**

Minimum pedal clearance when depressed with the force of 490 N (50 kgf, 110 lbf) with the engine running, mm (in.):

Two-wheel drive models 82 (3.2)

Four-wheel drive models

With 205R16C tires
With 255/70R15C tires

80 (8.

Pedal free play, mm (in.): 1—6 (0.04—0.24)

Parking brake adjustment when pulled with

the force of 200 N (20.4 kgf, 45.0 lbf):

Two-wheel drive models

6—8 clicks

Four-wheel drive models

7-9 clicks

#### Fluid type:

SAE J1703 or FMVSS No.116 DOT 3

#### STEERING

Wheel free play:

Less than 30 mm (1.2 in.)

Power steering fluid type:

Automatic transmission fluid DEXRON®II or III

#### **Tires**

#### Tire size and cold tire inflation pressure:

TWO-WHEEL DRIVE MODELS

kPa (kgf/cm<sup>2</sup> or bar, psi)

Model of vehicle	Tire size	Front	Re	ear
Widder of Verlicie	THE SIZE	Tiont	Unloaded	Loaded
Single-cab models	205/70R15C 106/104S	240 (2.4, 35)	330 (3.3, 48)	450 (4.5, 65)
Extra-cab models	205/70R15C 106/104S	260 (2.6, 38)	290 (2.9, 42)	400 (4.0, 58)
Double-cab models	205/70R15C 106/104S	260 (2.6, 38)	290 (2.9, 42)	350 (3.5, 51)

#### FOUR-WHEEL DRIVE MODELS

kPa (kgf/cm<sup>2</sup> or bar, psi)

Tire size	Front	Re	ear
THE SIZE	Tours of the second	Unloaded	Loaded
205R16C-8PR 110/108S	2*0 (2.*, '', )	240 (2.4, 35)	320 (3.2, 46)
255/70R15C 112/110S	200 (2.0, 29)	200 (2.0, 29)	250 (2.5, 36)

Wheel nut torque, N·m (kgf·m, ft·lbf):

Two-wheel drive models

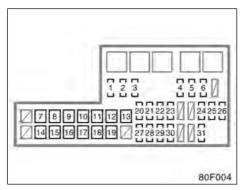
 Steel wheels
 152 (15.5, 112)

 Aluminum wheels
 121 (12.3, 89)

 Four-wheel drive models
 105 (10.7, 77.4)

NOTE: For complete information on tires (e.g. replacing tires or replacing wheels), see "Checking tire inflation pressure" on page 261 through "Aluminum wheel precautions" on page 267.

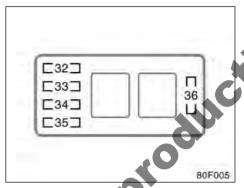
#### **Fuses**



**Engine compartment** 

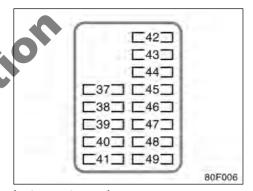
- 1. SPARE 25 A: Spare fuse
- 2. SPARE 15 A: Spare fuse
- 3. SPARE 10 A: Spare fuse
- 4. FOG 15 A: Front driving lights
- 5. HORN 10 A: Horn
- EFI 25 A: Multiport fuel injection system/sequential multiport fuel injection system
- 7. PTC NO.1 50 A: Power heater
- 8. PWR SEAT 30 A (gasoline engine):
  No circuit

H-LP CLN 30 A (diesel engine): No circuit



Front passenger side kick panel

- 9. PTC NO.2 30 A: Power heater
- 10. RR CLR 40 A: No circuit
- 11. FR HTR 50 A: Air conditioning system, "A/C" fuse
- 12. ABS NO.2 30 A: Anti-lock brake system
- 13. ABS NO.1 40 A: Anti-lock brake system
- 14. ALT 100 A: Charging system, "FR HTR", "RR CLR", "ABS NO.1", "ABS NO.2", "PTC NO.1", "PTC NO.2", "PWR OUT", "STOP", "TAIL" and "OBD" fuses
- 15. GLOW 80 A: Engine glow system



Instrument panel

- 16. BATT P/I 50 A: "FOG", "HORN" and "EFI" fuses
- 17. AM2 30 A: Engine starter, "ST", "IGN" and "INJ" fuses
- 18. MAIN 40 A: "H-LP RH" and "H-LP LH" fuses
- A/PUMP 50 A: Emission control system
- 20. H-LP RL 20 A: No circuit
- 21. H-LP LL 20 A: No circuit
- 22. H-LP RH 20 A: Right-hand headlight
- 23. H-LP LH 20 A: Left-hand headlight

- 24. ECU-B 10 A: Door courtesy switches, power door lock system, wireless remote control system, engine immobilizer system, headlights and air conditioning system
- 25. RAD 15 A: Audio system
- 26. DOME 7.5 A: Interior light, engine switch light, personal light, gauges and meters, clock and wireless remote control system
- 27. A/F 20 A: Emission control system
- 28. ETCS 10 A: Multiport fuel injection system/sequential multiport fuel injection system
- 29. ALT-S 7.5 A: Charging system
- 30. TURN-HAZ 15 A: Emergency flashers and turn signal lights
- **31. DCC 30 A:** "ECU-B", "DOME" and "RAD" fuses
- 32. 4WD 20 A: Anti-lock brake system
- 33. S-HTR 15 A: No circuit
- 34. DEF 20 A: Rear window defogger and multiport fuel injection system/sequential multiport fuel injection system
- 35. DOOR 25 A: Power door lock system
- 36. PWR 30 A: Power window

- INJ 15 A: Multiport fuel injection system/sequential multiport fuel injection system
- 38. OBD 7.5 A: On-board diagnosis system
- 39. STOP 10 A: Stop lights, high mounted stoplight, multiport fuel injection system/sequential multiport fuel injection system, anti-lock brake system and shift lock control system
- 40. TAIL 10 A: Audio system, gauges and meters, front driving lights, emergency flashers, air conditioning system, clock, cigarette lighter, parking lights, tail lights, license plate lights, multiport fuel injection system/sequential multiport fuel injection system, rear window defogger, power heater, automatic transmission and multi-information display
- 41 PWR OUT 15 A: Power outlet
- **42. ST 7.5 A:** Starting system and multiport fuel injection system/sequential multiport fuel injection system
- 43. A/C 10 A: Air conditioning system
- 44. MET 7.5 A: Gauges and meters
- 45. CIG 15 A: Cigarette lighter

- 46. ACC 7.5 A: Audio system, power outlet, clock, power rear view mirror control system, shift lock control system and multi-information display
- 47. IGN 7.5 A: Multiport fuel injection system/sequential multiport fuel injection system, SRS airbags, fuel pump and engine immobilizer system
- 48. WIP 20 A: Windshield wiper and washer
- 49. ECU-IG & GAUGE 10 A: Air conditioning system, charging system, anti-lock brake system, emergency flashers, turn signal lights, back-up lights, automatic transmission indicator lights, multiport fuel injection system/sequential multiport fuel injection system, power window, shift lock control system, gauges and meters, rear window defogger, headlights, door courtesy switches, power door lock system, wireless remote control system, multi-information display and passenger's seat belt reminder light

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#### Gas station information

#### Fuel type:

1GR-FE engine-

Unleaded gasoline, Research Octane Number 91 or higher. For improved vehicle performance, the use of premium unleaded gasoline with a Research Octane Number of 95 or higher is recommended.

2TR-FE engine-

Unleaded gasoline, Research Octane Number 91 or higher.

1KD-FTV engine-

Diesel fuel, cetane number 48 or higher

See page 177 for detailed infomation.

#### Fuel tank capacity:

76 L (20.1 gal., 16.7 lmp. gal.)

Engine oil: See pages 257 through 258.

Tire information: See pages 261 through 267.

Tire inflation pressure: See pages 261 and 290.

Publication No. OM0K034E Part No. 01999-0K034 Printed in Thailand 01-0808-00 ハイラックス (豪州E)